



7450 Ethernet Service Switch
7750 Service Router
7950 Extensible Routing System
Virtualized Service Router
Release 23.3.R1

MD-CLI Command Reference Guide

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1 Getting started

1.1 About this guide

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

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

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



Note:

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

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

1.2 Platforms and terminology



Note:

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

Table 1: Platforms and terminology

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

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

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

1.3 Conventions

This section describes the general conventions used in this guide.

1.3.1 Precautionary and information messages

The following information symbols are used in the documentation.



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



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



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



Note: Note provides additional operational information.



Tip: Tip provides suggestions for use or best practices.

1.3.2 Options or substeps in procedures and sequential workflows

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

Example: Options in a procedure

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

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

Example: Substeps in a procedure

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

1.4 MD-CLI command reference

1.4.1 MD-CLI tree hierarchy

Table 2: Command syntax symbols

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

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

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

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

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

Figure 1: MD-CLI configuration tree example

```

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

```

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

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

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

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

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

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

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

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

- number
- IPv4 address
- IPv6 address
- MAC address

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

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

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

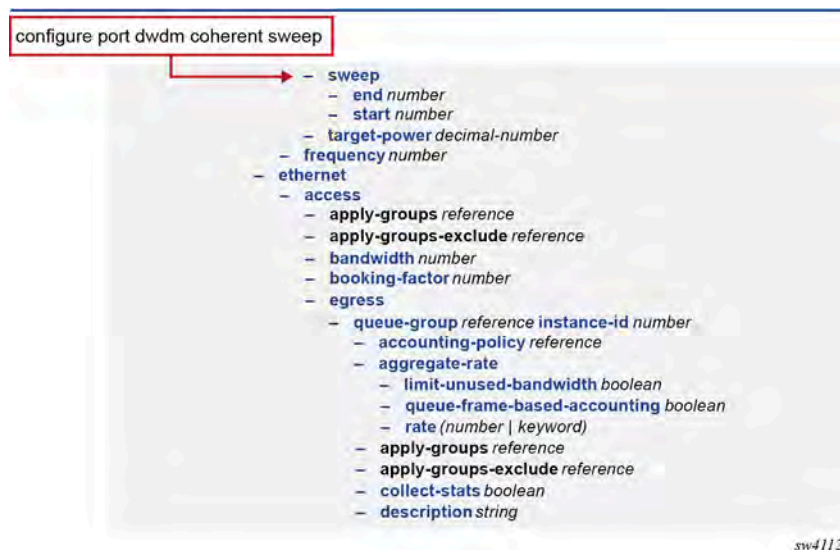
```
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
```

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

1.4.1.1 Context path

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

Figure 2: Command tree navigation



1.4.2 MD-CLI command descriptions

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

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

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

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


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

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

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

Table 3: Command descriptions fields

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

Field	Description
Reference	Reference to an element instance in the configuration or state datastore
Min./Max. Instances	For lists and leaf-lists, the minimum or maximum number of instances for this element
Notes	Information about special attributes of the element, including whether the element is: <ul style="list-style-type: none"> • a key for an element • mandatory • ordered by the user (instead of by the system) • part of a choice of elements
Introduced	Release in which the element was introduced
Deprecated	Release in which the element was deprecated
Platforms	Hardware platforms on which the element is available. See Platforms and terminology for more information about the platforms. <p> Note: Some SR OS features are platform-specific and therefore may not be available or visible on all platforms. See the <i>SR OS R23.x.Rx Software Release Notes</i>, part number 3HE 19269 000 x TQZZA, for information about platform support.</p>

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



Note:

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

2 Operational commands

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

2.1 admin commands

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

```

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

```

admin show configuration [cli-path]

```

- [cli-path] string
- configure
- debug
- detail
- flat
- full-context
- intended
- json
- li
- running
- units
- xml
- support-mode
- system
- license
  - activate
    - [file-url] string
    - now
  - validate
    - [file-url] string
- management-interface
- operations
  - delete-operation
    - [delete-id] number
    - op-table-bypass boolean
  - stop-operation
    - op-table-bypass boolean
    - [stop-id] number
- security
  - hash-control
    - custom-hash
      - algorithm keyword
      - key string
    - remove-custom-hash
  - pki
    - clear-ocsp-cache
      - [entry-id] number
    - cmpv2
      - cert-request
        - ca-profile reference
        - current-certificate string
        - current-key string
        - domain-name string
        - hash-algorithm keyword
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - new-key string
        - save-as string
        - subject-dn string
      - clear-request
        - ca-profile reference
    - initial-registration
      - ca-profile reference
      - certificate string
      - domain-name string
      - hash-algorithm keyword
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - key-to-certify string
      - password string
      - protection-key string
      - reference string
      - save-as string
      - send-chain
      - subject-dn string
      - with-ca reference

```


admin system security pki cmpv2 key-update

- **key-update**
 - **ca-profile** *reference*
 - **hash-algorithm** *keyword*
 - **new-key** *string*
 - **old-certificate** *string*
 - **old-key** *string*
 - **save-as** *string*
- **poll**
 - **ca-profile** *reference*
- **convert-file**
 - **force**
 - **format** *keyword*
 - **[input-file]** *string*
 - **[output-file]** *string*
- **crl-update**
 - **ca-profile** *reference*
- **est**
 - **ca-certificates**
 - **est-profile** *string*
 - **force**
 - **output-url** *string*
 - **enroll**
 - **domain-name** *string*
 - **est-profile** *string*
 - **force**
 - **hash-algorithm** *keyword*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **key** *string*
 - **output-file** *string*
 - **subject-dn** *string*
 - **validate-certificate-chain**
 - **renew**
 - **certificate** *string*
 - **est-profile** *string*
 - **force**
 - **hash-algorithm** *keyword*
 - **key** *string*
 - **output-file** *string*
 - **validate-certificate-chain**
- **export**
 - **format** *keyword*
 - **input-file** *string*
 - **key-file** *string*
 - **output-url** *string*
 - **password** *string*
 - **type** *keyword*
- **generate-csr**
 - **domain-name** *string*
 - **hash-algorithm** *keyword*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **key-url** *string*
 - **output-url** *string*
 - **subject-dn** *string*
 - **use-printable**
- **generate-keypair**
 - **dsa-key-size** *number*
 - **ecdsa-curve** *keyword*
 - **rsa-key-size** *number*
 - **[save-path]** *string*
- **import**
 - **format** *keyword*
 - **input-url** *string*
 - **output-file** *string*
 - **password** *string*

admin system security pki import type

- **type** *keyword*
- **validate-certificate-chain**
- **reload**
 - **application** *keyword*
 - **certificate** *string*
 - **key** *string*
- **show**
 - **file-content**
 - **[file-path]** *string*
 - **format** *keyword*
 - **password** *string*
 - **type** *keyword*
 - **update-certificate**
 - **certificate** *reference*
- **system-password**
 - **admin-password**
- **telemetry**
 - **grpc**
 - **cancel**
 - **all**
 - **subscription-id** *number*
- **tech-support**
 - **[url]** *string*

2.1.1 admin command descriptions

admin

Synopsis	Enter the administrative context for system operations
Context	admin
Tree	admin
Introduced	16.0.R1
Platforms	All

application-assurance

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

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

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

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

Synopsis	AA group ID
Context	admin application-assurance group reference
Tree	group
Reference	state application-assurance group <i>number</i>

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

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

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

[url-list-name] *reference*

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

upgrade

Synopsis	Upgrade the referenced URL list
Context	admin application-assurance group reference url-list reference upgrade
Tree	upgrade
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upgrade

Synopsis	Upgrade to a new isa-aa.tim file
Context	admin application-assurance upgrade

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

clear

Synopsis	Enter the clear context
Context	admin clear
Tree	clear
Introduced	19.10.R1
Platforms	All

security

Synopsis	Enter the security context
Context	admin clear security
Tree	security
Introduced	19.10.R1
Platforms	All

lockout

Synopsis	Reset the lockout timer
Context	admin clear security lockout
Tree	lockout
Introduced	19.10.R1
Platforms	All

all

Synopsis	Clear lockout of all users
Context	admin clear security lockout all
Tree	all

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

user string

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

password-history

Synopsis	Clear the password history
Context	admin clear security password-history
Tree	password-history
Introduced	19.10.R1
Platforms	All

all

Synopsis	Clear password history of all users
Context	admin clear security password-history all
Tree	all
Notes	The following elements are part of a mandatory choice: all or user .
Introduced	19.10.R1
Platforms	All

user string

Synopsis	User to be cleared of password history information
Context	admin clear security password-history user string

Tree	user
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all or user .
Introduced	19.10.R1
Platforms	All

disconnect

Synopsis	Disconnect a user session
Context	admin disconnect
Tree	disconnect
Introduced	16.0.R1
Platforms	All

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

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

op-table-bypass *boolean*

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

session-id *number*

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

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

session-type *keyword*

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

username *string*

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

nat

Synopsis	Enter the nat context
Context	admin nat
Tree	nat
Introduced	21.2.R1
Platforms	All

save-deterministic-script

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

Context	admin nat save-deterministic-script
Tree	save-deterministic-script
Introduced	21.2.R1
Platforms	All

reboot

Synopsis	Reboot CPM or force an upgrade of system boot ROMs
Context	admin reboot
Tree	reboot
Introduced	16.0.R1
Platforms	All

[card] keyword

Synopsis	Card to reboot
Context	admin reboot [card] keyword
Tree	[card]
Options	active, standby, upgrade
Introduced	16.0.R1
Platforms	All

hold

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

now

Synopsis	Reboot immediately without prompts or confirmation
Context	admin reboot now
Tree	now

Introduced	16.0.R1
Platforms	All

redundancy

Synopsis	Enter the redundancy context
Context	admin redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	All

force-switchover

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

ignore-status

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

now

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

synchronize

Synopsis	Synchronize the standby CPM
Context	admin redundancy synchronize
Tree	synchronize
Introduced	20.10.R1
Platforms	All

boot-environment

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

certificate

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

configuration

Synopsis	Synchronize the configuration files
Context	admin redundancy synchronize configuration
Tree	configuration
Description	When specified, the system synchronizes the primary, secondary, and tertiary configuration files.
Notes	The following elements are part of a mandatory choice: boot-environment , certificate , or configuration .

Introduced	20.10.R1
Platforms	All

satellite

Synopsis	Perform administrative operations for satellites
Context	admin satellite
Tree	satellite
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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

Synopsis	Enter the ethernet-satellite list instance
Context	admin satellite ethernet-satellite <i>reference</i>
Tree	ethernet-satellite
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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

Synopsis	Satellite ID
Context	admin satellite ethernet-satellite <i>reference</i>
Tree	ethernet-satellite
Reference	state satellite ethernet-satellite <i>number</i>
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reboot

Synopsis	Initiate an administrative reboot of the chassis
Context	admin satellite ethernet-satellite <i>reference</i> reboot
Tree	reboot
Introduced	22.2.R1

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

now

Synopsis Reboot immediately without prompts or confirmation

Context [admin satellite ethernet-satellite](#) *reference* [reboot now](#)

Tree [now](#)

Introduced 22.2.R1

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

upgrade

Synopsis Initiate a firmware image update during the reboot

Context [admin satellite ethernet-satellite](#) *reference* [reboot upgrade](#)

Tree [upgrade](#)

Introduced 22.2.R1

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

synchronize

Synopsis Synchronize the chassis to the boot image

Context [admin satellite ethernet-satellite](#) *reference* [synchronize](#)

Tree [synchronize](#)

Introduced 22.2.R1

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

tech-support

Synopsis Save satellite technical support information

Context [admin satellite ethernet-satellite](#) *reference* [tech-support](#)

Tree [tech-support](#)

Description This command creates a system core dump. If no file URL is specified and the **ts-location** command is configured in the **configure system security tech-support** context, the technical support file is automatically generated by the system with the file name based on the system name and the date and time, and is saved to the directory indicated by the **ts-location** configuration.

The format of the auto-generated file name is ts-XXXXX.YYYYMMDD.HHMMUTC.dat, where:

- XXXXX is the system name with special characters expanded to avoid problems with file systems (for example, a period (.) is expanded to %2E)
- YYYYMMDD is the date with leading zeros on the year, month, and day
- HHMM is the hours and minutes in UTC time (24 hour format, always 4 characters, with leading zeros on the hours and minutes)

Note: This command is not supported over non-interactive interfaces (for example, NETCONF).

Note: This command should only be used with authorized direction from the Nokia Technical Assistance Center (TAC).

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[url] string

Synopsis	URL to save technical support information
Context	admin satellite ethernet-satellite <i>reference</i> tech-support [url] string
Tree	[url]
String Length	1 to 180
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	All

save

Synopsis	Perform configuration save operations
Context	admin save
Tree	save
Introduced	16.0.R1
Platforms	All

bof

Synopsis	Save the BOF region configuration
Context	admin save bof
Tree	bof

Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	20.10.R1
Platforms	All

configure

Synopsis	Save the configure region configuration
Context	admin save configure
Tree	configure
Notes	The following elements are part of a choice: bof , configure , debug , or li .
Introduced	20.7.R2
Platforms	All

debug

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

li

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

[url] string

Synopsis	Location to save the configuration
Context	admin save [url] string

Tree	[url]
Introduced	16.0.R1
Platforms	All

set

Synopsis	Enter the set context
Context	admin set
Tree	set
Introduced	19.10.R1
Platforms	All

time

Synopsis	System date and time
Context	admin set time
Tree	time
Introduced	19.10.R1
Platforms	All

[system-time] string

Synopsis	System date and time
Context	admin set time [system-time] string
Tree	[system-time]
Description	This command sets the system date and time. The time zone may optionally be specified. When the time zone is not specified, the system uses the configured system time zone.
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

show

Synopsis	Enter the show context
Context	admin show

Tree	show
Introduced	16.0.R1
Platforms	All

configuration

Synopsis	Show the current configuration
Context	admin show configuration
Tree	configuration
Introduced	16.0.R1
Platforms	All

bof

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

booted

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

cflash-id *string*

Synopsis	Show the BOF configuration file on a compact flash
Context	admin show configuration cflash-id string
Tree	cflash-id

String Length	4 to 6
Notes	The following elements are part of a choice: booted or cflash-id .
Introduced	20.10.R1
Platforms	All

[cli-path] *string*

Synopsis	Absolute path or relative path from '/'
Context	admin show configuration [cli-path] string
Tree	[cli-path]
Introduced	21.10.R1
Platforms	All

configure

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

debug

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

detail

Synopsis	Include default and unconfigured values
Context	admin show configuration detail

Tree	detail
Introduced	20.7.R1
Platforms	All

flat

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

full-context

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

intended

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

json

Synopsis	Show the output in indented JSON format
Context	admin show configuration json

Tree	json
Notes	The following elements are part of a choice: flat , full-context , json , or xml .
Introduced	19.10.R1
Platforms	All

li

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

running

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

units

Synopsis	Include unit types for applicable elements
Context	admin show configuration units
Tree	units
Introduced	20.10.R1
Platforms	All

xml

Synopsis	Show the output in indented XML format
Context	admin show configuration xml

Tree	xml
Notes	The following elements are part of a choice: flat , full-context , json , or xml .
Introduced	20.7.R1
Platforms	All

support-mode

Synopsis	Enable the shell and kernel commands
Context	admin support-mode
Tree	support-mode
Introduced	16.0.R4
Platforms	All

system

Synopsis	Enter the system context
Context	admin system
Tree	system
Introduced	16.0.R6
Platforms	All

license

Synopsis	Enter the license context
Context	admin system license
Tree	license
Introduced	19.10.R1
Platforms	All

activate

Synopsis	Load and activate a system license
Context	admin system license activate
Tree	activate
Introduced	19.10.R1

Platforms All

[file-url] *string*

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

now

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

validate

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

[file-url] *string*

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

management-interface

Synopsis	Enter the management-interface context
Context	admin system management-interface
Tree	management-interface
Introduced	21.5.R1
Platforms	All

operations

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

delete-operation

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

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

Synopsis	ID of the operation to remove
Context	admin system management-interface operations delete-operation [delete-id] <i>number</i>
Tree	[delete-id]
Range	1 to 10000
Notes	This element is mandatory.

Introduced	21.5.R1
Platforms	All

op-table-bypass *boolean*

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

stop-operation

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

op-table-bypass *boolean*

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

Platforms All

[stop-id] *number*

Synopsis ID of the operation to stop

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

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

Range 1 to 10000

Notes This element is mandatory.

Introduced 21.5.R1

Platforms All

security

Synopsis Enter the **security** context

Context [admin system security](#)

Tree [security](#)

Introduced 16.0.R6

Platforms All

hash-control

Synopsis Enter the **hash-control** context

Context [admin system security hash-control](#)

Tree [hash-control](#)

Introduced 16.0.R6

Platforms All

custom-hash

Synopsis Custom encryption

Context [admin system security hash-control custom-hash](#)

Tree [custom-hash](#)

Introduced 16.0.R6

Platforms All

algorithm *keyword*

Synopsis	Algorithm for custom encryption
Context	admin system security hash-control custom-hash algorithm <i>keyword</i>
Tree	algorithm
Description	This command configures the algorithm for custom encryption. The encryption uses ECB mode, PKCS#7 padding, and Base64 encoding.
Options	3des, aes128, aes192, aes256
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

key *string*

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

remove-custom-hash

Synopsis	Remove the custom encryption
Context	admin system security hash-control remove-custom-hash
Tree	remove-custom-hash
Introduced	20.10.R1
Platforms	All

pki

Synopsis	Perform PKI related operations
Context	admin system security pki
Tree	pki

Description	Commands in this context specify options for public key infrastructure operations.
Introduced	23.3.R1
Platforms	All

clear-ocsp-cache

Synopsis	Clear the current OCSP response cache
Context	admin system security pki clear-ocsp-cache
Tree	clear-ocsp-cache
Introduced	23.3.R1
Platforms	All

[entry-id] number

Synopsis	Local OCSP response cache entry ID to clear
Context	admin system security pki clear-ocsp-cache [entry-id] number
Tree	[entry-id]
Range	1 to 2000
Introduced	23.3.R1
Platforms	All

cmpv2

Synopsis	Perform CMPv2 operations
Context	admin system security pki cmpv2
Tree	cmpv2
Description	Commands in this context specify options for Certificate Management Protocol v2 (CMPv2) operations.
Introduced	23.3.R1
Platforms	All

cert-request

Synopsis	Request an additional certificate
Context	admin system security pki cmpv2 cert-request

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

ca-profile *reference*

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

current-certificate *string*

Synopsis	Existing imported certificate file to create request
Context	admin system security pki cmpv2 cert-request current-certificate <i>string</i>
Tree	current-certificate
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

current-key *string*

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

domain-name *string*

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

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki cmpv2 cert-request hash-algorithm keyword
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
----------	---

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

new-key string

Synopsis	New imported key file to create certificate request
Context	admin system security pki cmpv2 cert-request new-key string
Tree	new-key
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

save-as string

Synopsis	Full path to save the result certificate
Context	admin system security pki cmpv2 cert-request save-as string
Tree	save-as
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

subject-dn string

Synopsis	Subject of the requesting certificate
Context	admin system security pki cmpv2 cert-request subject-dn string
Tree	subject-dn
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C ST O OU CN}.

String Length	1 to 256
Introduced	23.3.R1
Platforms	All

clear-request

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

ca-profile *reference*

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

initial-registration

Synopsis	Request initial certificate using the CMPv2 protocol
Context	admin system security pki cmpv2 initial-registration
Tree	initial-registration
Description	When specified, the system requests the initial certificate from the CA using the CMPv2 initial registration procedure. The ca-profile parameter specifies a CA profile which includes CMP server information. The key-to-certify parameter is an imported key file to be certified by the CA. The request is authenticated via one of the following methods:

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

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

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

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

Introduced	23.3.R1
Platforms	All

ca-profile reference

Synopsis	PKI CA profile name
Context	admin system security pki cmpv2 initial-registration ca-profile reference
Tree	ca-profile
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	state system security pki ca-profile string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

certificate string

Synopsis	Filename of the certificate for the protection key
Context	admin system security pki cmpv2 initial-registration certificate string

Tree	certificate
String Length	1 to 95
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	23.3.R1
Platforms	All

domain-name *string*

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

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki cmpv2 initial-registration hash-algorithm <i>keyword</i>
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki cmpv2 initial-registration ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address

Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	23.3.R1
Platforms	All

key-to-certify *string*

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

password *string*

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

protection-key *string*

Synopsis	Key file used to generate message protection signature
Context	admin system security pki cmpv2 initial-registration protection-key <i>string</i>
Tree	protection-key
String Length	1 to 95
Notes	The following elements are part of a mandatory choice: (certificate , hash-algorithm , protection-key , send-chain , and with-ca) or (password and reference).
Introduced	23.3.R1

Platforms All

reference string

Synopsis Password reference number

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

Tree [reference](#)

String Length 1 to 64

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

Introduced 23.3.R1

Platforms All

save-as string

Synopsis Full path to save the result certificate

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

Tree [save-as](#)

String Length 1 to 200

Notes This element is mandatory.

Introduced 23.3.R1

Platforms All

send-chain

Synopsis Send a certificate chain

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

Tree [send-chain](#)

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

Introduced 23.3.R1

Platforms All

subject-dn string

Synopsis Subject of the requesting certificate

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

with-ca *reference*

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

key-update

Synopsis	Request new certificate to update existing certificate
Context	admin system security pki cmpv2 key-update
Tree	key-update
Description	When specified, the system requests a new certificate from the CA to update an existing certificate due to reasons such as a key refresh or to replace a compromised key. The CA may not return the certificate immediately, for example, if the request process requires manual intervention. In these cases, the poll command can be used to poll the status of the request.
Introduced	23.3.R1
Platforms	All

ca-profile *reference*

Synopsis	PKI CA profile name
Context	admin system security pki cmpv2 key-update ca-profile <i>reference</i>

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

hash-algorithm *keyword*

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

new-key *string*

Synopsis	Name of new imported key file used for the key update
Context	admin system security pki cmpv2 key-update new-key <i>string</i>
Tree	new-key
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

old-certificate *string*

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

Platforms All

old-key string

Synopsis Name of the old key file to be replaced

Context [admin system security pki cmpv2 key-update old-key string](#)

Tree [old-key](#)

String Length 1 to 95

Notes This element is mandatory.

Introduced 23.3.R1

Platforms All

save-as string

Synopsis Full path to save the result certificate file

Context [admin system security pki cmpv2 key-update save-as string](#)

Tree [save-as](#)

String Length 1 to 200

Notes This element is mandatory.

Introduced 23.3.R1

Platforms All

poll

Synopsis Poll the CMPv2 server for pending request status

Context [admin system security pki cmpv2 poll](#)

Tree [poll](#)

Description When specified, the system polls the status of the pending CMPv2 request toward the specified CA.

If the response is ready, the system resumes the CMPv2 protocol exchange with the server.

SR OS allows only one pending CMP request per CA; therefore, no new request is allowed when a pending request is present.

Introduced 23.3.R1

Platforms All

ca-profile *reference*

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

convert-file

Synopsis	Convert imported file between secure and legacy format
Context	admin system security pki convert-file
Tree	convert-file
Introduced	23.3.R1
Platforms	All

force

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

format *keyword*

Synopsis	File format to convert to
Context	admin system security pki convert-file format keyword
Tree	format

Options	secure, legacy
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

[input-file] *string*

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

[output-file] *string*

Synopsis	Output filename
Context	admin system security pki convert-file [output-file] <i>string</i>
Tree	[output-file]
Description	This command specifies the output filename. If the filename already exists, the system prompts the user to proceed or aborts if the force command is unconfigured.
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

crl-update

Synopsis	Trigger the CRL update for the CA profile
Context	admin system security pki crl-update
Tree	crl-update
Introduced	23.3.R1
Platforms	All

ca-profile *reference*

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

est

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

ca-certificates

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

est-profile *string*

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

force

Synopsis	Force an overwrite of the result file
Context	admin system security pki est ca-certificates force
Tree	force
Introduced	23.3.R1
Platforms	All

output-url *string*

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

enroll

Synopsis	Enroll a new certificate with CA with the EST protocol
Context	admin system security pki est enroll
Tree	enroll
Description	<p>When specified, the system enrolls a new certificate with Certificate Authority (CA) by the EST protocol specified with the est-profile command with a imported private key specified by the key command.</p> <p>The est-profile command specifies the authentication between the system and EST server.</p>

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

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

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

Introduced 23.3.R1
Platforms All

domain-name *string*

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

est-profile *string*

Synopsis PKI EST profile name
Context [admin system security pki est enroll est-profile string](#)
Tree [est-profile](#)
String Length 1 to 32
Notes This element is mandatory.
Introduced 23.3.R1
Platforms All

force

Synopsis Force an overwrite of the result file
Context [admin system security pki est enroll force](#)

Tree	force
Introduced	23.3.R1
Platforms	All

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki est enroll hash-algorithm keyword
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

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

key string

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

output-file *string*

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

subject-dn *string*

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

validate-certificate-chain

Synopsis	Validate result certificate chain before importing
Context	admin system security pki est enroll validate-certificate-chain
Tree	validate-certificate-chain
Introduced	23.3.R1
Platforms	All

renew

Synopsis	Renew a CA certificate using the EST protocol
Context	admin system security pki est renew
Tree	renew
Description	When specified, the system renews an imported certificate (specified by the certificate command) with a Certificate Authority (CA) using the EST protocol specified by the est-

profile parameter, with an imported private key specified the **key** command. The key can be either the key of the certificate to be renewed or a new key.

The authentication between system and EST server is specified by the **est-profile** parameter.

The system uses the **hash-alg** command to generate the CSR in the EST request message.

Introduced	23.3.R1
Platforms	All

certificate string

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

est-profile string

Synopsis	PKI EST profile name
Context	admin system security pki est renew est-profile string
Tree	est-profile
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

force

Synopsis	Force an overwrite of the result file
Context	admin system security pki est renew force
Tree	force
Introduced	23.3.R1
Platforms	All

hash-algorithm *keyword*

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

key *string*

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

output-file *string*

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

validate-certificate-chain

Synopsis	Validate result certificate chain before importing
Context	admin system security pki est renew validate-certificate-chain
Tree	validate-certificate-chain
Introduced	23.3.R1

Platforms All

export

Synopsis Export an imported file
 Context [admin system security pki export](#)
 Tree [export](#)
 Introduced 23.3.R1
 Platforms All

format *keyword*

Synopsis Output file format
 Context [admin system security pki export format *keyword*](#)
 Tree [format](#)
 Options pkcs12, pkcs7-der, pkcs7-pem, pem, der
 Notes This element is mandatory.
 Introduced 23.3.R1
 Platforms All

input-file *string*

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

key-file *string*

Synopsis Name of the key file to be exported
 Context [admin system security pki export key-file *string*](#)
 Tree [key-file](#)

Description	This command specifies the name of the key file to be exported when the output format may contain the certificate and the key.
String Length	1 to 95
Introduced	23.3.R1
Platforms	All

output-url *string*

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

password *string*

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

type *keyword*

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

generate-csr

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

domain-name *string*

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

hash-algorithm *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	admin system security pki generate-csr hash-algorithm keyword
Tree	hash-algorithm
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
Context	admin system security pki generate-csr ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ip-address
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.

Introduced	23.3.R1
Platforms	All

key-url string

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

output-url string

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

subject-dn string

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

use-printable

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

generate-keypair

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

dsa-key-size *number*

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

ecdsa-curve *keyword*

Synopsis	Elliptic curve of the ECDSA key to be generated
Context	admin system security pki generate-keypair ecdsa-curve keyword

Tree	ecdsa-curve
Default	secp256r1
Options	secp256r1, secp384r1, secp521r1
Notes	The following elements are part of a mandatory choice: dsa-key-size , ecdsa-curve , or rsa-key-size .
Introduced	23.3.R1
Platforms	All

rsa-key-size *number*

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

[save-path] *string*

Synopsis	Full path to save the result key file
Context	admin system security pki generate-keypair [save-path] <i>string</i>
Tree	[save-path]
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

import

Synopsis	Import a certificate related file
Context	admin system security pki import
Tree	import

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

format *keyword*

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

input-url *string*

Synopsis	Full path to the file to import
Context	admin system security pki import input-url <i>string</i>
Tree	input-url
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

output-file *string*

Synopsis	Name of the result file
Context	admin system security pki import output-file <i>string</i>
Tree	output-file
String Length	1 to 95

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

password *string*

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

type *keyword*

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

validate-certificate-chain

Synopsis	Validate the certificate chain
Context	admin system security pki import validate-certificate-chain
Tree	validate-certificate-chain
Description	When specified, the system validates the result certificate chain before it is imported.
Introduced	23.3.R1
Platforms	All

reload

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

application *keyword*

Synopsis	Application to be reloaded
Context	admin system security pki reload application keyword
Tree	application
Options	ipsec
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

certificate *string*

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

key *string*

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

Platforms All

show

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

file-content

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

[file-path] *string*

Synopsis Full path to the file to display
 Context [admin system security pki show file-content \[file-path\] string](#)
 Tree [\[file-path\]](#)
 String Length 1 to 200
 Notes This element is mandatory.
 Introduced 23.3.R1
 Platforms All

format *keyword*

Synopsis Format of the file to display
 Context [admin system security pki show file-content format keyword](#)
 Tree [format](#)
 Options pkcs10, pkcs12, pkcs7-der, pkcs7-pem, pem, der

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

password *string*

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

type *keyword*

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

update-certificate

Synopsis	Update End Entity certificate
Context	admin system security pki update-certificate
Tree	update-certificate
Description	When specified, the system triggers an update for the specified certificate according to the corresponding configure system security pki certificate-auto-update configuration.
Introduced	23.3.R1
Platforms	All

certificate *reference*

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

system-password

Synopsis	Change a local system password
Context	admin system security system-password
Tree	system-password
Introduced	22.10.R2
Platforms	All

admin-password

Synopsis	Administrative password
Context	admin system security system-password admin-password
Tree	admin-password
Notes	This element is mandatory.
Introduced	22.10.R2
Platforms	All

telemetry

Synopsis	Enter the telemetry context
Context	admin system telemetry
Tree	telemetry
Introduced	19.10.R1
Platforms	All

grpc

Synopsis	Enter the grpc context
Context	admin system telemetry grpc
Tree	grpc
Introduced	19.10.R1
Platforms	All

cancel

Synopsis	Cancel the gRPC dynamic telemetry subscription
Context	admin system telemetry grpc cancel
Tree	cancel
Introduced	19.10.R1
Platforms	All

all

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

subscription-id *number*

Synopsis	ID of the telemetry subscription to cancel
Context	admin system telemetry grpc cancel subscription-id <i>number</i>
Tree	subscription-id
Max. Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: all or subscription-id .
Introduced	19.10.R1
Platforms	All

tech-support

Synopsis	Save technical support information to a file
Context	admin tech-support
Tree	tech-support
Introduced	20.10.R1
Platforms	All

[url] *string*

Synopsis	URL to save technical support information
Context	admin tech-support [url] <i>string</i>
Tree	[url]
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

2.2 Configuration mode commands

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

```

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

```

2.2.1 Configuration mode command descriptions

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

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

[comment-text] *string*

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

[cli-path] *string*

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

commit

Synopsis	Commit the candidate configuration
Context	commit
Tree	commit

Introduced	16.0.R1
Platforms	All

comment *string*

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

confirmed

Synopsis	Explicitly confirm the changes to be accepted
Context	commit confirmed
Tree	confirmed
Introduced	16.0.R1
Platforms	All

accept

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

cancel

Synopsis	Cancel an ongoing confirmed commit issued and roll back
Context	commit confirmed cancel
Tree	cancel

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

comment *string*

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

persist-id *string*

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

[timeout] *number*

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

Platforms All

compare *[from] string to string*

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

[from] *string*

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

[to] *string*

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

[cli-path] *string*

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

Introduced	20.10.R1
Platforms	All

flat

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

full-context

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

lines number

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

netconf-rpc

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

summary

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

copy

Synopsis	Copy a configuration element to another
Context	copy
Tree	copy
Introduced	20.10.R1
Platforms	All

[cli-path] *string*

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

Platforms All

to string

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

discard

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

[cli-path] string

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

insert [new-entry] string

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

[new-entry] *string*

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

after

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

[cli-path] *string*

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

before

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

[cli-path] string

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

beginning

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

end

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

load [mode] keyword

Synopsis	Load configuration into the candidate configuration
Context	load keyword
Tree	load
Introduced	16.0.R1
Platforms	All

[mode] keyword

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

encryption-key string

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

interactive

Synopsis	Load the configuration interactively
Context	load keyword interactive
Tree	interactive
Description	This command allows the user to enter configuration commands directly in an interactive session.
Notes	The following elements are part of a mandatory choice: interactive or (encryption-key and url).
Introduced	22.10.R1
Platforms	All

[url] string

Synopsis	Location of the file to be loaded
----------	-----------------------------------

Context	load keyword [url] string
Tree	[url]
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: interactive or (encryption-key and url).
Introduced	16.0.R1
Platforms	All

rename

Synopsis	Rename a list element
Context	rename
Tree	rename
Introduced	20.10.R1
Platforms	All

[cli-path] string

Synopsis	Source element path to the list, or 'pwc'
Context	rename [cli-path] string
Tree	[cli-path]
Introduced	20.10.R1
Platforms	All

to string

Synopsis	Destination key name
Context	rename to string
Tree	to
Introduced	20.10.R1
Platforms	All

rollback

Synopsis	Roll back to a previous configuration
----------	---------------------------------------

Context	rollback
Tree	rollback
Introduced	16.0.R1
Platforms	All

commit-id *number*

Synopsis	Commit ID to roll back to
Context	rollback commit-id <i>number</i>
Tree	commit-id
Range	1 to 4294967295
Notes	The following elements are part of a choice: commit-id or rollback-id .
Introduced	16.0.R1
Platforms	All

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

Synopsis	Saved configuration number to roll back to
Context	rollback [rollback-id] (<i>keyword</i> <i>number</i>)
Tree	[rollback-id]
Range	0 to 200
Options	startup
Notes	The following elements are part of a choice: commit-id or rollback-id .
Introduced	23.3.R1
Platforms	All

update

Synopsis	Update the candidate baseline
Context	update
Tree	update
Introduced	16.0.R4
Platforms	All

/configure

Synopsis	Update the entire candidate
Context	update /configure
Tree	/configure
Introduced	16.0.R4
Platforms	All

/bof

Synopsis	Update the entire BOF candidate
Context	update /bof
Tree	/bof
Introduced	20.10.R1
Platforms	All

check

Synopsis	Perform dry-run update report without an actual update
Context	update check
Tree	check
Introduced	16.0.R4
Platforms	All

/debug

Synopsis	Update the entire debug candidate
Context	update /debug
Tree	/debug
Introduced	21.5.R1
Platforms	All

/li

Synopsis	Update the entire LI candidate
Context	update /li

Tree	/li
Introduced	19.10.R1
Platforms	All

validate

Synopsis	Validate changes in the candidate configuration
Context	validate
Tree	validate
Introduced	16.0.R1
Platforms	All

2.3 environment commands

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

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

2.3.1 environment command descriptions

environment

Synopsis	Configure the environment settings for this session
Context	environment
Tree	environment
Introduced	16.0.R1
Platforms	All

command-alias

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

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

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

[alias-name] *string*

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

admin-state *keyword*

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

cli-command *string*

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

description *string*

Synopsis	Text description
Context	environment command-alias alias <i>string</i> description <i>string</i>

Tree	description
String Length	1 to 110
Introduced	21.7.R1
Platforms	All

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

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

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

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

python-script *reference*

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

command-completion

Synopsis	Enter the command-completion context
Context	environment command-completion
Tree	command-completion
Introduced	16.0.R1
Platforms	All

enter *boolean*

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

space *boolean*

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

tab *boolean*

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

console

Synopsis	Enter the console context
Context	environment console
Tree	console
Introduced	16.0.R1
Platforms	All

length *number*

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

width *number*

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

info-output

Synopsis	Enter the info-output context
Context	environment info-output
Tree	info-output
Introduced	22.2.R1
Platforms	All

always-display

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

admin-state *boolean*

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

message-severity-level

Synopsis	Enter the message-severity-level context
Context	environment message-severity-level
Tree	message-severity-level
Introduced	16.0.R1
Platforms	All

cli *keyword*

Synopsis	Message severity threshold for CLI messages
Context	environment message-severity-level cli <i>keyword</i>
Tree	cli
Default	info

Options	warning, info
Introduced	16.0.R1
Platforms	All

more *boolean*

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

progress-indicator

Synopsis	Enter the progress-indicator context
Context	environment progress-indicator
Tree	progress-indicator
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

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

delay *number*

Synopsis	Delay before the progress indicator is displayed
Context	environment progress-indicator delay <i>number</i>

Tree	delay
Range	0 to 10000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type *keyword*

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

prompt

Synopsis	Enter the prompt context
Context	environment prompt
Tree	prompt
Introduced	16.0.R1
Platforms	All

context *boolean*

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

newline *boolean*

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

timestamp *boolean*

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

uncommitted-changes-indicator *boolean*

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

python

Synopsis	Enter the python context
Context	environment python
Tree	python
Introduced	21.10.R1
Platforms	All

memory-reservation *number*

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

minimum-available-memory *number*

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

timeout *number*

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

time-display *keyword*

Synopsis	Time zone to display time
Context	environment time-display <i>keyword</i>
Tree	time-display

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

time-format *keyword*

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

2.4 file commands

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

```

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

```

file repair [cflash-id]

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

2.4.1 file command descriptions

file

Synopsis	Perform file operations
Context	file
Tree	file
Description	Commands in this context execute file management operations.
Introduced	20.10.R1
Platforms	All

change-directory

Synopsis	Change the working directory
Context	file change-directory
Tree	change-directory
Introduced	20.10.R1
Platforms	All

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

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

checksum

Synopsis	Compute and display checksums
Context	file checksum
Tree	checksum

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

[type] keyword

Synopsis	Checksum option type
Context	file checksum [type] keyword
Tree	[type]
Options	image, md5, sha256
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

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

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

copy

Synopsis	Copy files
Context	file copy
Tree	copy
Introduced	20.10.R1
Platforms	All

client-tls-profile *string*

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

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

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

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

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file copy direct-http
Tree	direct-http
Introduced	20.10.R1
Platforms	All

force

Synopsis	Force copy without prompting before overwriting
Context	file copy force
Tree	force
Introduced	20.10.R1
Platforms	All

proxy string

Synopsis	Connect over HTTP with a proxy
Context	file copy proxy string
Tree	proxy
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

recursive

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

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

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

disable

Synopsis	Disable compact flash devices
Context	file disable
Tree	disable
Introduced	20.10.R1

Platforms All

active

Synopsis Disable all devices on the active CPM

Context [file disable active](#)

Tree [active](#)

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

Introduced 20.10.R1

Platforms All

cflash-id *string*

Synopsis Disable the compact flash device

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

Tree [cflash-id](#)

String Length 4 to 6

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

Introduced 20.10.R1

Platforms All

standby

Synopsis Disable all devices on the standby CPM

Context [file disable standby](#)

Tree [standby](#)

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

Introduced 20.10.R1

Platforms All

edit

Synopsis Edit files with the text editor

Context [file edit](#)

Tree [edit](#)

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

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

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

enable

Synopsis	Enable compact flash devices
Context	file enable
Tree	enable
Introduced	20.10.R1
Platforms	All

active

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

cflash-id *string*

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

standby

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

format

Synopsis	Format a compact flash device
Context	file format
Tree	format
Introduced	20.10.R1
Platforms	All

[cflash-id] *string*

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

list

Synopsis	List directory contents
Context	file list
Tree	list
Introduced	20.10.R1
Platforms	All

reverse

Synopsis	List files in reverse sort order
Context	file list reverse
Tree	reverse
Introduced	20.10.R1
Platforms	All

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

Synopsis	Sort order for the directory
Context	file list [sort-order] keyword
Tree	[sort-order]
Options	date, name, size
Introduced	20.10.R1
Platforms	All

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

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

make-directory

Synopsis	Make a directory
Context	file make-directory
Tree	make-directory
Introduced	20.10.R1
Platforms	All

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

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

move

Synopsis	Move or rename files or directories
Context	file move
Tree	move
Introduced	20.10.R1
Platforms	All

client-tls-profile *string*

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

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

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

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file move direct-http
Tree	direct-http
Introduced	20.10.R1
Platforms	All

force

Synopsis	Force move without prompting before overwriting
Context	file move force
Tree	force
Introduced	20.10.R1
Platforms	All

proxy string

Synopsis	Connect over HTTP with a proxy
Context	file move proxy string
Tree	proxy
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

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

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

permission

Synopsis	Show or set file permissions
Context	file permission
Tree	permission
Introduced	20.10.R1
Platforms	All

[attribute] *keyword*

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

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

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

remove

Synopsis	Remove files
Context	file remove
Tree	remove
Introduced	20.10.R1
Platforms	All

client-tls-profile *string*

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

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file remove direct-http
Tree	direct-http
Introduced	20.10.R1
Platforms	All

force

Synopsis	Force removal without prompting
Context	file remove force
Tree	force
Introduced	20.10.R1
Platforms	All

proxy string

Synopsis	Connect over HTTP with a proxy
Context	file remove proxy string
Tree	proxy
String Length	1 to 255
Introduced	20.10.R1
Platforms	All

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

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

remove-directory

Synopsis	Remove directories
Context	file remove-directory
Tree	remove-directory
Introduced	20.10.R1
Platforms	All

force

Synopsis	Force removal without prompting
Context	file remove-directory force
Tree	force
Introduced	20.10.R1
Platforms	All

recursive

Synopsis	Remove directory and contents recursively
Context	file remove-directory recursive
Tree	recursive
Introduced	20.10.R1
Platforms	All

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

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

repair

Synopsis	Repair a compact flash file system
Context	file repair
Tree	repair
Introduced	20.10.R1
Platforms	All

[cflash-id] *string*

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

show

Synopsis	Display the contents of a file
Context	file show
Tree	show
Introduced	20.10.R1
Platforms	All

client-tls-profile *string*

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

direct-http

Synopsis	Allow direct HTTP connection, do not follow redirects
Context	file show direct-http
Tree	direct-http
Introduced	20.10.R1
Platforms	All

proxy *string*

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

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

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

unzip

Synopsis	Unzip files
Context	file unzip
Tree	unzip
Introduced	20.10.R1
Platforms	All

create-destination

Synopsis	Create destination directory if it does not exist
Context	file unzip create-destination
Tree	create-destination
Introduced	20.10.R1
Platforms	All

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

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

force

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

list

Synopsis	List the file contents without the unzip operation
Context	file unzip list
Tree	list
Notes	The following elements are part of a choice: force or list .
Introduced	20.10.R1
Platforms	All

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

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

version

Synopsis	Display the version of an SR OS image file
Context	file version
Tree	version
Introduced	20.10.R1
Platforms	All

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

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

2.5 Global commands

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

```

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

```

oam eth-cfm eth-test

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

oam lsp-ping ldp next-hop

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

oam lsp-ping sr-policy endpoint

```

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

```


oam lsp-trace rsvp-te fc

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

oam lsp-trace sr-ospf3 size

```

- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- sr-policy
- color number
- downstream-map-tlv keyword
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- fc keyword
- interface reference
- interval number
- max-fail number
- max-ttl number
- min-ttl number
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- probe-count number
- profile keyword
- segment-list number
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- sr-te
- downstream-map-tlv keyword
- fc keyword
- interface reference
- interval number
- lsp-name reference
- max-fail number
- max-ttl number
- min-ttl number
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- path reference
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- probe-count number
- profile keyword
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- oam-pm
- action keyword
- session reference
- test-type keyword
- saa
- owner reference test reference
- start
- accounting boolean
- stop
- accounting boolean
- password
- ping
- bypass-routing
- count number
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- do-not-fragment
- fc keyword
- interface (reference | reference | reference | reference | reference)
- interval (number | decimal-number)
- next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- pattern (keyword | number)
- router-instance (reference | reference)

```

ping size

```

- size number
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- subscriber string
- timeout number
- tos number
- ttl number
- pwc
- [path-type] keyword
- previous
- pyexec (string | reference)
- [argument-01] string
- [argument-02] string
- [argument-03] string
- [argument-04] string
- [argument-05] string
- [argument-06] string
- [argument-07] string
- [argument-08] string
- [argument-09] string
- [argument-10] string
- quit-config
- ssh
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- key-re-exchange
- mbytes (number | keyword)
- minutes (number | keyword)
- login-name string
- router-instance (reference | reference)
- telnet
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- port number
- router-instance (reference | reference)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- top
- traceroute
- color number
- decode keyword
- dest-port number
- dest-port-udp-fixed
- [destination] (ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)
- detail
- endpoint string
- min-ttl number
- numeric
- probe-count number
- protocol keyword
- router-instance string
- segment-list number
- size number
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- srv6-policy
- tos number
- ttl number
- wait number
- tree
- [cli-path] string
- detail
- flat

```

2.5.1 Global command descriptions

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

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

[levels] *number*

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

bof

Synopsis	Enter a candidate configuration mode
Context	bof
Tree	bof
Introduced	20.10.R1
Platforms	All

exclusive

Synopsis	Enter exclusive configuration mode
Context	bof exclusive
Tree	exclusive
Introduced	20.10.R1

Platforms All

private

Synopsis Enter private configuration mode
Context [bof private](#)
Tree [private](#)
Introduced 20.10.R1
Platforms All

read-only

Synopsis Enter read-only configuration mode
Context [bof read-only](#)
Tree [read-only](#)
Introduced 20.10.R1
Platforms All

configure

Synopsis Enter a candidate configuration mode
Context [configure](#)
Tree [configure](#)
Introduced 16.0.R2
Platforms All

exclusive

Synopsis Enter exclusive configuration mode
Context [configure exclusive](#)
Tree [exclusive](#)
Introduced 16.0.R2
Platforms All

global

Synopsis	Enter global configuration mode
Context	configure global
Tree	global
Introduced	16.0.R2
Platforms	All

private

Synopsis	Enter private configuration mode
Context	configure private
Tree	private
Introduced	16.0.R4
Platforms	All

read-only

Synopsis	Enter read-only configuration mode
Context	configure read-only
Tree	read-only
Introduced	16.0.R2
Platforms	All

debug

Synopsis	Enter a candidate configuration mode
Context	debug
Tree	debug
Introduced	21.5.R1
Platforms	All

exclusive

Synopsis	Enter exclusive configuration mode
Context	debug exclusive

Tree	exclusive
Introduced	21.5.R1
Platforms	All

private

Synopsis	Enter private configuration mode
Context	debug private
Tree	private
Introduced	21.5.R1
Platforms	All

read-only

Synopsis	Enter read-only configuration mode
Context	debug read-only
Tree	read-only
Introduced	21.5.R1
Platforms	All

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

Synopsis	Delete an element
Context	delete string
Tree	delete
Introduced	16.0.R1
Platforms	All

[cli-path] *string*

Synopsis	Absolute path or relative path from pwc
Context	delete string
Tree	delete
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

edit-config

Synopsis Enter a configuration mode
Context [edit-config](#)
Tree [edit-config](#)
Introduced 16.0.R1
Platforms All

bof

Synopsis Enter the bof configuration context
Context [edit-config bof](#)
Tree [bof](#)
Introduced 20.10.R1
Platforms All

debug

Synopsis Enter the debug configuration context
Context [edit-config debug](#)
Tree [debug](#)
Introduced 21.5.R1
Platforms All

exclusive

Synopsis Enter exclusive configuration mode
Context [edit-config exclusive](#)
Tree [exclusive](#)
Introduced 16.0.R1
Platforms All

global

Synopsis	Enter global configuration mode
Context	edit-config global
Tree	global
Introduced	16.0.R1
Platforms	All

li

Synopsis	Enter the li configuration context
Context	edit-config li
Tree	li
Introduced	19.10.R1
Platforms	All

private

Synopsis	Enter private configuration mode
Context	edit-config private
Tree	private
Introduced	16.0.R4
Platforms	All

read-only

Synopsis	Enter read-only configuration mode
Context	edit-config read-only
Tree	read-only
Introduced	16.0.R1
Platforms	All

enable

Synopsis	Enable administrative mode
Context	enable

Tree	enable
Introduced	20.2.R1
Platforms	All

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

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

[url] *string*

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

echo

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

exit

Synopsis	Return to the previous context or to operational root
Context	exit
Tree	exit
Introduced	16.0.R1

Platforms All

all

Synopsis Return to the root context

Context [exit all](#)

Tree [all](#)

Introduced 16.0.R1

Platforms All

history

Synopsis Show the command history

Context [history](#)

Tree [history](#)

Introduced 16.0.R1

Platforms All

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

Synopsis Show the information under the present working context

Context [info keyword](#)

Tree [info](#)

Introduced 16.0.R1

Platforms All

[[from](#)] *keyword*

Synopsis Source datastore

Context [info keyword](#)

Tree [info](#)

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

Options candidate, running, baseline, intended

Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	All

[cli-path] *string*

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

converted

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

detail

Synopsis	Include default and unconfigured values
Context	info keyword detail
Tree	detail
Introduced	16.0.R1
Platforms	All

differences

Synopsis	Show the different values each model tries to set
----------	---

Context	info keyword differences
Tree	differences
Description	When specified, this command shows only the values that are different when multiple models set the same configuration element.
Notes	The following elements are part of a choice: differences , model , or values .
Introduced	23.3.R1
Platforms	All

flat

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

full-context

Synopsis	Show the full context on each line
Context	info keyword full-context
Tree	full-context
Introduced	16.0.R1
Platforms	All

inheritance

Synopsis	Include configuration inherited from configuration groups
Context	info keyword inheritance
Tree	inheritance
Description	<p>This option specifies the inclusion of configuration inherited from configuration groups in the output.</p> <p>This option should only be used in the configure region when configuration groups are used. The output with this option is the same as info when used in other configuration regions.</p>

This option is not supported for **state** elements.

Introduced 16.0.R1
 Platforms All

json

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

model keyword

Synopsis Data model for which to display converted output
 Context [info keyword model keyword](#)
 Tree [model](#)
 Description This option specifies the data model for which to display the converted output.
 This option is only supported with the **converted** option and is only available when **configure system management-interface yang-modules openconfig-modules** is set to **true**.
 Default all
 Options all, openconfig
 Notes The following elements are part of a choice: **differences**, **model**, or **values**.
 Introduced 20.7.R1
 Platforms All

units

Synopsis Include unit types for applicable elements
 Context [info keyword units](#)
 Tree [units](#)
 Introduced 20.5.R1
 Platforms All

values

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

xml

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

li

Synopsis	Enter a candidate configuration mode
Context	li
Tree	li
Introduced	19.10.R1
Platforms	All

exclusive

Synopsis	Enter exclusive configuration mode
Context	li exclusive
Tree	exclusive
Introduced	19.10.R1
Platforms	All

private

Synopsis	Enter private configuration mode
Context	li private
Tree	private
Introduced	19.10.R1
Platforms	All

read-only

Synopsis	Enter read-only configuration mode
Context	li read-only
Tree	read-only
Introduced	19.10.R1
Platforms	All

logout

Synopsis	Exit the CLI session
Context	logout
Tree	logout
Introduced	16.0.R1
Platforms	All

oam

Synopsis	Perform OAM tests
Context	oam
Tree	oam
Introduced	20.2.R1
Platforms	All

efm

Synopsis	Enter the efm context
----------	------------------------------

Context	oam efm
Tree	efm
Introduced	20.2.R1
Platforms	All

local-loopback

Synopsis	Start or stop local loopback test on a port
Context	oam efm local-loopback
Tree	local-loopback
Introduced	20.2.R1
Platforms	All

[action] *keyword*

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

port-id *string*

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

remote-loopback

Synopsis	Start or stop remote loopback test on a port
----------	--

Context	oam efm remote-loopback
Tree	remote-loopback
Introduced	20.2.R1
Platforms	All

[action] *keyword*

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

port-id *string*

Synopsis	Port ID for the test
Context	oam efm remote-loopback port-id string
Tree	port-id
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

eth-cfm

Synopsis	Initiate an Ethernet Connectivity Fault Management test
Context	oam eth-cfm
Tree	eth-cfm
Introduced	20.2.R1
Platforms	All

eth-test

Synopsis	Initiate an OAM ETH-CFM test
----------	------------------------------

Context	oam eth-cfm eth-test
Tree	eth-test
Introduced	20.2.R1
Platforms	All

data-length *number*

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

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

mep-id *number*

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

priority *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	oam eth-cfm eth-test priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	20.2.R1
Platforms	All

linktrace

Synopsis	Initiate a linktrace test
Context	oam eth-cfm linktrace
Tree	linktrace

Introduced 20.2.R1
Platforms All

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

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

mep-id number

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

ttl number

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

loopback

Synopsis	Initiate a loopback test
Context	oam eth-cfm loopback
Tree	loopback
Introduced	20.2.R1
Platforms	All

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

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

Introduced	20.2.R1
Platforms	All

interval *number*

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

lbm-padding *number*

Synopsis	Data portion size of the data TLV, no octet string
Context	oam eth-cfm loopback lbm-padding number
Tree	lbm-padding
Description	This command specifies the size of the data portion of the data TLV which does not allow for an optional octet string. MSDU is not processed when setting is in use. A value of 0 means that no data TLV is added to the packet. This is specified with an octet string. This parameter and size are mutually exclusive.
Range	0 3 to 9778
Default	0
Introduced	20.2.R1
Platforms	All

ma-admin-name *reference*

Synopsis	Association name
Context	oam eth-cfm loopback ma-admin-name reference
Tree	ma-admin-name
Reference	state eth-cfm domain association string
Notes	This element is mandatory.

Introduced	20.2.R1
Platforms	All

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm loopback md-admin-name reference
Tree	md-admin-name
Reference	state eth-cfm domain string
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

mep-id *number*

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

priority *number*

Synopsis	Frame priority that can be manipulated by QoS policies
Context	oam eth-cfm loopback priority number
Tree	priority
Range	0 to 7
Introduced	20.2.R1
Platforms	All

send-count *number*

Synopsis	Number of loopback messages to send
----------	-------------------------------------

Context	oam eth-cfm loopback send-count <i>number</i>
Tree	send-count
Range	1 to 1024
Default	1
Introduced	20.2.R1
Platforms	All

size *number*

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

timeout *number*

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

one-way-delay-test

Synopsis	Initiate a one-way delay test
Context	oam eth-cfm one-way-delay-test
Tree	one-way-delay-test
Introduced	20.2.R1
Platforms	All

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

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

ma-admin-name *reference*

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

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm one-way-delay-test md-admin-name <i>reference</i>
Tree	md-admin-name
Reference	state eth-cfm domain <i>string</i>

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

mep-id *number*

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

priority *number*

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

two-way-delay-test

Synopsis	Initiate a two-way delay test
Context	oam eth-cfm two-way-delay-test
Tree	two-way-delay-test
Introduced	20.2.R1
Platforms	All

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

Synopsis	Destination MAC address or remote MEP ID of the peer
----------	--

Context	oam eth-cfm two-way-delay-test [destination] (<i>mac-unicast-address-no-zero number</i>)
Tree	[destination]
Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

ma-admin-name *reference*

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

md-admin-name *reference*

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

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm two-way-delay-test mep-id <i>number</i>
Tree	mep-id
Range	1 to 8191
Notes	This element is mandatory.

Introduced	20.2.R1
Platforms	All

priority *number*

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

two-way-slm-test

Synopsis	Initiate a two-way SLM test in SAA
Context	oam eth-cfm two-way-slm-test
Tree	two-way-slm-test
Introduced	20.2.R1
Platforms	All

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

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

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

Synopsis	Time between probes within the test run
Context	oam eth-cfm two-way-slm-test interval (<i>number</i> <i>decimal-number</i>)

Tree	interval
Range	1 to 10
Default	5
Units	seconds
Introduced	20.2.R1
Platforms	All

ma-admin-name *reference*

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

md-admin-name *reference*

Synopsis	Domain name
Context	oam eth-cfm two-way-slm-test md-admin-name reference
Tree	md-admin-name
Reference	state eth-cfm domain string
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

mep-id *number*

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	oam eth-cfm two-way-slm-test mep-id number
Tree	mep-id
Range	1 to 8191
Notes	This element is mandatory.

Introduced	20.2.R1
Platforms	All

priority number

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

send-count number

Synopsis	Number of two-way SLM test messages to send
Context	oam eth-cfm two-way-slm-test send-count number
Tree	send-count
Range	1 to 1000
Default	1
Introduced	20.2.R1
Platforms	All

size number

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

timeout *number*

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

lsp-ping

Synopsis	Perform a Label Switched Path (LSP) ping test
Context	oam lsp-ping
Tree	lsp-ping
Introduced	23.3.R1
Platforms	All

bgp-label

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

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
----------	---

Context	oam lsp-ping bgp-label fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping bgp-label interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping bgp-label interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping bgp-label next-hop (ipv4-address-no-zone ipv6-address-no-zone)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1

Platforms All

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

Synopsis IP address of the path destination
 Context [oam lsp-ping bgp-label path-destination](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
 Tree [path-destination](#)
 Introduced 23.3.R1
 Platforms All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis Destination IP prefix for the test
 Context [oam lsp-ping bgp-label prefix](#) (*ipv4-prefix | ipv6-prefix*)
 Tree [prefix](#)
 Notes This element is mandatory.
 Introduced 23.3.R1
 Platforms All

profile *keyword*

Synopsis QoS profile for the transmitted echo request packets
 Context [oam lsp-ping bgp-label profile](#) *keyword*
 Tree [profile](#)
 Default out
 Options in, out
 Introduced 23.3.R1
 Platforms All

send-count *number*

Synopsis Number of echo request packets to send
 Context [oam lsp-ping bgp-label send-count](#) *number*
 Tree [send-count](#)
 Range 1 to 100

Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size number

Synopsis	Echo request packet pad size
Context	oam lsp-ping bgp-label size number
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

source-ip-address ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Source IP address
Context	oam lsp-ping bgp-label source-ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout number

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping bgp-label timeout number
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

ttl number

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping bgp-label ttl number
Tree	ttl
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

ldp

Synopsis	Perform a Label Distribution Protocol (LDP) LSP ping test
Context	oam lsp-ping ldp
Tree	ldp
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping ldp fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping ldp interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .

Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping ldp interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping ldp next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-ping ldp path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping ldp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)

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

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping ldp profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping ldp send-count <i>number</i>
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping ldp size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1

Platforms All

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

Synopsis Source IP address

Context [oam lsp-ping ldp source-ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [source-ip-address](#)

Introduced 23.3.R1

Platforms All

timeout *number*

Synopsis Time to wait for a reply after sending an echo request

Context [oam lsp-ping ldp timeout](#) *number*

Tree [timeout](#)

Range 1 to 10

Default 5

Units seconds

Introduced 23.3.R1

Platforms All

ttl *number*

Synopsis TTL value for the MPLS label of the echo request

Context [oam lsp-ping ldp ttl](#) *number*

Tree [ttl](#)

Range 1 to 255

Default 255

Introduced 23.3.R1

Platforms All

rsvp-te

Synopsis Perform an RSVP-TE LSP ping test

Context [oam lsp-ping rsvp-te](#)

Tree	rsvp-te
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping rsvp-te fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interval number

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping rsvp-te interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

lsp-name reference

Synopsis	Name of the LSP to test
Context	oam lsp-ping rsvp-te lsp-name reference
Tree	lsp-name
Reference	state router mpls lsp string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

path *reference*

Synopsis	Name of the MPLS path to test
Context	oam lsp-ping rsvp-te path reference
Tree	path
Reference	state router mpls path string
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping rsvp-te profile keyword
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping rsvp-te send-count number
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping rsvp-te size number
Tree	size

Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-ping rsvp-te source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping rsvp-te timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping rsvp-te ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

sr-isis

Synopsis	Perform an SR-ISIS LSP ping test
Context	oam lsp-ping sr-isis
Tree	sr-isis
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-isis fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

igp-instance number

Synopsis	IGP instance for the SR-ISIS test
Context	oam lsp-ping sr-isis igp-instance number
Tree	igp-instance
Range	0 to 127
Default	0
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-isis interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .

Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-isis interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-isis next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-isis path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping sr-isis prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)

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

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping sr-isis profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-isis send-count <i>number</i>
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-isis size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1

Platforms All

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

Synopsis Source IP address
 Context [oam lsp-ping sr-isis source-ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
 Tree [source-ip-address](#)
 Introduced 23.3.R1
 Platforms All

timeout *number*

Synopsis Time to wait for a reply after sending an echo request
 Context [oam lsp-ping sr-isis timeout](#) *number*
 Tree [timeout](#)
 Range 1 to 10
 Default 5
 Units seconds
 Introduced 23.3.R1
 Platforms All

ttl *number*

Synopsis TTL value for the MPLS label of the echo request
 Context [oam lsp-ping sr-isis ttl](#) *number*
 Tree [ttl](#)
 Range 1 to 255
 Default 255
 Introduced 23.3.R1
 Platforms All

sr-ospf

Synopsis Perform an SR-OSPF LSP ping test
 Context [oam lsp-ping sr-ospf](#)

Tree	sr-ospf
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-ospf fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

igp-instance number

Synopsis	IGP instance for the SR-OSPF test
Context	oam lsp-ping sr-ospf igp-instance number
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-ospf interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-ospf interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

next-hop *string*

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-ospf next-hop <i>string</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

path-destination *string*

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-ospf path-destination <i>string</i>
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping sr-ospf prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1

Platforms All

profile *keyword*

Synopsis QoS profile for the transmitted echo request packets
Context [oam lsp-ping sr-ospf profile keyword](#)
Tree [profile](#)
Default out
Options in, out
Introduced 23.3.R1
Platforms All

send-count *number*

Synopsis Number of echo request packets to send
Context [oam lsp-ping sr-ospf send-count number](#)
Tree [send-count](#)
Range 1 to 100
Default 1
Units packets
Introduced 23.3.R1
Platforms All

size *number*

Synopsis Echo request packet pad size
Context [oam lsp-ping sr-ospf size number](#)
Tree [size](#)
Range 1 to 9786
Default 1
Units bytes
Introduced 23.3.R1
Platforms All

source-ip-address *string*

Synopsis	Source IP address
Context	oam lsp-ping sr-ospf source-ip-address <i>string</i>
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-ospf timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping sr-ospf ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

sr-ospf3

Synopsis	Perform an SR-OSPFv3 LSP ping test
Context	oam lsp-ping sr-ospf3
Tree	sr-ospf3
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-ospf3 fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

igp-instance number

Synopsis	IGP instance for the SR-OSPFv3 test
Context	oam lsp-ping sr-ospf3 igp-instance number
Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-ospf3 interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval number

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-ospf3 interval number
Tree	interval

Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-ospf3 next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-ospf3 path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-ping sr-ospf3 prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
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Context	oam lsp-ping sr-ospf3 profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-ospf3 send-count <i>number</i>
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-ospf3 size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-ping sr-ospf3 source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1

Platforms All

timeout *number*

Synopsis Time to wait for a reply after sending an echo request
Context [oam lsp-ping sr-ospf3 timeout number](#)
Tree [timeout](#)
Range 1 to 10
Default 5
Units seconds
Introduced 23.3.R1
Platforms All

ttl *number*

Synopsis TTL value for the MPLS label of the echo request
Context [oam lsp-ping sr-ospf3 ttl number](#)
Tree [ttl](#)
Range 1 to 255
Default 255
Introduced 23.3.R1
Platforms All

sr-policy

Synopsis Perform an SR policy LSP ping test
Context [oam lsp-ping sr-policy](#)
Tree [sr-policy](#)
Introduced 23.3.R1
Platforms All

color *number*

Synopsis Segment Routing color for the test
Context [oam lsp-ping sr-policy color number](#)

Tree	color
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

Synopsis	Segment Routing endpoint for the test
Context	oam lsp-ping sr-policy endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-policy fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-policy interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-policy interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-policy next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-policy path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-ping sr-policy profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out

Introduced	23.3.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	oam lsp-ping sr-policy segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Introduced	23.3.R1
Platforms	All

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-policy send-count <i>number</i>
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-policy size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-ping sr-policy source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-ping sr-policy timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

ttl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	oam lsp-ping sr-policy ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

sr-te

Synopsis	Perform an SR-TE LSP ping test
Context	oam lsp-ping sr-te
Tree	sr-te
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-ping sr-te fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-ping sr-te interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval number

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-ping sr-te interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

lsp-name reference

Synopsis	Name of the LSP to test
Context	oam lsp-ping sr-te lsp-name reference

Tree	lsp-name
Reference	state router mpls lsp string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-ping sr-te next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

path reference

Synopsis	Name of the MPLS path to test
Context	oam lsp-ping sr-te path reference
Tree	path
Reference	state router mpls path string
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-ping sr-te path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

profile keyword

Synopsis	QoS profile for the transmitted echo request packets
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Context	oam lsp-ping sr-te profile keyword
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

send-count *number*

Synopsis	Number of echo request packets to send
Context	oam lsp-ping sr-te send-count number
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-ping sr-te size number
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-ping sr-te source-ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	source-ip-address
Introduced	23.3.R1

Platforms All

timeout *number*

Synopsis Time to wait for a reply after sending an echo request
Context [oam lsp-ping sr-te timeout number](#)
Tree [timeout](#)
Range 1 to 10
Default 5
Units seconds
Introduced 23.3.R1
Platforms All

ttl *number*

Synopsis TTL value for the MPLS label of the echo request
Context [oam lsp-ping sr-te ttl number](#)
Tree [ttl](#)
Range 1 to 255
Default 255
Introduced 23.3.R1
Platforms All

lsp-trace

Synopsis Perform a Label Switched Path (LSP) trace test
Context [oam lsp-trace](#)
Tree [lsp-trace](#)
Introduced 23.3.R1
Platforms All

bgp-label

Synopsis Perform a BGP-label LSP trace test
Context [oam lsp-trace bgp-label](#)

Tree	bgp-label
Description	This option performs an LSP trace test using Target FEC Stack sub-type "BGP labeled IPv4 prefix".
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace bgp-label downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc *keyword*

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

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace bgp-label interface <i>reference</i>
Tree	interface
Reference	state router interface <i>string</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace bgp-label interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace bgp-label max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace bgp-label max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace bgp-label min-ttl <i>number</i>

Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace bgp-label next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace bgp-label output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace bgp-label path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace bgp-label prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace bgp-label probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace bgp-label profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace bgp-label size <i>number</i>
Tree	size
Range	1 to 9786
Default	1

Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace bgp-label source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace bgp-label timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

ldp

Synopsis	Perform an LDP LSP trace test
Context	oam lsp-trace ldp
Tree	ldp
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace ldp downstream-map-tlv <i>keyword</i>

Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace ldp fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace ldp interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace ldp interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

max-fail number

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace ldp max-fail number
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl number

Synopsis	Maximum TTL
Context	oam lsp-trace ldp max-ttl number
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl number

Synopsis	Initial TTL for the test
Context	oam lsp-trace ldp min-ttl number
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace ldp next-hop (ipv4-address-no-zone ipv6-address-no-zone)
Tree	next-hop

Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace ldp output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace ldp path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace ldp prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace ldp probe-count <i>number</i>

Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace ldp profile keyword
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace ldp size number
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace ldp source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace ldp timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

rsvp-te

Synopsis	Perform an RSVP-TE LSP trace test
Context	oam lsp-trace rsvp-te
Tree	rsvp-te
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace rsvp-te downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace rsvp-te fc <i>keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc

Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace rsvp-te interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

lsp-name *reference*

Synopsis	Name of the LSP to test
Context	oam lsp-trace rsvp-te lsp-name <i>reference</i>
Tree	lsp-name
Reference	state router mpls lsp <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace rsvp-te max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace rsvp-te max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace rsvp-te min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace rsvp-te output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

path *reference*

Synopsis	Name of the MPLS path to test
Context	oam lsp-trace rsvp-te path <i>reference</i>
Tree	path
Reference	state router mpls path <i>string</i>

Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace rsvp-te probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace rsvp-te profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace rsvp-te size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace rsvp-te source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace rsvp-te timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

sr-isis

Synopsis	Perform an SR-ISIS LSP trace test
Context	oam lsp-trace sr-isis
Tree	sr-isis
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-isis downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc keyword

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-isis fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

igp-instance number

Synopsis	IGP instance for the SR-ISIS test
Context	oam lsp-trace sr-isis igp-instance number
Tree	igp-instance
Range	0 to 127
Default	0
Introduced	23.3.R1
Platforms	All

interface reference

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-isis interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval number

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-isis interval number
Tree	interval

Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-isis max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-isis max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-isis min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-isis next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-isis output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-isis path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-isis prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-isis probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-isis profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-isis size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace sr-isis source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-isis timeout number
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

sr-ospf

Synopsis	Perform an SR-OSPF LSP trace test
Context	oam lsp-trace sr-ospf
Tree	sr-ospf
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-ospf downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
----------	---

Context	oam lsp-trace sr-ospf fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR-OSPF test
Context	oam lsp-trace sr-ospf igp-instance number
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	23.3.R1
Platforms	All

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-ospf interface reference
Tree	interface
Reference	state router interface <i>string</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-ospf interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds

Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-ospf max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-ospf max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-ospf min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

next-hop *string*

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-ospf next-hop <i>string</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-ospf output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

path-destination *string*

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-ospf path-destination <i>string</i>
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-ospf prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-ospf probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-ospf profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-ospf size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

source-ip-address *string*

Synopsis	Source IP address
Context	oam lsp-trace sr-ospf source-ip-address <i>string</i>

Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-ospf timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

sr-ospf3

Synopsis	Perform an SR-OSPFv3 LSP trace test
Context	oam lsp-trace sr-ospf3
Tree	sr-ospf3
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-ospf3 downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
----------	---

Context	oam lsp-trace sr-ospf3 fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR-OSPFv3 test
Context	oam lsp-trace sr-ospf3 igp-instance number
Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	23.3.R1
Platforms	All

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-ospf3 interface reference
Tree	interface
Reference	state router interface <i>string</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-ospf3 interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds

Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-ospf3 max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-ospf3 max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-ospf3 min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-ospf3 next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-ospf3 output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-ospf3 path-destination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	oam lsp-trace sr-ospf3 prefix (<i>ipv4-prefix ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-ospf3 probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-ospf3 profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-ospf3 size <i>number</i>
Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
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Context	oam lsp-trace sr-ospf3 source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-ospf3 timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

sr-policy

Synopsis	Perform an SR policy LSP trace test
Context	oam lsp-trace sr-policy
Tree	sr-policy
Introduced	23.3.R1
Platforms	All

color *number*

Synopsis	Segment Routing color for the test
Context	oam lsp-trace sr-policy color <i>number</i>
Tree	color
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	oam lsp-trace sr-policy downstream-map-tlv keyword
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

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

Synopsis	Segment Routing endpoint for the test
Context	oam lsp-trace sr-policy endpoint (ipv4-address-no-zone ipv6-address-no-zone)
Tree	endpoint
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-policy fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-policy interface reference
Tree	interface
Reference	state router interface string
Notes	The following elements are part of a choice: interface or next-hop .

Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-policy interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1
Platforms	All

max-fail *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	oam lsp-trace sr-policy max-fail <i>number</i>
Tree	max-fail
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

max-ttl *number*

Synopsis	Maximum TTL
Context	oam lsp-trace sr-policy max-ttl <i>number</i>
Tree	max-ttl
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	Initial TTL for the test
Context	oam lsp-trace sr-policy min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-policy next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-policy output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-policy path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-policy probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-policy profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	oam lsp-trace sr-policy segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-policy size <i>number</i>
Tree	size
Range	1 to 9786

Default	1
Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace sr-policy source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-policy timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

sr-te

Synopsis	Perform an SR-TE LSP trace test
Context	oam lsp-trace sr-te
Tree	sr-te
Introduced	23.3.R1
Platforms	All

downstream-map-tlv *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
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Context	oam lsp-trace sr-te downstream-map-tlv <i>keyword</i>
Tree	downstream-map-tlv
Options	dsmap, ddmmap, none
Introduced	23.3.R1
Platforms	All

fc *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	oam lsp-trace sr-te fc <i>keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	23.3.R1
Platforms	All

interface *reference*

Synopsis	Egress router interface to use with path destination
Context	oam lsp-trace sr-te interface <i>reference</i>
Tree	interface
Reference	state router interface <i>string</i>
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

interval *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	oam lsp-trace sr-te interval <i>number</i>
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	23.3.R1

Platforms All

lsp-name *reference*

Synopsis Name of the LSP to test
Context [oam lsp-trace sr-te lsp-name reference](#)
Tree [lsp-name](#)
Reference **state router mpls lsp string**
Notes This element is mandatory.
Introduced 23.3.R1
Platforms All

max-fail *number*

Synopsis Maximum consecutive timeouts before terminating test
Context [oam lsp-trace sr-te max-fail number](#)
Tree [max-fail](#)
Range 1 to 255
Default 5
Introduced 23.3.R1
Platforms All

max-ttl *number*

Synopsis Maximum TTL
Context [oam lsp-trace sr-te max-ttl number](#)
Tree [max-ttl](#)
Range 1 to 255
Default 30
Introduced 23.3.R1
Platforms All

min-ttl *number*

Synopsis Initial TTL for the test

Context	oam lsp-trace sr-te min-ttl <i>number</i>
Tree	min-ttl
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	oam lsp-trace sr-te next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	23.3.R1
Platforms	All

output-format *keyword*

Synopsis	Output format for the result
Context	oam lsp-trace sr-te output-format <i>keyword</i>
Tree	output-format
Default	summary
Options	summary, detail
Introduced	23.3.R1
Platforms	All

path *reference*

Synopsis	Name of the MPLS path to test
Context	oam lsp-trace sr-te path <i>reference</i>
Tree	path
Reference	state router mpls path <i>string</i>
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	oam lsp-trace sr-te path-destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	path-destination
Introduced	23.3.R1
Platforms	All

probe-count *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	oam lsp-trace sr-te probe-count <i>number</i>
Tree	probe-count
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

profile *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	oam lsp-trace sr-te profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	23.3.R1
Platforms	All

size *number*

Synopsis	Echo request packet pad size
Context	oam lsp-trace sr-te size <i>number</i>
Tree	size
Range	1 to 9786
Default	1

Units	bytes
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	oam lsp-trace sr-te source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	23.3.R1
Platforms	All

timeout *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	oam lsp-trace sr-te timeout <i>number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	23.3.R1
Platforms	All

oam-pm

Synopsis	Initiate an on-demand OAM Performance Monitoring test
Context	oam oam-pm
Tree	oam-pm
Introduced	20.2.R1
Platforms	All

action *keyword*

Synopsis	OAM-PM test action
Context	oam oam-pm action <i>keyword</i>

Tree	action
Options	start, stop
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

session *reference*

Synopsis	OAM-PM session name
Context	oam oam-pm session reference
Tree	session
Reference	state oam-pm session <i>string</i>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

test-type *keyword*

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

saa

Synopsis	Enter the saa context
Context	oam saa
Tree	saa
Introduced	22.10.R1
Platforms	All

owner [**owner-name**] *reference test reference*

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

[owner-name] *reference*

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

test *reference*

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

start

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

accounting *boolean*

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

stop

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

accounting *boolean*

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

password

Synopsis	Change the local user password
Context	password
Tree	password
Introduced	20.10.R1
Platforms	All

ping

Synopsis	Ping an IP address or DNS name
Context	ping
Tree	ping
Introduced	19.10.R1
Platforms	All

bypass-routing

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

count *number*

Synopsis	Number of ping requests to send to the remote host
Context	ping count <i>number</i>
Tree	count
Range	1 to 100000
Default	5
Units	packets
Introduced	19.10.R1
Platforms	All

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

Synopsis	Destination IP address or DNS name
Context	ping [destination] (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i> <i>string-not-all-spaces</i>)

Tree	[destination]
String Length	1 to 128
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

do-not-fragment

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

fc keyword

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

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

Synopsis	Sending interface name
Context	ping interface (<i>reference</i> <i>reference</i> <i>reference</i> <i>reference</i> <i>reference</i>)
Tree	interface
Reference	state router interface <i>string</i> state service ies interface <i>string</i> state service ies subscriber-interface <i>string</i> state service vprn interface <i>string</i>

state service vprn subscriber-interface *string*

Notes	The following elements are part of a choice: bypass-routing , interface , next-hop-address , or subscriber .
Introduced	19.10.R1
Platforms	All

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

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

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

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

output-format *keyword*

Synopsis	Output format
Context	ping output-format <i>keyword</i>
Tree	output-format
Default	detail
Options	summary, detail

Introduced	19.10.R1
Platforms	All

pattern (*keyword* | *number*)

Synopsis	Pattern string to include in the packet
Context	ping pattern (<i>keyword</i> <i>number</i>)
Tree	pattern
Range	0 to 65535
Default	sequential
Options	sequential
Introduced	19.10.R1
Platforms	All

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

Synopsis	Router name or VPRN service name
Context	ping router-instance (<i>reference</i> <i>reference</i>)
Tree	router-instance
Default	Base
Reference	state router <i>string</i> state service vprn <i>string</i>
Introduced	19.10.R1
Platforms	All

size *number*

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

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

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

subscriber *string*

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

timeout *number*

Synopsis	Wait time for the ICMP Echo Reply packet
Context	ping timeout <i>number</i>
Tree	timeout
Description	This command specifies the time to wait for the ICMP Echo Reply packet. The timer is started when the last ICMP Echo Request is sent.
Range	1 to 10
Default	5
Units	seconds
Introduced	19.10.R2
Platforms	All

tos *number*

Synopsis	Type of Service (ToS) bits in the IP header
----------	---

Context	ping tos number
Tree	tos
Range	0 to 255
Default	0
Introduced	19.10.R1
Platforms	All

tll number

Synopsis	Time to Live (TTL) included in the request packet
Context	ping tll number
Tree	tll
Range	1 to 128
Default	64
Introduced	19.10.R1
Platforms	All

pwc

Synopsis	Show the present working context
Context	pwc
Tree	pwc
Introduced	16.0.R1
Platforms	All

[path-type] keyword

Synopsis	Alternative format to display the path
Context	pwc [path-type] keyword
Tree	[path-type]
Description	This command provides alternative formats to display the present working context.
Options	model-path, gnmi-path, cli-path, json-instance-path
Introduced	19.10.R1
Platforms	All

previous

Synopsis	Display previous working context
Context	pwc previous
Tree	previous
Introduced	16.0.R1
Platforms	All

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

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

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

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

[\[argument-01\]](#) *string*

Synopsis	First argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-01] <i>string</i>
Tree	[argument-01]
Introduced	21.7.R1
Platforms	All

[argument-02] *string*

Synopsis	Second argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-02] <i>string</i>
Tree	[argument-02]
Introduced	21.7.R1
Platforms	All

[argument-03] *string*

Synopsis	Third argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-03] <i>string</i>
Tree	[argument-03]
Introduced	21.7.R1
Platforms	All

[argument-04] *string*

Synopsis	Fourth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-04] <i>string</i>
Tree	[argument-04]
Introduced	21.7.R1
Platforms	All

[argument-05] *string*

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

[argument-06] *string*

Synopsis	Sixth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-06] <i>string</i>

Tree [\[argument-06\]](#)
Introduced 21.7.R1
Platforms All

[argument-07] string

Synopsis Seventh argument
Context [pyexec \(string | reference\) \[argument-07\] string](#)
Tree [\[argument-07\]](#)
Introduced 21.7.R1
Platforms All

[argument-08] string

Synopsis Eight argument
Context [pyexec \(string | reference\) \[argument-08\] string](#)
Tree [\[argument-08\]](#)
Introduced 21.7.R1
Platforms All

[argument-09] string

Synopsis Ninth argument
Context [pyexec \(string | reference\) \[argument-09\] string](#)
Tree [\[argument-09\]](#)
Introduced 21.7.R1
Platforms All

[argument-10] string

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

quit-config

Synopsis	Exit the candidate configuration mode
Context	quit-config
Tree	quit-config
Introduced	16.0.R1
Platforms	All

ssh

Synopsis	SSH to an IP address or DNS name
Context	ssh
Tree	ssh
Introduced	20.7.R1
Platforms	All

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

Synopsis	Destination IP address or DNS name
Context	ssh [destination] (<i>ipv4-address-with-zone ipv6-address-with-zone string-not-all-spaces</i>)
Tree	[destination]
String Length	1 to 128
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	All

key-re-exchange

Synopsis	Enter the key-re-exchange context
Context	ssh key-re-exchange
Tree	key-re-exchange
Introduced	20.7.R1
Platforms	All

mbytes (*number* | *keyword*)

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

minutes (*number* | *keyword*)

Synopsis	Time after which SSH client initiates key re-exchange
Context	ssh key-re-exchange minutes (<i>number</i> <i>keyword</i>)
Tree	minutes
Range	1 to 1440
Default	60
Units	minutes
Options	infinite
Introduced	20.7.R1
Platforms	All

login-name *string*

Synopsis	SSH login username
Context	ssh login-name <i>string</i>
Tree	login-name
String Length	1 to 32
Introduced	20.7.R1
Platforms	All

router-instance (*reference | reference*)

Synopsis	Router name or VPRN service name
Context	ssh router-instance (<i>reference reference</i>)
Tree	router-instance
Default	Base
Reference	state router <i>string</i> state service vprn <i>string</i>
Introduced	20.7.R1
Platforms	All

telnet

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

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

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

port number

Synopsis	Remote host TCP port for the Telnet connection
Context	telnet port number
Tree	port
Range	1 to 65535
Default	23
Introduced	20.7.R1
Platforms	All

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

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

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

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

top

Synopsis	Move to the top level of the context
Context	top
Tree	top
Introduced	16.0.R1
Platforms	All

traceroute

Synopsis	Show the route taken to an IP address or DNS name
Context	traceroute
Tree	traceroute
Introduced	19.10.R1
Platforms	All

color number

Synopsis	Color ID of the SRv6 policy to trace
Context	traceroute color number
Tree	color
Description	This command launches a traceroute of an SRv6 policy that matches a specific color.
Max. Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	23.3.R1
Platforms	All

decode keyword

Synopsis	Perform original datagram parsing functions
Context	traceroute decode keyword
Tree	decode
Default	none
Options	none, original-datagram
Introduced	22.7.R1
Platforms	All

dest-port number

Synopsis	Transport protocol destination port number
Context	traceroute dest-port number

Tree	dest-port
Range	1 to 65535
Default	33434
Introduced	20.10.R1
Platforms	All

dest-port-udp-fixed

Synopsis	Avoid increment of destination port number for UDP test
Context	traceroute dest-port-udp-fixed
Tree	dest-port-udp-fixed
Introduced	21.10.R1
Platforms	All

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

Synopsis	Destination IP address or DNS name
Context	traceroute [destination] (<i>ipv4-address-no-zone ipv6-address-no-zone string-not-all-spaces</i>)
Tree	[destination]
String Length	1 to 128
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	19.10.R1
Platforms	All

detail

Synopsis	Display MPLS label stack information or TCP port status
Context	traceroute detail
Tree	detail
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	Endpoint of the SRv6 policy to trace
Context	traceroute endpoint string
Tree	endpoint
Description	This command configures an IPv6 endpoint address for an SRv6 policy as the target of the traceroute.
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	23.3.R1
Platforms	All

min-ttl *number*

Synopsis	First hop traceroute probes using the TTL value
Context	traceroute min-ttl number
Tree	min-ttl
Description	This command specifies the first hop traceroute probes, using the tll value.
Range	1 to 255
Default	1
Introduced	21.10.R1
Platforms	All

numeric

Synopsis	Display IP addresses instead of DNS names
Context	traceroute numeric
Tree	numeric
Introduced	19.10.R1
Platforms	All

probe-count *number*

Synopsis	Number of probes to send per hop
Context	traceroute probe-count number

Tree	probe-count
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	All

protocol *keyword*

Synopsis	Packet type to send
Context	traceroute protocol keyword
Tree	protocol
Description	This command sets the transport protocol, UDP or TCP, for the traceroute packet. A targeted VPRN service silently discards TCP traceroutes and only responds to UDP traceroutes.
Default	udp
Options	udp, tcp
Notes	The following elements are part of a mandatory choice: (destination, protocol, router-instance, source-address, and tos) or (color, endpoint, segment-list, and srv6-policy).
Introduced	21.10.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	traceroute router-instance string
Tree	router-instance
Default	Base
Notes	The following elements are part of a mandatory choice: (destination, protocol, router-instance, source-address, and tos) or (color, endpoint, segment-list, and srv6-policy).
Introduced	19.10.R1
Platforms	All

segment-list *number*

Synopsis	SR IPv6 segment list to trace
----------	-------------------------------

Context	traceroute segment-list number
Tree	segment-list
Description	This command configures the traceroute probe to target a specific segment list of an SRv6 policy. When the segment list is not specified, the traceroute probe is sent on the lowest available segment list.
Range	1 to 32
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	23.3.R1
Platforms	All

size number

Synopsis	Number of pad bytes in each transmitted packet
Context	traceroute size number
Tree	size
Range	0 to 9786
Default	0
Units	bytes
Introduced	21.10.R1
Platforms	All

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

Synopsis	Source address of the probe packets
Context	traceroute source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Description	This command specifies the source address of the probe packets. If the IP address is not one of the interfaces of the device, the system returns an error.
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	19.10.R1
Platforms	All

srv6-policy

Synopsis	Trace an SRv6 policy
Context	traceroute srv6-policy
Tree	srv6-policy
Description	This command launches a traceroute of a Segment Routing IPv6 (SRv6) policy.
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	23.3.R1
Platforms	All

tos number

Synopsis	Type of Service (ToS) bits in the IP header
Context	traceroute tos number
Tree	tos
Range	0 to 255
Default	0
Notes	The following elements are part of a mandatory choice: (destination , protocol , router-instance , source-address , and tos) or (color , endpoint , segment-list , and srv6-policy).
Introduced	19.10.R1
Platforms	All

ttl number

Synopsis	Maximum number of hops (TTL) to probe
Context	traceroute ttl number
Tree	ttl
Range	1 to 255
Default	30
Introduced	19.10.R1
Platforms	All

wait *number*

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

tree

Synopsis	Show the command tree under the present working context
Context	tree
Tree	tree
Introduced	16.0.R1
Platforms	All

[cli-path] *string*

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

detail

Synopsis	Display the tree with keys and field values
Context	tree detail
Tree	detail
Introduced	16.0.R1
Platforms	All

flat

Synopsis	Show the context from the pwc on each line
Context	tree flat
Tree	flat
Introduced	16.0.R1
Platforms	All

2.6 Output modifier commands

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

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

2.6.1 Output modifier command descriptions

|

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

count

Synopsis	Show the line count of the output
Context	count
Tree	count
Introduced	16.0.R1
Platforms	All

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

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

[[pattern](#)] *string*

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

ignore-case *boolean*

Synopsis	Ignore case in pattern match
Context	match <i>string</i> ignore-case <i>boolean</i>
Tree	ignore-case
Default	false
Introduced	16.0.R1
Platforms	All

invert-match *boolean*

Synopsis	Invert the pattern match selection
Context	match <i>string</i> invert-match <i>boolean</i>
Tree	invert-match
Default	false
Introduced	16.0.R1
Platforms	All

max-count *number*

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

post-lines *number*

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

Platforms All

pre-lines *number*

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

no-more

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

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

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

[url] (*string | reference*)

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

Introduced 21.7.R1
Platforms All

[argument-01] string

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

[argument-02] string

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

[argument-03] string

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

[argument-04] string

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

[argument-05] string

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

[argument-06] string

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

[argument-07] string

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

[argument-08] string

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

[argument-09] string

Synopsis	Ninth argument
Context	pyexec (<i>string</i> <i>reference</i>) [argument-09] <i>string</i>

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

[argument-10] *string*

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

reverse-dns

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

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

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

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

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

Introduced	16.0.R4
Platforms	All

2.7 reset commands

The **reset** commands are YANG-modeled versions of the **clear** commands and are available in MD-CLI and NETCONF interfaces. See the *7450 ESS, 7750 SR, 7950 XRS, and VSR MD-CLI User Guide* for more information.

```

reset
- filter
- ip-exception
  - direction keyword
  - entry reference
  - [filter-name] reference
- ip-filter
  - direction keyword
  - entry reference
  - [filter-name] reference
- ipv6-exception
  - direction keyword
  - entry reference
  - [filter-name] reference
- ipv6-filter
  - direction keyword
  - entry reference
  - [filter-name] reference
- mac-filter
  - direction keyword
  - entry reference
  - [filter-name] reference
- lag reference
- bfd-session
  - port
    - family keyword
    - [lag-port] reference
- lacp-statistics
- statistics
- saa
- owner reference test reference
- statistics
- system
- security
  - cpm-filter
    - cpm-queue
      - queue-id reference
    - ip-filter
      - entry reference
    - ipv6-filter
      - entry reference
    - mac-filter
      - entry reference
  - management-access-filter
    - ip-filter
      - entry reference
    - ipv6-filter
      - entry reference
    - mac-filter
      - entry reference

```

2.7.1 reset command descriptions

reset

Synopsis	Clear statistics or reset operational state
Context	reset
Tree	reset
Introduced	23.3.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	reset filter
Tree	filter
Introduced	23.3.R1
Platforms	All

ip-exception

Synopsis	Reset operation on the specified IP exception filter
Context	reset filter ip-exception
Tree	ip-exception
Introduced	23.3.R1
Platforms	VSR

direction *keyword*

Synopsis	Statistics direction for IP exception filter entries
Context	reset filter ip-exception direction <i>keyword</i>
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	VSR

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ip-exception entry reference
Tree	entry
Reference	state filter ip-exception entry <i>number</i>
Introduced	23.3.R1
Platforms	VSR

[filter-name] *reference*

Synopsis	IP exception filter name
Context	reset filter ip-exception [filter-name] reference
Tree	[filter-name]
Reference	state filter ip-exception <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

ip-filter

Synopsis	Reset operation on the specified IP filter
Context	reset filter ip-filter
Tree	ip-filter
Introduced	23.3.R1
Platforms	All

direction *keyword*

Synopsis	Statistics direction for IP filter entries
Context	reset filter ip-filter direction keyword
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ip-filter entry reference
Tree	entry
Reference	state filter ip-filter entry number
Introduced	23.3.R1
Platforms	All

[filter-name] *reference*

Synopsis	IP filter name
Context	reset filter ip-filter [filter-name] reference
Tree	[filter-name]
Reference	state filter ip-filter string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

ipv6-exception

Synopsis	Reset operation on the specified IPv6 exception filter
Context	reset filter ipv6-exception
Tree	ipv6-exception
Introduced	23.3.R1
Platforms	VSR

direction *keyword*

Synopsis	Statistics direction for IPv6 exception filter entries
Context	reset filter ipv6-exception direction keyword
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	VSR

entry *reference*

Synopsis	Entry ID for the filter
Context	reset filter ipv6-exception entry reference
Tree	entry
Reference	state filter ipv6-exception entry number
Introduced	23.3.R1
Platforms	VSR

[filter-name] *reference*

Synopsis	IPv6 exception filter name
Context	reset filter ipv6-exception [filter-name] reference
Tree	[filter-name]
Reference	state filter ipv6-exception string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	reset filter ipv6-filter
Tree	ipv6-filter
Introduced	23.3.R1
Platforms	All

direction *keyword*

Synopsis	Statistics direction of IPv6 filter entries
Context	reset filter ipv6-filter direction keyword
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the IPv6 filter
Context	reset filter ipv6-filter entry reference
Tree	entry
Reference	state filter ipv6-filter entry number
Introduced	23.3.R1
Platforms	All

[filter-name] *reference*

Synopsis	IPv6 exception filter name
Context	reset filter ipv6-filter [filter-name] reference
Tree	[filter-name]
Reference	state filter ipv6-filter string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

mac-filter

Synopsis	Reset operation on the specified MAC filter
Context	reset filter mac-filter
Tree	mac-filter
Introduced	23.3.R1
Platforms	All

direction *keyword*

Synopsis	Statistics direction for MAC filter entries
Context	reset filter mac-filter direction keyword
Tree	direction
Options	ingress, egress
Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the MAC filter
Context	reset filter mac-filter entry reference
Tree	entry
Reference	state filter mac-filter entry number
Introduced	23.3.R1
Platforms	All

[filter-name] *reference*

Synopsis	MAC filter name
Context	reset filter mac-filter [filter-name] reference
Tree	[filter-name]
Reference	state filter mac-filter string
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	reset lag reference
Tree	lag
Description	Commands in this context configure LAG reset operations.
Introduced	23.3.R1
Platforms	All

[lag-name] *reference*

Synopsis	LAG name, starting with lag-
Context	reset lag reference
Tree	lag
Reference	state lag string

Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

bfd-session

Synopsis	Enter the bfd-session context
Context	reset lag <i>reference</i> bfd-session
Tree	bfd-session
Description	Commands in this context reset the LAG BFD session data.
Introduced	23.3.R1
Platforms	All

port

Synopsis	Port identifier in the LAG
Context	reset lag <i>reference</i> bfd-session port
Tree	port
Introduced	23.3.R1
Platforms	All

family *keyword*

Synopsis	BFD session family type
Context	reset lag <i>reference</i> bfd-session port family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

[lag-port] *reference*

Synopsis	Member port of the LAG
Context	reset lag <i>reference</i> bfd-session port [lag-port] <i>reference</i>

Tree	[lag-port]
Reference	state lag port <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

lACP-statistics

Synopsis	Reset LACP statistics
Context	reset lag <i>reference</i> lACP-statistics
Tree	lACP-statistics
Introduced	23.3.R1
Platforms	All

statistics

Synopsis	Reset LAG statistics
Context	reset lag <i>reference</i> statistics
Tree	statistics
Introduced	23.3.R1
Platforms	All

saa

Synopsis	Enter the saa context
Context	reset saa
Tree	saa
Introduced	23.3.R1
Platforms	All

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

Synopsis	Enter the owner list instance
Context	reset saa owner <i>reference</i> test <i>reference</i>
Tree	owner

Introduced 23.3.R1
 Platforms All

[owner-name] *reference*

Synopsis Name of SAA test owner for which to reset statistics
 Context [reset saa owner reference test reference](#)
 Tree [owner](#)
 Description This command configures the name of the SAA test owner.
 When not configured, the system uses "TiMOS CLI" as the default owner.
 Reference **state saa owner string test string**
 Notes This element is part of a list key.
 Introduced 23.3.R1
 Platforms All

test *reference*

Synopsis Name of the SAA test for which to reset statistics
 Context [reset saa owner reference test reference](#)
 Tree [owner](#)
 Reference **state saa owner string test string**
 Notes This element is part of a list key.
 Introduced 23.3.R1
 Platforms All

statistics

Synopsis Clear the SAA test statistics
 Context [reset saa owner reference test reference statistics](#)
 Tree [statistics](#)
 Description This command clears historical statistics for a completed run. If this option is not configured, the reset operation has no impact.
 Introduced 23.3.R1
 Platforms All

system

Synopsis	Enter the system context
Context	reset system
Tree	system
Introduced	23.3.R1
Platforms	All

security

Synopsis	Enter the security context
Context	reset system security
Tree	security
Introduced	23.3.R1
Platforms	All

cpm-filter

Synopsis	Enter the cpm-filter context
Context	reset system security cpm-filter
Tree	cpm-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cpm-queue

Synopsis	Clear CPM Queue
Context	reset system security cpm-filter cpm-queue
Tree	cpm-queue
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue-id *reference*

Synopsis	Queue-id for cpm-queue
----------	------------------------

Context	reset system security cpm-filter cpm-queue queue-id reference
Tree	queue-id
Reference	state system security cpm-queue queue number
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-filter

Synopsis	Reset operation on the specified ip-filter
Context	reset system security cpm-filter ip-filter
Tree	ip-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry reference

Synopsis	Entry-id for ip-filter
Context	reset system security cpm-filter ip-filter entry reference
Tree	entry
Reference	state system security cpm-filter ip-filter entry number
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-filter

Synopsis	Reset operation on the specified ipv6-filter
Context	reset system security cpm-filter ipv6-filter
Tree	ipv6-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry reference

Synopsis	Entry-id for ipv6-filter
----------	--------------------------

Context	reset system security cpm-filter ipv6-filter entry reference
Tree	entry
Reference	state system security cpm-filter ipv6-filter entry number
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-filter

Synopsis	Reset operation on the specified mac-filter
Context	reset system security cpm-filter mac-filter
Tree	mac-filter
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry reference

Synopsis	Entry-id for mac-filter
Context	reset system security cpm-filter mac-filter entry reference
Tree	entry
Reference	state system security cpm-filter mac-filter entry number
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

management-access-filter

Synopsis	Enter the management-access-filter context
Context	reset system security management-access-filter
Tree	management-access-filter
Introduced	23.3.R1
Platforms	All

ip-filter

Synopsis	Reset operation on the specified IP filter
Context	reset system security management-access-filter ip-filter

Tree	ip-filter
Introduced	23.3.R1
Platforms	All

entry reference

Synopsis	Entry ID for the IP filter
Context	reset system security management-access-filter ip-filter entry reference
Tree	entry
Reference	state system security management-access-filter ip-filter entry number
Introduced	23.3.R1
Platforms	All

ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	reset system security management-access-filter ipv6-filter
Tree	ipv6-filter
Introduced	23.3.R1
Platforms	All

entry reference

Synopsis	Entry ID for the IPv6 filter
Context	reset system security management-access-filter ipv6-filter entry reference
Tree	entry
Reference	state system security management-access-filter ipv6-filter entry number
Introduced	23.3.R1
Platforms	All

mac-filter

Synopsis	Reset operation on the specified MAC filter
Context	reset system security management-access-filter mac-filter
Tree	mac-filter

Introduced	23.3.R1
Platforms	All

entry *reference*

Synopsis	Entry ID for the MAC filter
Context	reset system security management-access-filter mac-filter entry reference
Tree	entry
Reference	state system security management-access-filter mac-filter entry <i>number</i>
Introduced	23.3.R1
Platforms	All

3 Configuration commands

This section lists the configuration trees in the MD-CLI.

3.1 aaa commands

```

configure
- aaa
  - apply-groups reference
  - apply-groups-exclude reference
  - diameter
    - node string
      - apply-groups reference
      - apply-groups-exclude reference
      - connection
        - ipv4
          - allow-connections boolean
          - local-address string
        - ipv6
          - allow-connections boolean
          - local-address string
        - timer number
      - description string
      - origin-realm string
      - peer index number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - connection-timer number
        - default-peer boolean
        - destination-host string
        - preference number
        - route index number
          - application keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - preference number
          - realm string
        - watchdog-timer number
      - python-policy reference
      - router-instance string
    - radius
      - acct-on-off-group string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - coa-port number
      - isa-policy string
      - accounting
        - include-attributes
          - acct-delay-time boolean
          - acct-triggered-reason boolean
          - called-station-id boolean
          - calling-station-id boolean
          - circuit-id boolean
          - class boolean
          - credit-control-quota boolean
          - dhcp-options boolean
          - dhcp-vendor-class-id boolean
          - frame-counters boolean
          - framed-ip-address boolean
          - framed-ip-netmask boolean
          - framed-ipv6-prefix boolean
          - hardware-timestamp boolean

```

configure aaa radius isa-policy accounting include-attributes ipv6-address

```

- ipv6-address boolean
- mac-address boolean
- millisecond-event-timestamp boolean
- multi-session-id boolean
- nas-identifier boolean
- nas-ip-address boolean
- nas-ipv6-address boolean
- nas-port boolean
- nas-port-id boolean
- nas-port-type boolean
- nat-inside-service-id boolean
- nat-outside-ip-address boolean
- nat-outside-service-id boolean
- nat-port-range-block boolean
- nat-subscriber-string boolean
- octet-counters boolean
- proxied-subscriber-data boolean
- release-reason boolean
- remote-id boolean
- rsi boolean
- session-time boolean
- subscriber-id boolean
- toserver-dhcp6-options boolean
- ue-creation-type boolean
- user-name boolean
- wlan-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- xconnect-tunnel-local-ipv6-address boolean
- xconnect-tunnel-remote-ipv6-address boolean
- xconnect-tunnel-service boolean
- xconnect-tunnel-type boolean
- nat-periodic-update
- interval number
- rate-limit (number | keyword)
- update-triggers
- address-state boolean
- soft-quota-exhausted boolean
- apply-groups reference
- apply-groups-exclude reference
- authentication
- include-attributes
- called-station-id boolean
- calling-station-id boolean
- circuit-id boolean
- dhcp-vendor-class-id boolean
- framed-ip-address boolean
- ipv6-address boolean
- mac-address boolean
- nas-identifier boolean
- nas-ip-address boolean
- nas-ipv6-address boolean
- nas-port boolean
- nas-port-id boolean
- nas-port-type boolean
- remote-id boolean
- toserver-dhcp-options boolean
- toserver-dhcp6-options boolean
- wlan-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- description string
- nas-ip-address-origin keyword
- password string
- python-policy reference
- servers

```

configure aaa radius isa-policy servers access-algorithm

- **access-algorithm** *keyword*
- **ipv6**
 - **mtu** *number*
 - **source-prefix** *string*
- **router-instance** *string*
- **server** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **purpose**
 - **accounting**
 - **udp-port** *number*
 - **authentication**
 - **udp-port** *number*
 - **coa**
 - **udp-port** *number*
 - **secret** *string*
- **source-address-range** *string*
- **timeout** *number*
- **total-tries** *number*
- **user-name**
 - **format** *keyword*
 - **mac-format** *keyword*
- **l2tp-accounting-policy** *string*
 - **accounting-type**
 - **session** *boolean*
 - **tunnel** *boolean*
 - **acct-tunnel-connection-fmt** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **include-radius-attribute**
 - **calling-station-id** *boolean*
 - **nas-identifier** *boolean*
 - **nas-port**
 - **bit-spec** *string*
 - **nas-port-id**
 - **prefix-string** *string*
 - **suffix** *keyword*
 - **nas-port-type**
 - **type** (*keyword* | *number*)
 - **radius-server-policy** *reference*
- **route-downloader** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **base-user-name** *string*
 - **default-metric** *number*
 - **default-tag** *number*
 - **description** *string*
 - **download-interval** *number*
 - **max-routes** *number*
 - **password** *string*
 - **radius-server-policy** *reference*
 - **retry-interval**
 - **max** *number*
 - **min** *number*
- **server-policy** *string*
 - **acct-on-off**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor** *reference*
 - **oper-state-change**

configure aaa radius server-policy acct-on-off oper-state-change group

- **group** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **python-policy** *reference*
- **servers**
 - **access-algorithm** *keyword*
 - **buffering**
 - **acct-interim**
 - **lifetime** *number*
 - **max** *number*
 - **min** *number*
 - **acct-start**
 - **lifetime** *number*
 - **max** *number*
 - **min** *number*
 - **acct-stop**
 - **lifetime** *number*
 - **max** *number*
 - **min** *number*
 - **health-check**
 - **down-timeout** *number*
 - **test-account**
 - **admin-state** *keyword*
 - **interval** *number*
 - **password** *string*
 - **user-name** *string*
 - **hold-down-time** *number*
 - **ipv6-source-address** *string*
 - **retry-count** *number*
 - **router-instance** *string*
 - **server** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **server-name** *string*
 - **source-address** *string*
 - **stickiness** *boolean*
 - **timeout** *number*
- **wpp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **portal-group** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **portal** *string name string*
 - **system-name** *string*

3.1.1 aaa command descriptions

aaa

Synopsis	Enter the aaa context
Context	configure aaa
Tree	aaa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the diameter context
Context	configure aaa diameter
Tree	diameter
Description	Commands in this context configure Diameter Base parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

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

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

Synopsis	Origin-Host AVP
Context	configure aaa diameter node <i>string</i>
Tree	node
String Length	1 to 80

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

connection

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

ipv4

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

allow-connections *boolean*

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

local-address *string*

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

ipv6

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

allow-connections *boolean*

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

local-address *string*

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

timer number

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

description string

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

origin-realm string**WARNING:**

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

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

peer *index number*

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

index *number*

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

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

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

admin-state *keyword*

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

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

connection-timer *number*

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

default-peer *boolean*

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

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

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

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

preference *number*

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

route *index number*

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

index *number*

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

application *keyword***WARNING:**

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

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

preference *number*

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

realm *string***WARNING:**

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

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

watchdog-timer *number*

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

python-policy *reference*

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

router-instance *string*

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

radius

Synopsis	Enter the radius context
Context	configure aaa radius
Tree	radius
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-on-off-group [[name](#)] *string*

Synopsis	Enter the acct-on-off-group list instance
Context	configure aaa radius acct-on-off-group <i>string</i>
Tree	acct-on-off-group
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Group name for accounting on/off
Context	configure aaa radius acct-on-off-group <i>string</i>
Tree	acct-on-off-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius acct-on-off-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

coa-port *number*

Synopsis RADIUS listening port for CoA and Disconnect messages
 Context **configure** *aaa radius coa-port number*
 Tree [coa-port](#)
 Range 1647 | 1700 | 1812 | 3799
 Default 3799
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-policy [*name*] *string*

Synopsis Enter the **isa-policy** list instance
 Context **configure** *aaa radius isa-policy string*
 Tree [isa-policy](#)
 Max. Instances 8
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis ISA RADIUS policy name referenced by a NAT application
 Context **configure** *aaa radius isa-policy string*
 Tree [isa-policy](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting

Synopsis Enter the **accounting** context

Context	configure aaa radius isa-policy string accounting
Tree	accounting
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-attributes

Synopsis	Enter the include-attributes context
Context	configure aaa radius isa-policy string accounting include-attributes
Tree	include-attributes
Description	Commands in this context specify the attributes to include in the RADIUS accounting messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-delay-time *boolean*

Synopsis	Include the accounting delay time attribute
Context	configure aaa radius isa-policy string accounting include-attributes acct-delay-time boolean
Tree	acct-delay-time
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-triggered-reason *boolean*

Synopsis	Include the accounting triggered reason attribute
Context	configure aaa radius isa-policy string accounting include-attributes acct-triggered-reason boolean
Tree	acct-triggered-reason
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes circuit-id <i>boolean</i>
Tree	circuit-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

class *boolean*

Synopsis	Include the Class attribute
Context	configure aaa radius isa-policy string accounting include-attributes class <i>boolean</i>
Tree	class
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

credit-control-quota *boolean*

Synopsis Add unconsumed volume quota to Credit-Control-Quota

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [credit-control-quota](#) *boolean*

Tree [credit-control-quota](#)

Default false

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-options *boolean*

Synopsis Include the Alc-ToServer-Dhcp-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-options](#) *boolean*

Tree [dhcp-options](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis Include the Alc-Dhcp-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frame-counters *boolean*

Synopsis Include Acct-Input-Packets and Acct-Output-Packets

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [frame-counters](#) *boolean*

Tree	frame-counters
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes framed-ip-address <i>boolean</i>
Tree	framed-ip-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-netmask *boolean*

Synopsis	Include the Framed-IP-Netmask attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes framed-ip-netmask <i>boolean</i>
Tree	framed-ip-netmask
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes framed-ipv6-prefix <i>boolean</i>
Tree	framed-ipv6-prefix
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hardware-timestamp *boolean*

Synopsis	Include the Event-Timestamp attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes hardware-timestamp <i>boolean</i>
Tree	hardware-timestamp
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis	Include the Alc-Ipv6-Address attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes ipv6-address <i>boolean</i>
Tree	ipv6-address
Description	When configured to true , the IA_NA address of the UE is included in the accounting message if an active IA_NA lease exists. When configured to false , the address is not included.
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis	Include the Alc-Client-Hardware-Addr attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes mac-address <i>boolean</i>
Tree	mac-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

millisecond-event-timestamp *boolean*

Synopsis	Include the Alc-Millisecond-Event-Timestamp attribute
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Context	configure aaa radius isa-policy string accounting include-attributes millisecond-event-timestamp <i>boolean</i>
Tree	millisecond-event-timestamp
Description	When configured to true , the router includes the Alc-Millisecond-Event-Timestamp attribute in the accounting message. This attribute includes the time the accounting event was logged in milliseconds since Jan 1, 1970 00:00:00 UTC. When configured to false , the router does not include this attribute.
Default	false
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-session-id *boolean*

Synopsis	Include the Acct-Multi-Session-Id attribute
Context	configure aaa radius isa-policy string accounting include-attributes multi-session-id <i>boolean</i>
Tree	multi-session-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure aaa radius isa-policy string accounting include-attributes nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure aaa radius isa-policy string accounting include-attributes nas-ip-address <i>boolean</i>
Tree	nas-ip-address

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

nas-ipv6-address *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nas-ipv6-address <i>boolean</i>
Tree	nas-ipv6-address
Description	<p>When configured to true, the router includes the NAS-IPv6-Address attribute in RADIUS accounting messages using the address specified in the configure aaa radius isa-policy nas-ip-address-origin command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to false, the router does not include the NAS-IPv6-Address attribute in RADIUS accounting messages.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port *boolean*

Synopsis	Include the NAS-Port attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nas-port <i>boolean</i>
Tree	nas-port
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-type *boolean*

Synopsis Include the NAS-Port-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nas-port-type](#) *boolean*

Tree [nas-port-type](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-inside-service-id *boolean*

Synopsis Include NAT inside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-inside-service-id](#) *boolean*

Tree [nat-inside-service-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-outside-ip-address *boolean*

Synopsis Include the Alc-Nat-Outside-Ip-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-ip-address](#) *boolean*

Tree [nat-outside-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-outside-service-id *boolean*

Synopsis Include NAT outside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-service-id](#) *boolean*

Tree	nat-outside-service-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-port-range-block *boolean*

Synopsis	Include the Alc-Nat-Port-Range attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nat-port-range-block <i>boolean</i>
Tree	nat-port-range-block
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-subscriber-string *boolean*

Synopsis	Include the Alc-Subsc-ID-Str attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes nat-subscriber-string <i>boolean</i>
Tree	nat-subscriber-string
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octet-counters *boolean*

Synopsis	Include Acct-Input-Octets and Acct-Output-Octets
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes octet-counters <i>boolean</i>
Tree	octet-counters
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxied-subscriber-data *boolean*

Synopsis	Include subscriber data as RADIUS attributes
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes proxied-subscriber-data <i>boolean</i>
Tree	proxied-subscriber-data
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

release-reason *boolean*

Synopsis	Include reason in the Acct-Terminate-Cause attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes release-reason <i>boolean</i>
Tree	release-reason
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis	Include the Agent-Remote-Id attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rsi *boolean*

Synopsis	Include the Alc-RSSI attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes rsi <i>boolean</i>
Tree	rsi
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-time *boolean*

Synopsis Include the Acct-Session-Time attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [session-time](#) *boolean*

Tree [session-time](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *boolean*

Synopsis Include the Alc-Subsc-ID-Str attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [subscriber-id](#) *boolean*

Tree [subscriber-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp6-options *boolean*

Synopsis Include the Alc-ToServer-Dhcp6-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [toserver-dhcp6-options](#) *boolean*

Tree [toserver-dhcp6-options](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue-creation-type *boolean*

Synopsis Include the Alc-Wlan-Ue-Creation-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [ue-creation-type](#) *boolean*

Tree	ue-creation-type
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name *boolean*

Synopsis	Include the User-Name attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes user-name <i>boolean</i>
Tree	user-name
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes wlan-ssid-vlan <i>boolean</i>
Tree	wlan-ssid-vlan
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	configure aaa radius isa-policy <i>string</i> accounting include-attributes xconnect-tunnel-home-address <i>boolean</i>
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-local-ipv6-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Local-Ipv6 attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-local-ipv6-address <i>boolean</i>
Tree	xconnect-tunnel-local-ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-remote-ipv6-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Remote-Ipv6 attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-remote-ipv6-address <i>boolean</i>
Tree	xconnect-tunnel-remote-ipv6-address
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-service *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Service attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-service <i>boolean</i>
Tree	xconnect-tunnel-service
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-type *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Type attribute
Context	configure aaa radius isa-policy string accounting include-attributes xconnect-tunnel-type <i>boolean</i>
Tree	xconnect-tunnel-type
Default	false

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

nat-periodic-update

Synopsis	Enter the nat-periodic-update context
Context	configure aaa radius isa-policy <i>string</i> accounting nat-periodic-update
Tree	nat-periodic-update
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval for periodic RADIUS Interim-Update messages
Context	configure aaa radius isa-policy <i>string</i> accounting nat-periodic-update interval <i>number</i>
Tree	interval
Range	1 to 72
Units	hours
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit (*number* | *keyword*)

Synopsis	Rate limit for periodic RADIUS Interim-Update messages
Context	configure aaa radius isa-policy <i>string</i> accounting nat-periodic-update rate-limit (<i>number</i> <i>keyword</i>)
Tree	rate-limit
Range	1 to 100000
Default	unlimited
Units	packets per second
Options	unlimited
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-triggers

Synopsis	Enter the update-triggers context
Context	configure aaa radius isa-policy <i>string</i> accounting update-triggers
Tree	update-triggers
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-state *boolean*

Synopsis	Send an Interim-Update when address allocated or freed
Context	configure aaa radius isa-policy <i>string</i> accounting update-triggers address-state <i>boolean</i>
Tree	address-state
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

soft-quota-exhausted *boolean*

Synopsis	Send interim update when soft volume quota is reached
Context	configure aaa radius isa-policy <i>string</i> accounting update-triggers soft-quota-exhausted <i>boolean</i>
Tree	soft-quota-exhausted
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

Synopsis	Enter the authentication context
Context	configure aaa radius isa-policy <i>string</i> authentication
Tree	authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-attributes

Synopsis	Enter the include-attributes context
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes
Tree	include-attributes
Description	Commands in this context specify the attributes to include in the RADIUS authentication messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes called-station-id <i>boolean</i>
Tree	called-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes circuit-id <i>boolean</i>
Tree	circuit-id
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp-vendor-class-id *boolean*

Synopsis Include the Alc-DHCP-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis Include the Framed-IP-Address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [framed-ip-address](#) *boolean*

Tree [framed-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *boolean*

Synopsis Include the Alc-IPv6-address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [ipv6-address](#) *boolean*

Tree [ipv6-address](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis Include the Alc-Client-Hardware-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [mac-address](#) *boolean*

Tree	mac-address
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure aaa radius isa-policy string authentication include-attributes nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	configure aaa radius isa-policy string authentication include-attributes nas-ip-address <i>boolean</i>
Tree	nas-ip-address
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ipv6-address *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	configure aaa radius isa-policy string authentication include-attributes nas-ipv6-address <i>boolean</i>
Tree	nas-ipv6-address
Description	<p>When configured to true, the router includes the NAS-IPv6-Address attribute in RADIUS authentication messages using the address specified in the configure aaa radius isa-policy nas-ip-address-origin command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to false, the router does not include the NAS-IPv6-Address attribute in RADIUS authentication messages.</p>

Introduced 22.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port *boolean*

Synopsis Include the NAS-Port attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port** *boolean*
Tree [nas-port](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis Include the NAS-Port-Id attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port-id** *boolean*
Tree [nas-port-id](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-type *boolean*

Synopsis Include the NAS-Port-Type attribute
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) **nas-port-type** *boolean*
Tree [nas-port-type](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis Include the Agent-Remote-Id attribute

Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes remote-id <i>boolean</i>
Tree	remote-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp-Options attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes toserver-dhcp-options <i>boolean</i>
Tree	toserver-dhcp-options
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

toserver-dhcp6-options *boolean*

Synopsis	Include the Alc-ToServer-Dhcp6-Options attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes toserver-dhcp6-options <i>boolean</i>
Tree	toserver-dhcp6-options
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-ssid-vlan *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes wlan-ssid-vlan <i>boolean</i>
Tree	wlan-ssid-vlan
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	configure aaa radius isa-policy <i>string</i> authentication include-attributes xconnect-tunnel-home-address <i>boolean</i>
Tree	xconnect-tunnel-home-address
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius isa-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-address-origin *keyword*

Synopsis	NAS-IP-Address attribute
Context	configure aaa radius isa-policy <i>string</i> nas-ip-address-origin <i>keyword</i>
Tree	nas-ip-address-origin
Default	system-ip
Options	system-ip, isa-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used in the RADIUS access requests
Context	configure aaa radius isa-policy <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 42

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

python-policy *reference*

Synopsis Python policy used for modifying RADIUS messages
 Context **configure** [aaa radius isa-policy string python-policy reference](#)
 Tree [python-policy](#)
 Reference **configure** [python python-policy string](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis Enter the **servers** context
 Context **configure** [aaa radius isa-policy string servers](#)
 Tree [servers](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis Algorithm that accesses the RADIUS servers
 Context **configure** [aaa radius isa-policy string servers access-algorithm keyword](#)
 Tree [access-algorithm](#)
 Default direct
 Options direct, round-robin, hash-based, direct-priority
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context
 Context **configure** [aaa radius isa-policy string servers ipv6](#)
 Tree [ipv6](#)

Description	Commands in this context configure how to communicate with IPv6 RADIUS servers.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	MTU used to fragment outgoing IPv6 RADIUS packets
Context	configure aaa radius isa-policy <i>string</i> servers ipv6 <i>mtu number</i>
Tree	mtu
Range	1280 to 9000
Default	9000
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix *string*

Synopsis	Prefix containing individual source addresses per ISA
Context	configure aaa radius isa-policy <i>string</i> servers ipv6 <i>source-prefix string</i>
Tree	source-prefix
Description	This command configures an IPv6 prefix containing individual /128 addresses. These addresses are used as the source address for connections to IPv6 RADIUS servers. The prefix must be large enough to accommodate all BB-ISAs or ESA VMs in the system.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Routing instance
Context	configure aaa radius isa-policy <i>string</i> servers router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [*index*] *number*

Synopsis	Enter the server list instance
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i>
Tree	server
Max. Instances	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[index] *number*

Synopsis	RADIUS server ID
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i>
Tree	server
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA RADIUS server
Context	configure aaa radius isa-policy <i>string</i> servers server <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

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

Synopsis	IP address of the RADIUS server
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Context	configure aaa radius isa-policy string servers server number ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ip-address
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

purpose



WARNING:

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

Synopsis	Enter the purpose context
Context	configure aaa radius isa-policy string servers server number purpose
Tree	purpose
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting



WARNING:

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

Synopsis	Enable the accounting context
Context	configure aaa radius isa-policy string servers server number purpose accounting
Tree	accounting
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

**WARNING:**

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

Synopsis	ISA RADIUS server accounting UDP port
Context	configure aaa radius isa-policy string servers server number purpose accounting udp-port number
Tree	udp-port
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication

**WARNING:**

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

Synopsis	Enable the authentication context
Context	configure aaa radius isa-policy string servers server number purpose authentication
Tree	authentication
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

**WARNING:**

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

Synopsis	ISA RADIUS server authentication UDP port
Context	configure aaa radius isa-policy string servers server number purpose authentication udp-port number
Tree	udp-port
Range	1 to 65535
Default	1812

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

coa



WARNING:

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

Synopsis Enable the **coa** context
 Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [servers](#) [server](#) [number](#) [purpose](#) [coa](#)
 Tree [coa](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*



WARNING:

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

Synopsis ISA RADIUS server change of authorization UDP port
 Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [servers](#) [server](#) [number](#) [purpose](#) [coa](#) [udp-port](#) [number](#)
 Tree [udp-port](#)
 Range 1 to 65535
 Default 3799
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secret *string*



WARNING:

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

Synopsis Secret key to access the RADIUS server
 Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [servers](#) [server](#) [number](#) [secret](#) [string](#)

Tree	secret
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address-range *string*

Synopsis	Starting IP address of the IP address range
Context	configure aaa radius isa-policy <i>string</i> servers source-address-range <i>string</i>
Tree	source-address-range
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Timeout for a response from the RADIUS server
Context	configure aaa radius isa-policy <i>string</i> servers timeout <i>number</i>
Tree	timeout
Range	1 to 90
Default	5
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-tries *number*

Synopsis	Maximum number of tries toward the same RADIUS server
Context	configure aaa radius isa-policy <i>string</i> servers total-tries <i>number</i>
Tree	total-tries
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis	Enter the user-name context
Context	configure aaa radius isa-policy <i>string</i> user-name
Tree	user-name
Description	Commands in this context define the format of the username field in the UE authentication request sent to the RADIUS server. For authentication of IPv6 triggers (ICMPv6, DHCPv6, IPv6 data-trigger) the username format will always fall back to MAC only.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis	Username format in RADIUS message
Context	configure aaa radius isa-policy <i>string</i> user-name <i>format</i> <i>keyword</i>
Tree	format
Default	mac
Options	mac, mac-ip, dhcp-vendor, circuit-id
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-format *keyword*

Synopsis	MAC address format when contacting RADIUS server
Context	configure aaa radius isa-policy <i>string</i> user-name mac-format <i>keyword</i>
Tree	mac-format
Default	alu
Options	alu, ieee
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp-accounting-policy [[name](#)] *string*

Synopsis	Enter the l2tp-accounting-policy list instance
Context	configure aaa radius l2tp-accounting-policy <i>string</i>
Tree	l2tp-accounting-policy

Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	L2TP RADIUS accounting policy name
Context	configure aaa radius l2tp-accounting-policy <i>string</i>
Tree	l2tp-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-type

Synopsis	Enter the accounting-type context
Context	configure aaa radius l2tp-accounting-policy <i>string</i> accounting-type
Tree	accounting-type
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session *boolean*

Synopsis	Enable per-session accounting
Context	configure aaa radius l2tp-accounting-policy <i>string</i> accounting-type session <i>boolean</i>
Tree	session
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel *boolean*

Synopsis	Enable per-tunnel accounting
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Context	configure aaa radius l2tp-accounting-policy <i>string</i> accounting-type tunnel <i>boolean</i>
Tree	tunnel
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-tunnel-connection-fmt *string*

Synopsis	Accounting tunnel connection ASCII specification
Context	configure aaa radius l2tp-accounting-policy <i>string</i> acct-tunnel-connection-fmt <i>string</i>
Tree	acct-tunnel-connection-fmt
String Length	1 to 253
Default	%n
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius l2tp-accounting-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute
Tree	include-radius-attribute
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute calling-station-id <i>boolean</i>
Tree	calling-station-id
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i>
Tree	nas-identifier
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port

Synopsis	Enable the nas-port context
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute nas-port
Tree	nas-port
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis	RADIUS NAS-Port attribute
Context	configure aaa radius l2tp-accounting-policy <i>string</i> include-radius-attribute nas-port bit-spec <i>string</i>
Tree	bit-spec
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis Enable the **nas-port-id** context

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)

Tree [nas-port-id](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis Prefix string added to RADIUS NAS-Port attribute

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)
[prefix-string](#) *string*

Tree [prefix-string](#)

String Length 1 to 8

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis NAS-Port-Id suffix type

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)
[suffix](#) *keyword*

Tree [suffix](#)

Options circuit-id, remote-id

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis Enable the **nas-port-type** context

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-type](#)

Tree [nas-port-type](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [include-radius-attribute nas-port-type type](#) (*keyword* | *number*)

Tree [type](#)

Range 0 to 255

Default rfc-aligned

Options rfc-aligned

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis RADIUS server policy referenced

Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [radius-server-policy reference](#)

Tree [radius-server-policy](#)

Reference **configure** [aaa radius server-policy](#) *string*

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

route-downloader [[name](#)] *string*

Synopsis Enter the **route-downloader** list instance

Context **configure** [aaa radius route-downloader](#) *string*

Tree [route-downloader](#)

Max. Instances 1

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS route downloader name

Context	configure aaa radius route-downloader <i>string</i>
Tree	route-downloader
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this route downloader
Context	configure aaa radius route-downloader <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

base-user-name *string*

Synopsis	Prefix of the username used as access requests
Context	configure aaa radius route-downloader <i>string</i> base-user-name <i>string</i>
Tree	base-user-name
Description	This command sets the prefix for the username that is used for access requests. The actual name used is a concatenation of this string, the “-” (dash) character and a monotonically increasing integer.
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-metric *number*

Synopsis	Default metric that RTM imported routes acquire
Context	configure aaa radius route-downloader <i>string</i> default-metric <i>number</i>
Tree	default-metric
Range	0 to 254

Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-tag *number*

Synopsis	Default tag of this route downloader
Context	configure aaa radius route-downloader <i>string default-tag number</i>
Tree	default-tag
Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius route-downloader <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

download-interval *number*

Synopsis	Wait time between consecutive runs of the process
Context	configure aaa radius route-downloader <i>string download-interval number</i>
Tree	download-interval
Range	1 to 1440
Default	720
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-routes *number*

Synopsis	Maximum routes imported by this route downloader
Context	configure aaa radius route-downloader <i>string</i> max-routes <i>number</i>
Tree	max-routes
Range	1 to 200000
Default	200000
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Route downloader password for RADIUS access requests
Context	configure aaa radius route-downloader <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 71
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference***WARNING:**

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

Synopsis	RADIUS server policy referenced
Context	configure aaa radius route-downloader <i>string</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval

Synopsis	Enter the retry-interval context
Context	configure aaa radius route-downloader <i>string</i> retry-interval
Tree	retry-interval

Description	Commands in this context configure parameters of the retry interval timer, which is an exponential backoff timer. The system retries sending an Access Request message after the previous message was unanswered (for example, a RADIUS failure or ICMP port unreachable error).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum duration of the retry interval
Context	configure aaa radius route-downloader <i>string</i> retry-interval max <i>number</i>
Tree	max
Range	1 to 1440
Default	20
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum duration of the retry interval
Context	configure aaa radius route-downloader <i>string</i> retry-interval min <i>number</i>
Tree	min
Description	This command specifies the minimum duration of the retry interval. This duration grows exponentially after each sequential failure.
Range	1 to 1440
Default	10
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-policy [[name](#)] *string*

Synopsis	Enter the server-policy list instance
Context	configure aaa radius server-policy <i>string</i>
Tree	server-policy

Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RADIUS server policy name
Context	configure aaa radius server-policy <i>string</i>
Tree	server-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-on-off

Synopsis	Enable the acct-on-off context
Context	configure aaa radius server-policy <i>string</i> acct-on-off
Tree	acct-on-off
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor *reference***WARNING:**

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

Synopsis	Accounting on/off group name
Context	configure aaa radius server-policy <i>string</i> acct-on-off monitor <i>reference</i>
Tree	monitor
Reference	configure aaa radius acct-on-off-group <i>string</i>
Notes	The following elements are part of a choice: monitor or oper-state-change .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-state-change

Synopsis	Enable the oper-state-change context
Context	configure aaa radius server-policy <i>string</i> acct-on-off oper-state-change
Tree	oper-state-change
Notes	The following elements are part of a choice: monitor or oper-state-change .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group *reference*

**WARNING:**

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

Synopsis	Operational state for a group
Context	configure aaa radius server-policy <i>string</i> acct-on-off oper-state-change group <i>reference</i>
Tree	group
Reference	configure aaa radius acct-on-off-group <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure aaa radius server-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy for RADIUS packets to/from RADIUS servers
Context	configure aaa radius server-policy <i>string</i> python-policy <i>reference</i>
Tree	python-policy

Reference	configure python python-policy <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis	Enter the servers context
Context	configure aaa radius server-policy <i>string</i> servers
Tree	servers
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Algorithm to select a RADIUS server from the pool
Context	configure aaa radius server-policy <i>string</i> servers access-algorithm <i>keyword</i>
Tree	access-algorithm
Default	direct
Options	direct, round-robin, hash-based
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

buffering

Synopsis	Enter the buffering context
Context	configure aaa radius server-policy <i>string</i> servers buffering
Tree	buffering
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-interim

Synopsis	Enable the acct-interim context
Context	configure aaa radius server-policy <i>string</i> servers buffering acct-interim
Tree	acct-interim

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

lifetime number

Synopsis	Time accounting message can be in retransmission buffer
Context	configure aaa radius server-policy <i>string</i> servers buffering acct-interim <i>lifetime number</i>
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum time between accounting message resend attempts
Context	configure aaa radius server-policy <i>string</i> servers buffering acct-interim <i>max number</i>
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum time between accounting message resend attempts
Context	configure aaa radius server-policy <i>string</i> servers buffering acct-interim <i>min number</i>
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-start

Synopsis Enable the **acct-start** context
 Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start](#)
 Tree [acct-start](#)
 Introduced 20.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lifetime number

Synopsis Time accounting message can be in retransmission buffer
 Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start lifetime number](#)
 Tree [lifetime](#)
 Range 1 to 25
 Units hours
 Notes This element is mandatory.
 Introduced 20.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis Maximum time between accounting message resend attempts
 Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-start max number](#)
 Tree [max](#)
 Range 1 to 3600
 Units seconds
 Notes This element is mandatory.
 Introduced 20.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis Minimum time between accounting message resend attempts

Context	configure <i>aaa radius server-policy string servers buffering acct-start min number</i>
Tree	min
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-stop

Synopsis	Enable the acct-stop context
Context	configure <i>aaa radius server-policy string servers buffering acct-stop</i>
Tree	acct-stop
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lifetime number

Synopsis	Time accounting message can be in retransmission buffer
Context	configure <i>aaa radius server-policy string servers buffering acct-stop lifetime number</i>
Tree	lifetime
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum time between accounting message resend attempts
Context	configure <i>aaa radius server-policy string servers buffering acct-stop max number</i>
Tree	max
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.

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

min number

Synopsis Minimum time between accounting message resend attempts
Context **configure** [aaa radius server-policy](#) *string* [servers buffering acct-stop min number](#)
Tree [min](#)
Range 1 to 3600
Units seconds
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-check

Synopsis Enter the **health-check** context
Context **configure** [aaa radius server-policy](#) *string* [servers health-check](#)
Tree [health-check](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down-timeout number

Synopsis Wait time before declaring RADIUS server out-of-service
Context **configure** [aaa radius server-policy](#) *string* [servers health-check down-timeout number](#)
Tree [down-timeout](#)
Range 1 to 340
Units seconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

test-account

Synopsis Enter the **test-account** context

Context	configure aaa radius server-policy <i>string</i> servers health-check test-account
Tree	test-account
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the health check
Context	configure aaa radius server-policy <i>string</i> servers health-check test-account admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Time for test account to check health of RADIUS servers
Context	configure aaa radius server-policy <i>string</i> servers health-check test-account interval <i>number</i>
Tree	interval
Range	1 to 60
Default	3
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Test account password for RADIUS server health check
Context	configure aaa radius server-policy <i>string</i> servers health-check test-account password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name *string*

Synopsis Username to send access requests to probe RADIUS server

Context **configure** [aaa radius server-policy](#) *string* [servers health-check test-account user-name](#) *string*

Tree [user-name](#)

String Length 1 to 64

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-down-time *number*

Synopsis Hold time before reusing a RADIUS server that was down

Context **configure** [aaa radius server-policy](#) *string* [servers hold-down-time](#) *number*

Tree [hold-down-time](#)

Range 30 to 86400

Default 30

Units seconds

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-source-address *string*

Synopsis Source address for IPv6 RADIUS datagrams

Context **configure** [aaa radius server-policy](#) *string* [servers ipv6-source-address](#) *string*

Tree [ipv6-source-address](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Number of retries for contacting the RADIUS server

Context **configure** [aaa radius server-policy](#) *string* [servers retry-count](#) *number*

Tree [retry-count](#)

Range	1 to 256
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	RADIUS routing instance
Context	configure aaa radius server-policy <i>string</i> servers router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [[server-index](#)] *number*

Synopsis	Enter the server list instance
Context	configure aaa radius server-policy <i>string</i> servers server <i>number</i>
Tree	server
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[server-index] *number*

Synopsis	RADIUS server index
Context	configure aaa radius server-policy <i>string</i> servers server <i>number</i>
Tree	server
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-name *string*

Synopsis	RADIUS server name
Context	configure aaa radius server-policy <i>string</i> servers server <i>number</i> server-name <i>string</i>
Tree	server-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source address of RADIUS messages
Context	configure aaa radius server-policy <i>string</i> servers source-address <i>string</i>
Tree	source-address
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stickiness *boolean*

Synopsis	Allow stickiness in a multi-server application
Context	configure aaa radius server-policy <i>string</i> servers stickiness <i>boolean</i>
Tree	stickiness
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	Time until the next retry to the RADIUS server
Context	configure aaa radius server-policy <i>string</i> servers timeout <i>number</i>
Tree	timeout
Range	1 to 340
Default	5
Units	seconds
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis Enter the **wpp** context

Context **configure** [aaa wpp](#)

Tree [wpp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal-group [[group-name](#)] *string*

Synopsis Enter the **portal-group** list instance

Context **configure** [aaa wpp portal-group](#) *string*

Tree [portal-group](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[group-name\]](#) *string*

Synopsis Portal group name

Context **configure** [aaa wpp portal-group](#) *string*

Tree [portal-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the portal group

Context **configure** [aaa wpp portal-group](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

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

description *string*

Synopsis Text description
 Context **configure** *aaa wpp portal-group string description string*
 Tree *description*
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [*router-instance*] *string name string*

Synopsis Add a list entry for **portal**
 Context **configure** *aaa wpp portal-group string portal string name string*
 Tree *portal*
 Max. 8
 Instances
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[router-instance] *string*

Synopsis Router on which the portal is configured
 Context **configure** *aaa wpp portal-group string portal string name string*
 Tree *portal*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis Web portal server name
 Context **configure** *aaa wpp portal-group string portal string name string*

Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-name *string*

Synopsis	System name used in WPP protocol messages
Context	configure aaa wpp system-name <i>string</i>
Tree	system-name
String Length	1 to 16
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.2 anysec commands

```
configure
- anysec
  - apply-groups reference
  - apply-groups-exclude reference
  - mka-over-ip
    - mka-udp-port number
  - reserved-label-block reference
  - tunnel-encryption
    - encryption-group string
      - apply-groups reference
      - apply-groups-exclude reference
      - ca-name reference
      - encryption-label number
      - peer (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - encryption-label number
      - peer-tunnel-attributes
        - flex-algo-id number
        - igp-instance-id number
        - routing-protocol keyword
      - security-termination-policy reference
    - security-termination-policy string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - flex-algo-id number
      - igp-instance-id number
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - routing-protocol keyword
      - rx-must-be-encrypted boolean
```

3.2.1 anysec command descriptions

anysec

Synopsis	Enter the anysec context
Context	configure anysec
Tree	anysec
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

mka-over-ip

Synopsis	Enter the mka-over-ip context
Context	configure anysec mka-over-ip
Tree	mka-over-ip
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

mka-udp-port *number*

Synopsis	ANYSec MKA UDP port
Context	configure anysec mka-over-ip mka-udp-port <i>number</i>
Tree	mka-udp-port
Range	1024 to 49151
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

reserved-label-block *reference*

Synopsis	ANYSec reserved label block
Context	configure anysec reserved-label-block <i>reference</i>
Tree	reserved-label-block
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>

Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

tunnel-encryption

Synopsis	Enter the tunnel-encryption context
Context	configure anysec tunnel-encryption
Tree	tunnel-encryption
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

encryption-group [[group-name](#)] *string*

Synopsis	Enter the encryption-group list instance
Context	configure anysec tunnel-encryption encryption-group <i>string</i>
Tree	encryption-group
Max. Instances	512
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[\[group-name\]](#) *string*

Synopsis	ANYSec encryption group name
Context	configure anysec tunnel-encryption encryption-group <i>string</i>
Tree	encryption-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

ca-name *reference*

Synopsis	MACSec connectivity association to be used by this encryption group
Context	configure anysec tunnel-encryption encryption-group <i>string</i> ca-name <i>reference</i>
Tree	ca-name
Reference	configure macsec connectivity-association <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

encryption-label *number*

Synopsis	The label uniquely identifying packets sent from this node to peers
Context	configure anysec tunnel-encryption encryption-group <i>string</i> encryption-label <i>number</i>
Tree	encryption-label
Range	32 to 1048575
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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

Synopsis	Enter the peer list instance
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Max. Instances	512
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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

Synopsis	Peer IP address
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer

Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state *keyword*

Synopsis	Enable or disable encryption group
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

encryption-label *number*



WARNING:

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

Synopsis	The label uniquely identifying packets sent from this peer
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) encryption-label <i>number</i>
Tree	encryption-label
Range	32 to 1048575
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

peer-tunnel-attributes

Synopsis	Enter the peer-tunnel-attributes context
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer-tunnel-attributes
Tree	peer-tunnel-attributes

Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

flex-algo-id *number*

Synopsis	Flexible algorithm ID
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer-tunnel-attributes flex-algo-id <i>number</i>
Tree	flex-algo-id
Range	128 to 255
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

igp-instance-id *number*

Synopsis	IGP instance ID
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer-tunnel-attributes igp-instance-id <i>number</i>
Tree	igp-instance-id
Range	0 to 31 64 to 95
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

routing-protocol *keyword*

Synopsis	Routing protocol
Context	configure anysec tunnel-encryption encryption-group <i>string</i> peer-tunnel-attributes routing-protocol <i>keyword</i>
Tree	routing-protocol
Default	sr-isis
Options	sr-ospf, sr-ospf3, sr-isis
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

security-termination-policy *reference*

Synopsis	Security termination policy to be used by this encryption group
Context	configure anysec tunnel-encryption encryption-group <i>string</i> security-termination-policy <i>reference</i>
Tree	security-termination-policy
Reference	configure anysec tunnel-encryption security-termination-policy <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

security-termination-policy [[policy-name](#)] *string*

Synopsis	Enter the security-termination-policy list instance
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i>
Tree	security-termination-policy
Max. Instances	512
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[policy-name] *string*

Synopsis	ANYSec security termination policy name
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i>
Tree	security-termination-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state *keyword*

Synopsis	Enable or disable security termination policy
----------	---

Context	configure anysec tunnel-encryption security-termination-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

flex-algo-id *number*



WARNING:

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

Synopsis	Flexible algorithm ID
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i> flex-algo-id <i>number</i>
Tree	flex-algo-id
Range	128 to 255
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

igp-instance-id *number*



WARNING:

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

Synopsis	IGP instance ID
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i> igp-instance-id <i>number</i>
Tree	igp-instance-id
Range	0 to 31 64 to 95
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

local-address (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

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

Synopsis	Local address
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i> local-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	local-address
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

routing-protocol *keyword***WARNING:**

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

Synopsis	Routing protocol
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i> routing-protocol <i>keyword</i>
Tree	routing-protocol
Default	sr-isis
Options	sr-ospf, sr-ospf3, sr-isis
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

rx-must-be-encrypted *boolean*

Synopsis	Toggles whether received packets must be encrypted
Context	configure anysec tunnel-encryption security-termination-policy <i>string</i> rx-must-be-encrypted <i>boolean</i>
Tree	rx-must-be-encrypted
Default	false
Introduced	23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D,
7750 SR-1x-92S, 7750 SR-1se

3.3 application-assurance commands

```

configure
- application-assurance
- aarp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - master-selection-mode keyword
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
  - peer-endpoint
    - sap
      - encap-type keyword
      - sap-id string
      - spoke-sdp string
    - priority number
  - apply-groups reference
  - apply-groups-exclude reference
- cflowd
  - field string
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
  - flow-attribute
    - attribute string
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
  - group number
    - apply-groups reference
    - apply-groups-exclude reference
    - certificate-profile string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - file string
    - cflowd
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
      - comprehensive
        - apply-groups reference
        - apply-groups-exclude reference
        - flow-rate number
        - flow-rate-2 number
        - template
          - apply-groups reference
          - apply-groups-exclude reference
          - dynamic-fields
            - admin-state keyword
            - field string
          - field-selection keyword
      - direct-export
        - collector number

```

configure application-assurance group cflowd direct-export collector address

```

- address (ipv4-address-no-zone | ipv6-address-no-zone) port number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - vlan-id number
- export-override
  - mode keyword
  - prefix string
- obfuscation
  - aes-128-encryption-key string
  - aes-256-encryption-key string
- rtp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - audio-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - flow-rate number
  - flow-rate-2 number
  - video-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - voice-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- tcp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - flow-rate number
  - flow-rate-2 number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- template-retransmit number
- volume
  - rate number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- dns-ip-cache string
  - admin-state keyword

```

configure application-assurance group dns-ip-cache apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **dns-match**
 - **domain** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expression** *string*
 - **trusted-server-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **server-name** *string*
- **ip-cache**
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **size** *number*
 - **static-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **http-enrich** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **field** *string*
 - **aes-initialization-vector** *string*
 - **anti-spoof** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **calling-line-id** *boolean*
 - **encode**
 - **cert-base64** *reference*
 - **cert-profile** *reference*
 - **key**
 - **type** *keyword*
 - **value** *string*
 - **md5-salt** *string*
 - **name** *string*
 - **static-string** *string*
 - **rat-type-enrichment**
 - **rat-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rat-string** *string*
- **http-error-redirect** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **error-code** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **custom-message-size** *number*
 - **http-host** *string*
 - **participant-id** *string*
 - **template** *number*
- **http-notification** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **interval** (*number | keyword*)
 - **script-url** *string*
 - **template** *number*
- **http-redirect** *string*
 - **admin-state** *keyword*

configure application-assurance group http-redirect apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **captive-redirect**
 - **vlan-id** *number*
- **description** *string*
- **redirect-https** *boolean*
- **redirect-url** *string*
- **tcp-client-reset** *boolean*
- **template** *number*
- **ip-identification-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **passive-dns**
 - **monitor** *boolean*
 - **trusted-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **comment** *string*
- **partition** *number*
 - **aa-sub-congestion-detection**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rat-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold-tolerance** *number*
 - **aa-sub-remote** *boolean*
 - **access-network-location**
 - **source** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rat-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold** (*number* | *keyword*)
 - **rtt-threshold-tolerance** *number*
 - **source-level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **aqp-initial-lookup** *boolean*
 - **cflowd**
 - **export-type** *keyword*
 - **admin-state** *keyword*
 - **app-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate-choice** *keyword*
 - **application** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate-choice** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **event-log** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **buffer-type** *keyword*

configure application-assurance group partition event-log max-entries

- **max-entries** *number*
- **syslog**
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **description** *string*
 - **facility** *keyword*
 - **port** *number*
 - **severity** *keyword*
 - **vlan-id** *number*
- **gtp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gtp-filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **gtp-in-gtp** *keyword*
 - **gtp-tunnel-database**
 - **default-tunnel-endpoint-limit** *number*
 - **validate-gtp-tunnels** *boolean*
 - **validate-sequence-number** *boolean*
 - **validate-source-ip-addr** *boolean*
 - **imsi-apn-filter**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apn** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **imsi-mcc-mnc-prefix** *string*
 - **src-gsn**
 - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **ip-prefix-list** *reference*
 - **log**
 - **action** *keyword*
 - **event-log** *reference*
 - **max-payload-length** *number*
 - **message-type**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** (*number* | *keyword*)
 - **message-type-gtp-v2**
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** (*number* | *keyword*)
 - **gtpc-inspection** *boolean*
 - **log**
 - **action** *keyword*
 - **event-log** *reference*
 - **mode** *keyword*
 - **http-match-all-requests** *boolean*
 - **http-x-online-host** *boolean*
 - **ip-identification-contribute** *boolean*
 - **ip-prefix-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)

configure application-assurance group partition ip-prefix-list prefix apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- name string
- policy
- app-filter
- entry number
- admin-state keyword
- application reference
- apply-groups reference
- apply-groups-exclude reference
- description string
- expression number
- apply-groups reference
- apply-groups-exclude reference
- eq string
- neq string
- type keyword
- flow-setup-direction keyword
- http-match-all-requests boolean
- http-port
- eq
- port-list reference
- port-number number
- neq
- port-list reference
- port-number number
- ip-identification-assist boolean
- ip-protocol
- eq (number | keyword)
- neq (number | keyword)
- network-address
- eq
- ip-prefix (ipv4-prefix | ipv6-prefix)
- ip-prefix-list reference
- neq
- ip-prefix (ipv4-prefix | ipv6-prefix)
- ip-prefix-list reference
- protocol
- eq (string | named-item)
- neq (string | named-item)
- server-address
- eq
- dns-ip-cache reference
- ip-prefix (ipv4-prefix | ipv6-prefix)
- ip-prefix-list reference
- masked-ip
- address (ipv4-address-no-zone | ipv6-address-no-zone)
- netmask (ipv4-address-no-zone | ipv6-address-no-zone)
- neq
- dns-ip-cache reference
- ip-prefix (ipv4-prefix | ipv6-prefix)
- ip-prefix-list reference
- masked-ip
- address (ipv4-address-no-zone | ipv6-address-no-zone)
- netmask (ipv4-address-no-zone | ipv6-address-no-zone)
- server-port
- eq
- first-packet-policy keyword
- port-list reference
- port-number number
- range
- end number
- start number
- gt

```


configure application-assurance group partition policy app-filter entry server-port gt port-number

```

    - port-number number
  - lt
    - port-number number
  - neq
    - port-list reference
    - port-number number
    - range
      - end number
      - start number
- app-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - charging-group reference
  - description string
  - export-id number
- app-profile string
  - aa-sub-suppressible boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - capacity-cost number
  - characteristic reference
    - apply-groups reference
    - apply-groups-exclude reference
    - value reference
  - description string
  - divert boolean
- app-qos-policy
  - entry number
    - action
      - abandon-tcp-optimization boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth-policer
        - anl reference
        - dual-bucket reference
        - single-bucket reference
      - dns-ip-cache reference
      - drop boolean
      - error-drop
        - event-log reference
      - flow-count-limit-policer
        - event-log reference
        - policer-name reference
      - flow-setup-rate-policer
        - event-log reference
        - policer-name reference
      - fragment-drop
        - drop-scope keyword
        - event-log reference
      - gtp-filter reference
      - http-enrich reference
      - http-error-redirect reference
      - http-notification reference
      - http-redirect
        - flow-type keyword
        - name reference
      - mirror-source
        - all-inclusive boolean
        - mirror-service reference
      - overload-drop
        - event-log reference
      - remark
        - dscp
          - in-profile keyword

```

configure application-assurance group partition policy app-qos-policy entry action remark dscp out-profile

```

    - out-profile keyword
    - fc keyword
    - priority keyword
  - sctp-filter reference
  - session-filter reference
  - tcp-mss-adjust number
  - tcp-validate reference
  - tls-enrich reference
  - url-filter
    - characteristic reference
    - name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - aa-sub
      - esm
        - eq string
        - neq string
      - esm-mac
        - eq string
        - neq string
      - sap
        - eq string
        - neq string
      - spoke-sdp
        - eq string
        - neq string
      - transit
        - eq string
        - neq string
    - aa-sub-tethering keyword
    - app-group
      - eq reference
      - neq reference
    - application
      - eq reference
      - neq reference
    - apply-groups reference
    - apply-groups-exclude reference
    - characteristic reference
      - apply-groups reference
      - apply-groups-exclude reference
      - eq reference
      - neq reference
    - charging-group
      - eq reference
      - neq reference
    - dscp
      - eq keyword
      - neq keyword
    - dst-ip
      - eq
        - ip-prefix (ipv4-prefix | ipv6-prefix)
        - ip-prefix-list reference
      - neq
        - ip-prefix (ipv4-prefix | ipv6-prefix)
        - ip-prefix-list reference
    - dst-port
      - eq
        - port-list reference
        - port-number number
      - range

```

configure application-assurance group partition policy app-qos-policy entry match dst-port eq range end

```

    - end number
    - start number
  - neq
    - port-list reference
    - port-number number
    - range
      - end number
      - start number
  - flow-attribute string
    - apply-groups reference
    - apply-groups-exclude reference
  - confidence
    - eq number
    - gte number
    - lt number
  - ip-protocol
    - eq (number | keyword)
    - neq (number | keyword)
  - src-ip
    - eq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - neq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
  - src-port
    - eq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
    - neq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
  - traffic-direction keyword
- app-service-options
  - characteristic string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-value string
    - value string
- application string
  - app-group reference
  - apply-groups reference
  - apply-groups-exclude reference
  - charging-group reference
  - description string
  - export-id number
- apply-groups reference
- apply-groups-exclude reference
- charging-filter
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - charging-group reference
    - description string
  - match
    - app-group
      - eq reference

```

configure application-assurance group partition policy charging-filter entry match app-group neq

```

    - neq reference
  - application
    - eq reference
    - neq reference
  - flow-attribute string
    - apply-groups reference
    - apply-groups-exclude reference
  - confidence
    - eq number
    - gte number
    - lt number
  - tethered-flow
- charging-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - export-id number
  - notify-start-stop keyword
- custom-protocol string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - expression number
    - apply-groups reference
    - apply-groups-exclude reference
  - direction keyword
  - eq string
  - offset number
  - ip-protocol keyword
- default-charging-group reference
- default-tethered-charging-group reference
- policy-override
  - aa-sub
    - sap string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
      - value reference
    - spoke-sdp string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
      - value reference
    - transit string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
      - value reference
- port-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - port number
  - range start number end number
- sctp-filter string
  - apply-groups reference
  - apply-groups-exclude reference

```

configure application-assurance group partition sctp-filter description

```

- description string
- event-log reference
- ppid
  - default-action keyword
  - entry number
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - value (number | keyword)
  - ppid-range
    - max number
    - min number
- session-filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action
    - action keyword
    - event-log reference
  - description string
  - entry number
    - action
      - deny
      - event-log reference
      - http-redirect reference
      - permit
      - tcp-optimizer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - match
    - dst-ip
      - dns-ip-cache reference
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - dst-port
      - eq number
      - gt number
      - lt number
      - port-list reference
      - range
        - end number
        - start number
    - ip-protocol (number | keyword)
    - src-ip
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - src-port
      - eq number
      - gt number
      - lt number
      - port-list reference
      - range
        - end number
        - start number
- shallow-inspection boolean
- statistics
  - aa-admit-deny
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - gtp-filter-stats boolean
    - policer-stats boolean
    - policer-stats-resources boolean

```

configure application-assurance group partition statistics aa-admit-deny sctp-filter-stats

- **sctp-filter-stats** *boolean*
- **session-filter-stats** *boolean*
- **tcp-validate-stats** *boolean*
- **aa-app-group**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **aa-application**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **aa-partition**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **tethering-stats** *boolean*
 - **traffic-type-stats** *boolean*
- **aa-protocol**
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
- **aa-sub**
 - **accounting-policy** *reference*
 - **aggregate-stats-export-using** *keyword*
 - **app-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **application** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **charging-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **collect-stats** *boolean*
 - **exclude-tcp-retrans** *boolean*
 - **max-throughput-stats** *boolean*
 - **protocol** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-using** *keyword*
 - **radius-accounting-policy** *reference*
 - **usage-monitoring** *boolean*
- **aa-sub-study** *keyword*
 - **aa-sub**
 - **esm** *string*
 - **esm-mac** *string*
 - **sap** *string*
 - **spoke-sdp** *string*
 - **transit** *string*
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **tcp-validate** *string*

configure application-assurance group partition tcp-validate apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **log**
 - **all** *boolean*
 - **event-log** *reference*
- **strict** *boolean*
- **tethering-detection**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **single-device**
 - **expected-ttl** *number*
 - **invert-match** *boolean*
 - **ttl-monitor**
 - **tcp-protocols** *keyword*
 - **udp-protocols** *keyword*
- **threshold-crossing-alert**
 - **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **gtp-filter** *reference* **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **gtp-filter-entry** *reference* **entry-id** *number* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **policer** *string* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **sctp-filter** *reference* **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **sctp-filter-entry** *reference* **entry-id** *reference* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **session-filter** *reference* **criteria** *keyword* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **session-filter-entry** *reference* **entry-id** *reference* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **tcp-validate** *reference* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high-watermark** *number*
 - **low-watermark** *number*
 - **transit-ip-policy** *number*

configure application-assurance group partition transit-ip-policy apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-app-profile** *reference*
- **description** *string*
- **detect-seen-ip** *boolean*
- **dhcp**
 - **admin-state** *keyword*
- **diameter**
 - **admin-state** *keyword*
 - **application-policy** *reference*
- **ipv6-address-prefix-length** *number*
- **radius**
 - **admin-state** *keyword*
 - **authentication-policy** *reference*
 - **seen-ip-radius-acct-policy** *reference*
- **static-aa-sub** *string*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip** (*ipv4-unicast-address | ipv6-prefix*)
- **sub-ident-policy** *reference*
- **transit-auto-create**
 - **admin-state** *keyword*
 - **inactivity-monitor** *boolean*
- **transit-prefix-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **aa-sub** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **match**
 - **aa-sub-ip** (*ipv4-prefix | ipv6-prefix*)
 - **network-ip** (*ipv4-prefix | ipv6-prefix*)
 - **static-aa-sub** *string*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **is-remote** *boolean*
- **waplx**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **policer**
 - **anl-bandwidth-policer** *string*
 - **action** *keyword*
 - **adaptation-rule**
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **mbs** *number*
 - **rate-percentage** *number*
 - **rate-percentage-stage-2** *number*
 - **dual-bucket-bandwidth-policer** *string*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** *number*
 - **cir** (*number | keyword*)
 - **congestion-override**

configure application-assurance group policer dual-bucket-bandwidth-policer congestion-override cbs

```

- cbs number
- cir (number | keyword)
- mbs number
- pir (number | keyword)
- congestion-override-stage-2
- cbs number
- cir (number | keyword)
- mbs number
- pir (number | keyword)
- description string
- mbs number
- pir (number | keyword)
- time-of-day-override number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs number
- cir (number | keyword)
- description string
- mbs number
- pir (number | keyword)
- time-range
- daily
- all-days
- end string
- on keyword
- start string
- weekly
- end
- day keyword
- time string
- start
- day keyword
- time string
- flow-count-limit-policer string
- action keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- granularity keyword
- limit-gtp-flows boolean
- peak-flow-count (number | keyword)
- time-of-day-override number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- peak-flow-count (number | keyword)
- time-range
- daily
- all-days
- end string
- on keyword
- start string
- weekly
- end
- day keyword
- time string
- start
- day keyword
- time string
- flow-setup-rate-policer string
- action keyword
- adaptation-rule

```

configure application-assurance group policer flow-setup-rate-policer adaptation-rule peak-flow-setup-rate

```

- peak-flow-setup-rate keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- flow-setup-rate-burst-size number
- granularity keyword
- peak-flow-setup-rate (number | keyword)
- time-of-day-override number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - flow-setup-rate-burst-size number
  - peak-flow-setup-rate (number | keyword)
  - time-range
    - daily
      - all-days
      - end string
      - on keyword
      - start string
    - weekly
      - end
        - day keyword
        - time string
      - start
        - day keyword
        - time string
- single-bucket-bandwidth-policer string
  - action keyword
  - adaptation-rule
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - congestion-override
    - mbs number
    - pir (number | keyword)
  - congestion-override-stage-2
    - mbs number
    - pir (number | keyword)
  - description string
  - granularity keyword
  - mbs number
  - pir (number | keyword)
  - time-of-day-override number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - mbs number
    - pir (number | keyword)
    - time-range
      - daily
        - all-days
        - end string
        - on keyword
        - start string
      - weekly
        - end
          - day keyword
          - time string
        - start
          - day keyword
          - time string
  - tcp-optimizer string

```

configure application-assurance group tcp-optimizer apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **dack-timeout** *number*
- **description** *string*
- **initial-cwnd** *number*
- **initial-ss-threshold** (*number* | *keyword*)
- **network-rtt-threshold** *number*
- **tcp-stack** *keyword*
- **url-filter** *string*
 - **admin-state** *keyword*
 - **apply-function-specific-behaviour** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **description** *string*
 - **http-redirect** *reference*
 - **http-request-filtering** *keyword*
 - **icap**
 - **custom-x-header** *string*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **http-redirect** *reference*
 - **server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **vlan-id** *number*
- **local-filtering**
 - **allow-list** *reference*
 - **deny-list** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **http-redirect** *reference*
- **web-service**
 - **category-set** *number*
 - **classification-overrides**
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **category-name** *string*
 - **expression** *string*
 - **classifier** *keyword*
 - **default-action**
 - **allow**
 - **block-all**
 - **block-http-redirect** *reference*
 - **default-profile** *reference*
 - **dns-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **fqdn** *string*
 - **http-redirect** *reference*
 - **profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block**

configure application-assurance group url-filter web-service profile block category

```

    - category string
    - description string
  - server (ipv4-address-no-zone | ipv6-address-no-zone) port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - vlan-id number
- url-list string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - file string
  - host-expressions boolean
  - key string
  - size keyword
- http-enrich
  - field string
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- http-error-redirect
  - error-code number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
  - template number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- http-notification
  - template number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- http-redirect
  - template number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- protocol string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- radius-accounting-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - interim-update-interval number
  - radius-accounting-server
    - access-algorithm keyword
    - retry number
    - router-instance string
    - server number
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - port number
      - secret string
    - source-address string
    - timeout number
  - significant-change number
- usage-alert-thresholds

```

configure application-assurance usage-alert-thresholds bit-rate-high-wmark

- **bit-rate-high-wmark** *(number | keyword)*
- **bit-rate-low-wmark** *number*
- **datapath-cpu-high-wmark** *(number | keyword)*
- **datapath-cpu-low-wmark** *number*
- **flow-setup-rate-high-wmark** *(number | keyword)*
- **flow-setup-rate-low-wmark** *number*
- **flow-table-high-wmark** *number*
- **flow-table-low-wmark** *number*
- **packet-rate-high-wmark** *(number | keyword)*
- **packet-rate-low-wmark** *number*

3.3.1 application-assurance command descriptions

application-assurance

Synopsis	Enter the application-assurance context
Context	configure application-assurance
Tree	application-assurance
Description	Commands in this context configure the attributes of Application Assurance (AA) operations.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp [[aarp-id](#)] *number*

Synopsis	Enter the aarp list instance
Context	configure application-assurance aarp <i>number</i>
Tree	aarp
Description	Commands in this context define an Application Assurance Redundancy Protocol (AARP) instance. This instance is paired with the same AARP ID in a peer node, as part of the configuration to provide flow and packet asymmetry removal for traffic of a multi-homed SAP or spoke SDP.
Max. Instances	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[aarp-id\]](#) *number*

Synopsis	AARP ID
Context	configure application-assurance aarp <i>number</i>
Tree	aarp
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AARP instance
Context	configure application-assurance aarp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance aarp <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

master-selection-mode *keyword***WARNING:**

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

Synopsis	AARP master selection mode
Context	configure application-assurance aarp <i>number</i> master-selection-mode <i>keyword</i>
Tree	master-selection-mode
Description	This command configures the AARP mode of operation with the peer instance. The modes affect the AARP state machine behavior according to the specified behavior.
Default	minimize-switchovers
Options	minimize-switchovers, inter-chassis-efficiency, priority-based-balance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

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

Synopsis	AARP peer IP address
Context	configure application-assurance aarp <i>number</i> peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Description	This command defines the IP address of the AARP peer router, which must be a routable system IP address. If no peer is configured when the AARP is administratively enabled, it is configured as a single node AARP instance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-endpoint

Synopsis	Enter the peer-endpoint context
Context	configure application-assurance aarp <i>number</i> peer-endpoint
Tree	peer-endpoint
Description	Commands in this context specify the attributes of the peer endpoint parent AA subscriber of the AARP peer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap

Synopsis	Enable the sap context
Context	configure application-assurance aarp <i>number</i> peer-endpoint sap
Tree	sap
Notes	The following elements are part of a choice: sap or spoke-sdp .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword*

Synopsis	Encapsulation type for peer endpoint SAP
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Context	configure application-assurance aarp <i>number</i> peer-endpoint sap encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-id *string*

Synopsis	AARP peer endpoint SAP ID
Context	configure application-assurance aarp <i>number</i> peer-endpoint sap sap-id <i>string</i>
Tree	sap-id
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp *string*

Synopsis	AARP peer endpoint spoke SDP
Context	configure application-assurance aarp <i>number</i> peer-endpoint spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	The following elements are part of a choice: sap or spoke-sdp .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*



WARNING:

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

Synopsis	AARP priority
Context	configure application-assurance aarp <i>number</i> priority <i>number</i>

Tree	priority
Description	This command defines the priority for the AARP instance. The priority value is used to determine the master and backup upon initialization or rebalance.
Range	0 to 255
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the cflowd context
Context	configure application-assurance cflowd
Tree	cflowd
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the field list instance
Context	configure application-assurance cflowd field <i>string</i>
Tree	field
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd record field name
Context	configure application-assurance cflowd field <i>string</i>
Tree	field
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance cflowd field <i>string</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute

Synopsis	Enter the flow-attribute context
Context	configure application-assurance flow-attribute
Tree	flow-attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the attribute list instance
Context	configure application-assurance flow-attribute attribute <i>string</i>
Tree	attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[attribute-name] *string*

Synopsis	Attribute name
Context	configure application-assurance flow-attribute attribute <i>string</i>
Tree	attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance flow-attribute attribute <i>string</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the group list instance
Context	configure application-assurance group <i>number</i>
Tree	group
Description	Commands in this context configure an Application Assurance group and partition parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[aa-group-id] *number*

Synopsis	AA group ID
Context	configure application-assurance group <i>number</i>
Tree	group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

certificate-profile [[cert-prof-name](#)] *string*

Synopsis	Enter the certificate-profile list instance
Context	configure application-assurance group <i>number</i> certificate-profile <i>string</i>
Tree	certificate-profile
Description	Commands in this context create a certificate profile to be used for certificate-based encryption in HTTP header enrichment.

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[cert-prof-name] *string*

Synopsis AA group certificate profile name
 Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string*
 Tree [certificate-profile](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the AA certificate profile
 Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string* **admin-state** *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string* **description** *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

file string**WARNING:**

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

Synopsis	Certificate file name
Context	configure application-assurance group <i>number</i> certificate-profile <i>string</i> file string
Tree	file
String Length	1 to 95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the cflowd context
Context	configure application-assurance group <i>number</i> cflowd
Tree	cflowd
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of cflowd export
Context	configure application-assurance group <i>number</i> cflowd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the collector list instance
Context	configure application-assurance group <i>number</i> cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	collector

Description	Commands in this context configure flow data collectors for cflowd data. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the remote cflowd collector host
Context	configure application-assurance group <i>number</i> cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	collector
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	Cflowd collector host port number
Context	configure application-assurance group <i>number</i> cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	collector
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the cflowd export
Context	configure application-assurance group number cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comprehensive

Synopsis	Enter the comprehensive context
Context	configure application-assurance group number cflowd comprehensive
Tree	comprehensive
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	configure application-assurance group number cflowd comprehensive flow-rate number
Tree	flow-rate
Range	1 to 1000
Units	flows per second

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	configure application-assurance group <i>number</i> cflowd comprehensive flow-rate-2 number
Tree	flow-rate-2
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the template context
Context	configure application-assurance group <i>number</i> cflowd comprehensive template
Tree	template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure the fields that are included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
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Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a dynamic field to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd comprehensive template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpprecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisd sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow Duration Milliseconds postIpprecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC

- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIppPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterIframeGap | imageWidth | imageHeight | frameRate | slicesPerIframe | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIppPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [comprehensive](#) [template](#) [field-selection](#) *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Default legacy

Options legacy, dynamic

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direct-export

Synopsis Enter the **direct-export** context

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#)

Tree [direct-export](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collector [[collector-id](#)] *number*

Synopsis	Enter the collector list instance
Context	configure application-assurance group number cflowd direct-export collector number
Tree	collector
Max. Instances	16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[collector-id] *number*

Synopsis	Cflowd direct export collector ID
Context	configure application-assurance group number cflowd direct-export collector number
Tree	collector
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the address list instance
Context	configure application-assurance group number cflowd direct-export collector number address (ipv4-address-no-zone ipv6-address-no-zone) port number
Tree	address
Description	Commands in this context configure the cflowd direct export collector IP address. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the remote cflowd collector host
Context	configure application-assurance group <i>number</i> cflowd direct-export collector <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	address
Description	This command configures the IP address of the remote cflowd collector host. In the current release, the system supports IPv4 addresses only for the cflowd collector host.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	Cflowd collector host port number
Context	configure application-assurance group <i>number</i> cflowd direct-export collector <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	address
Description	This command configures the UDP port number used by the remote cflowd collector host. In the MD-CLI, the default port is 4739.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the direct export collector
Context	configure application-assurance group <i>number</i> cflowd direct-export collector <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	This command sets the administrative state of the cflowd direct export collector. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.

Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description of the collector
Context	configure application-assurance group number cflowd direct-export collector number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

Synopsis	Cflowd direct export VLAN ID
Context	configure application-assurance group number cflowd direct-export vlan-id number
Tree	vlan-id
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-override

Synopsis	Enter the export-override context
Context	configure application-assurance group number cflowd export-override
Tree	export-override
Description	<p>Commands in this context configure the AA subtype used in the cflowd record export. The cflowd statistics exported to the cflowd collector look identical to AA for the type of system defined by the mode. The following cflowd export fields are affected:</p> <ul style="list-style-type: none"> • The cflowd export observation point (field 138) mode is derived from the export-override category that is selected. • The cflowd export AA_Subscriber_Type (field 12) mode is modified as configured, using existing field types.

- The cflowd interface name is used as the sub-ID field, optionally modified to use the configured **mode** and **prefix** commands for global identifiers.

All AA cflowd record types are affected by export override. To change the export override or prefix, cflowd must first be disabled. When this command is set back to the default, the prefix is also set back to its default.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*



WARNING:

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

Synopsis	AA cflowd export override mode
Context	configure application-assurance group number cflowd export-override mode keyword
Tree	mode
Description	This command specifies the type of system emulated for the cflowd export.
Options	mobile, ifname-obfuscate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *string*



WARNING:

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

Synopsis	AA group cflowd export override prefix
Context	configure application-assurance group number cflowd export-override prefix string
Tree	prefix
Description	This command specifies the prefix-string associated with the export override. The prefix string specifies up to an 8 character string. If the 8 character prefix is "ABCDEFG_" for a particular node, the cflowd export override would generate IPv4 interface names such as ABCDEF_G_255.255.255.255 or IPv6 as ABCDEF_G_2001:DB8:EF01:2345::/64. By default, the prefix is left blank.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

obfuscation

Synopsis	Enter the obfuscation context
Context	configure application-assurance group number cflowd obfuscation
Tree	obfuscation
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-128-encryption-key *string*

Synopsis	AES-128 encryption key
Context	configure application-assurance group number cflowd obfuscation aes-128-encryption-key string
Tree	aes-128-encryption-key
Description	This command specifies the AES-128 key used to encrypt export cflowd fields.
String Length	51
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-256-encryption-key *string*

Synopsis	AES-256 encryption key
Context	configure application-assurance group number cflowd obfuscation aes-256-encryption-key string
Tree	aes-256-encryption-key
Description	This command specifies the AES-256 key used to encrypt exported cflowd fields.
String Length	71
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtp-performance

Synopsis	Enter the rtp-performance context
Context	configure application-assurance group number cflowd rtp-performance
Tree	rtp-performance

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

audio-template

Synopsis Enter the **audio-template** context
 Context **configure** [application-assurance group number cflowd rtp-performance audio-template](#)
 Tree [audio-template](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis Enter the **dynamic-fields** context
 Context **configure** [application-assurance group number cflowd rtp-performance audio-template dynamic-fields](#)
 Tree [dynamic-fields](#)
 Description Commands in this context configure dynamic fields to be included in the exported cflowd template.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the dynamic fields
 Context **configure** [application-assurance group number cflowd rtp-performance audio-template dynamic-fields admin-state keyword](#)
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Add a list entry for **field**

Context	configure application-assurance group number cflowd rtp-performance audio-template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group number cflowd rtp-performance audio-template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterFrame Gap imageWidth imageHeight frameRate slicesPerFrame SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurst Count rtpAvgBurstLengthPkts rtpGapCount rtpAvgGapLengthPkts PPDVM rtp NumAudioChannels rtpRefClockRate rtpPeakAudioBw SSRC hostName • For volume and comprehensive templates, the following values apply: tcpSessionEst Delay tcpRetransmittedBytes tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group <i>number</i> cflowd rtp-performance audio-template field-selection <i>keyword</i>
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	configure application-assurance group <i>number</i> cflowd rtp-performance flow-rate <i>number</i>
Tree	flow-rate
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	configure application-assurance group <i>number</i> cflowd rtp-performance flow-rate-2 <i>number</i>
Tree	flow-rate-2
Range	1 to 1000

Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

video-template

Synopsis	Enter the video-template context
Context	configure application-assurance group number cflowd rtp-performance video-template
Tree	video-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group number cflowd rtp-performance video-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	configure application-assurance group number cflowd rtp-performance video-template dynamic-fields admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [*field-name*] *string*

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd rtp-performance video-template dynamic-fields <i>field</i> <i>string</i>
Tree	field
Description	This command adds a list entry for the fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd rtp-performance video-template dynamic-fields <i>field</i> <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterIframe Gap imageWidth imageHeight frameRate slicesPerIframe SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurst Count rtpAvgBurstLengthPkts rtpGapCount rtpAvgGapLengthPkts PPDVM rtp NumAudioChannels rtpRefClockRate rtpPeakAudioBw SSRC hostName

- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group number cflowd rtp-performance video-template field-selection keyword
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

voice-template

Synopsis	Enter the voice-template context
Context	configure application-assurance group number cflowd rtp-performance voice-template
Tree	voice-template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group number cflowd rtp-performance voice-template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	configure application-assurance group <i>number</i> cflowd rtp-performance voice-template dynamic-fields admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd rtp-performance voice-template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a cflowd record field to the list included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd rtp-performance voice-template dynamic-fields field <i>string</i>
Tree	field
Description	This command specifies the name of the field to be included in the exported cflowd template. <ul style="list-style-type: none"> Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postItpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId

cellId | timeZone | aaChargingGrp | flowAttr_video | flowAttr_abr_service | flowAttr_audio | flowAttr_encrypted | flowAttr_download | flowAttr_upload | flowAttr_realtime_communication | aaSubTetheringState | imei | ipTTL | imei_roamingStatus | mcc | uli | chargingChar | plmnid | customerId

- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs | MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterFrameGap | imageWidth | imageHeight | frameRate | slicesPerIFrame | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance group](#) *number* [cflowd](#) [rtp-performance](#) [voice-template](#) **field-selection** *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Default legacy

Options legacy, dynamic

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-performance

Synopsis	Enter the tcp-performance context
Context	configure application-assurance group number cflowd tcp-performance
Tree	tcp-performance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate *number*

Synopsis	Cflowd flow sampling rate
Context	configure application-assurance group number cflowd tcp-performance flow-rate number
Tree	flow-rate
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-rate-2 *number*

Synopsis	Cflowd per-flow second sampling rate
Context	configure application-assurance group number cflowd tcp-performance flow-rate-2 number
Tree	flow-rate-2
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the template context
Context	configure application-assurance group number cflowd tcp-performance template
Tree	template
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis Enter the **dynamic-fields** context

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields](#)

Tree [dynamic-fields](#)

Description Commands in this context configure the fields to be included in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the dynamic fields

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Add a list entry for **field**

Context **configure** [application-assurance group number cflowd tcp-performance template dynamic-fields field string](#)

Tree [field](#)

Description This command adds a list entry for fields to include in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd tcp-performance template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIpPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterFrame Gap imageWidth imageHeight frameRate slicesPerFrame SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIpPrecedence aaProt aaApp aaAppGrp rtpBurst Count rtpAvgBurstLengthPkts rtpGapCount rtpAvgGapLengthPkts PPDVM rtp NumAudioChannels rtpRefClockRate rtpPeakAudioBw SSRC hostName • For volume and comprehensive templates, the following values apply: tcpSessionEst Delay tcpRetransmittedBytes tcpRetransmittedPackets
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group number cflowd tcp-performance template field-selection keyword
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template-retransmit *number*

Synopsis	Template retransmit time
Context	configure application-assurance group number cflowd template-retransmit number
Tree	template-retransmit
Range	10 to 600
Default	600
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis	Enter the volume context
Context	configure application-assurance group number cflowd volume
Tree	volume
Description	Commands in this context configure the cflowd volume export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate *number*

Synopsis	Cflowd packet sampling rate
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Context	configure application-assurance group number cflowd volume rate number
Tree	rate
Range	1 to 10000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template

Synopsis	Enter the template context
Context	configure application-assurance group number cflowd volume template
Tree	template
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-fields

Synopsis	Enter the dynamic-fields context
Context	configure application-assurance group number cflowd volume template dynamic-fields
Tree	dynamic-fields
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	configure application-assurance group number cflowd volume template dynamic-fields admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field [*field-name*] *string*

Synopsis	Add a list entry for field
Context	configure application-assurance group <i>number</i> cflowd volume template dynamic-fields field <i>string</i>
Tree	field
Description	This command adds a list entry for the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	Cflowd template dynamic field name
Context	configure application-assurance group <i>number</i> cflowd volume template dynamic-fields field <i>string</i>
Tree	field
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> • Common to all templates are the following values: flowStartSeconds flowDuration Milliseconds postIIPPrecedence aaProt aaApp aaAppGrp hostName hostName Extended deviceId deviceMfgId deviceOsId ipFamily deviceOsVer1 device OsVer2 deviceOsVer3 aniType aniTopology aniCongestionState apn charge Id mnc imsi msisdn sgw-sgsnAddr pgw-ggsnAddr bsid ratType regionId cellId timeZone aaChargingGrp flowAttr_video flowAttr_abr_service flowAttr_audio flowAttr_encrypted flowAttr_download flowAttr_upload flowAttr_realtime_communication aaSubTetheringState imei ipTTL imei roamingStatus mcc uli chargingChar plmnid customerId • When AA is deployed in FWA SR, the following value applies: ApnExtended • For the rtp-voice template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIIPPrecedence aaProt aaApp aaAppGrp rtpBurstCount rtpAvgBurstLengthMs rtpGapCount rtpAvgGapLengthMs MAPDV RBurst RGap SSRC • For the rtp-video template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIIPPrecedence aaProt aaApp aaAppGrp rtpRefClock Rate MOSAV VSTQ estimatedPSNR GoPType avgGoPLength avgInterIframe Gap imageWidth imageHeight frameRate slicesPerIframe SSRC video Interlaced IFrameReceived IFrameImpaired PFrameReceived PFrameImpaired BFrameReceived BFrameImpaired SIFrameReceived SIFrameImpaired SPFrameReceived SPFrameImpaired frameInterArrivalJitter IFrameInterArrival Jitter avgFrameArrivalDelay • For the rtp-audio template only, the following values apply: flowStartSeconds flow DurationMilliseconds postIIPPrecedence aaProt aaApp aaAppGrp rtpBurst

Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp
NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName

- For volume and comprehensive templates, the following values apply: tcpSessionEst
Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

field-selection *keyword*

Synopsis	Field selection method
Context	configure application-assurance group <i>number</i> cflowd volume template field-selection <i>keyword</i>
Tree	field-selection
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Default	legacy
Options	legacy, dynamic
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache [[dns-ip-cache-name](#)] *string*

Synopsis	Enter the dns-ip-cache list instance
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i>
Tree	dns-ip-cache
Description	Commands in this context configure a DNS IP cache that is used to snoop DNS requests generated by subscribers, to populate a cache of IP addresses that match a specified list of domain names. In the context of strengthening URL-content charging, Operators may also specify a list of trusted DNS servers to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[dns-ip-cache-name] *string*

Synopsis	DNS IP cache name within the AA group
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Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i>
Tree	dns-ip-cache
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA DNS IP cache object
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-match

Synopsis	Enter the dns-match context
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> dns-match
Tree	dns-match
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [**domain-name**] *string*

Synopsis	Enter the domain list instance
Context	configure application-assurance group number dns-ip-cache string dns-match domain string
Tree	domain
Description	Commands in this context configure a domain expression to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[domain-name] *string*

Synopsis	DNS IP cache domain name
Context	configure application-assurance group number dns-ip-cache string dns-match domain string
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression *string*

Synopsis	AA DNS domain expression to match
Context	configure application-assurance group number dns-ip-cache string dns-match domain string expression string
Tree	expression
Description	This command specifies a domain name expression string used to define a pattern match. The domain expression uses the same syntax as the expressions used in configure application-assurance group partition policy app-filter entry app-filters configuration.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trusted-server-address [[dns-server-address](#)] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Enter the trusted-server-address list instance
Context	configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	trusted-server-address
Description	Commands in this context configure a trusted DNS server address. DNS responses from this DNS server are used to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[dns-server-address] ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	Trusted DNS server address
Context	configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	trusted-server-address
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-name *string*

Synopsis	DNS server name
Context	configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone ipv6-address-no-zone) server-name string
Tree	server-name
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-cache

Synopsis	Enter the ip-cache context
Context	configure application-assurance group number dns-ip-cache string ip-cache
Tree	ip-cache

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark value for the DNS IP cache
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache high-watermark <i>number</i>
Tree	high-watermark
Description	This command configures the high watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the threshold, the system generates a trap.
Range	0 to 100
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark value for the DNS IP cache
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache low-watermark <i>number</i>
Tree	low-watermark
Description	This command configures the low watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the high watermark threshold, the system generates a trap based on the high watermark. The trap clears after the number of cached IP addresses drops below the configured low watermark value.
Range	0 to 100
Default	80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

size *number*

Synopsis	Maximum number of IP addresses stored in the cache
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache size <i>number</i>
Tree	size

Range	10 to 64000
Default	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for static-address
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache static-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	static-address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[static-ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Trusted IP address for the DNS IP cache
Context	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i> ip-cache static-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	static-address
Description	This command configures an IP address to be used as a trusted IP address. For packets whose destination IP address matches that of the trusted IP address, a cache hit is assumed.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich [[http-enrich-name](#)] *string*

Synopsis	Enter the http-enrich list instance
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i>
Tree	http-enrich
Description	Commands in this context configure the attributes of the HTTP enrichment policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-enrich-name] *string*

Synopsis	HTTP header enrichment policy name
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i>
Tree	http-enrich
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the HTTP enrichment policy
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the field list instance
Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> field <i>string</i>
Tree	field
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis Field name to insert into the HTTP header

Context **configure** **application-assurance** **group** *number* **http-enrich** *string* **field** *string*

Tree **field**

Description This command specifies the field type to insert into the HTTP header. The command must be repeated for each field to be inserted. The same field cannot be inserted twice into the header under different header names.

Note: AA can insert two copies of the following fields in the same HTTP header (with a different header name):

imei-hyphenated, imei-hyphenated-2, imsi, imsi-2, static-string, static-string-2, user-location-raw, and user-location-raw2.

The following field types are supported in any deployment:

static-string - header name for the inserted string

static-string-2 - header name for the inserted string

subscriber-id - header name for the subscriber ID

subscriber-ip - header name for the subscriber IP address

The following field types are supported in Fixed Wireless Access (FWA) deployments only:

apn - complete APN string

apn-ni - APN Network Identifier (APN-NI) used by the UE

billing-type - UE charging type (charging characteristics)

dynamic-acr - dynamic Anonymous Customer Record (ACR)

static-acr - static ACR

imei-hyphenated - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-hyphenated-2 - subscriber IMEI with format AABBBBBB-CCCCCC-EE

imei-sv - subscriber IMEI with format AABBBBBBCCCCCEE

imsi - subscriber IMSI

imsi-2 - subscriber IMSI

msisdn - subscriber MSISDN

msisdn-ts - subscriber MSISDN appended with the UNIX timestamp

msisdn-without-cc - subscriber MSISDN without a country code

pgw-ggsn-address - PGW/GGSN address serving the UE

plmn-id - Public Land Mobile Network (PLMN) ID of the SGSN/MME

rat-type - Radio Access Technology (RAT) type

timestamp - timestamp inserted in UNIX time format; for example, 1531204313

user-location - UE LOCATION (ULI)
 user-location-3gpp - ULI encoded as defined in 3GPP 29.061
 user-location-raw - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16
 user-location-raw-2 - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aes-initialization-vector *string*

Synopsis	Initialization vector for the AES CBC encryption
Context	configure application-assurance group number http-enrich string field string aes-initialization-vector string
Tree	aes-initialization-vector
Description	This command configures the initialization vector used for the AES CBC encryption. The vector consists of 34 characters, that is, 0x followed by exactly 32 hexadecimal characters.
String Length	34
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *boolean*

Synopsis	Enable anti-spoofing
Context	configure application-assurance group number http-enrich string field string anti-spoof boolean
Tree	anti-spoof
Description	When configured to true , this command enables the HTTP header enrichment anti-spoofing functionality.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-line-id *boolean*

Synopsis	Enable calling line identification
Context	configure application-assurance group number http-enrich string field string calling-line-id boolean
Tree	calling-line-id
Description	When configured to true , this command configures the HTTP header for “x-up-calling-line-id” anti-spoofing.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encode

Synopsis	Enter the encode context
Context	configure application-assurance group number http-enrich string field string encode
Tree	encode
Description	Commands in this context configure the encoding applied to the HTTP header enrichment field.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-base64 *reference*

Synopsis	Specifies the certificate profile name to use for encoding this field and in base64 format.
Context	configure application-assurance group number http-enrich string field string encode cert-base64 reference
Tree	cert-base64
Reference	configure application-assurance group number certificate-profile string
Notes	The following elements are part of a choice: cert-base64 , cert-profile , or key .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name used for encryption
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Context	configure application-assurance group number http-enrich string field string encode cert-profile reference
Tree	cert-profile
Reference	configure application-assurance group number certificate-profile string
Notes	The following elements are part of a choice: cert-base64 , cert-profile , or key .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enter the key context
Context	configure application-assurance group number http-enrich string field string encode key
Tree	key
Description	Commands in this context configure the encryption fields.
Notes	The following elements are part of a choice: cert-base64 , cert-profile , or key .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Encoding type
Context	configure application-assurance group number http-enrich string field string encode key type <i>keyword</i>
Tree	type
Description	This command configures the encoding/ encryption method.
Options	md5, rc4, rc4-md5-base64, aes128, aes256, aes128cbc, aes256cbc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *string*

Synopsis	Secret key for encrypting the field
Context	configure application-assurance group number http-enrich string field string encode key value <i>string</i>
Tree	value

String Length 1 to 114
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

md5-salt *string*

Synopsis MD5 salt string
 Context **configure** [application-assurance group number](#) [http-enrich string field string](#) **md5-salt string**
 Tree [md5-salt](#)
 Description This command configures an MD5 salt string. The configured string is appended to the parameter before performing MD5 hashing of the field.
 String Length 1 to 16
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

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

Synopsis HTTP header field name
 Context **configure** [application-assurance group number](#) [http-enrich string field string](#) **name string**
 Tree [name](#)
 String Length 1 to 32
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-string *string*

Synopsis HTTP header enrichment template field static string
 Context **configure** [application-assurance group number](#) [http-enrich string field string](#) **static-string string**
 Tree [static-string](#)
 String Length 1 to 16
 Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type-enrichment

Synopsis Enter the **rat-type-enrichment** context

Context **configure** [application-assurance](#) [group](#) *number* [http-enrich](#) *string* [rat-type-enrichment](#)

Tree [rat-type-enrichment](#)

Description Commands in this context configure Radio Access Type (RAT) enrichment.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [[rat-type-name](#)] *keyword*

Synopsis Enter the **rat-type** list instance

Context **configure** [application-assurance](#) [group](#) *number* [http-enrich](#) *string* [rat-type-enrichment](#) [rat-type](#) *keyword*

Tree [rat-type](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[rat-type-name](#)] *keyword*

Synopsis RAT type name

Context **configure** [application-assurance](#) [group](#) *number* [http-enrich](#) *string* [rat-type-enrichment](#) [rat-type](#) *keyword*

Tree [rat-type](#)

Description This command configures a customised RAT value for the specified RAT-Type.

Options [utran](#), [geran](#), [wlan](#), [gan](#), [hspa-evol](#), [eutran](#), [virtual](#), [eutran-nb](#), [ehrpd](#), [hrpd](#), [cdma-1x](#), [umb](#), [wifi](#), [nr](#), [lte-m](#)

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-string *string*

Synopsis Customised RAT type value

Context	configure application-assurance group <i>number</i> http-enrich <i>string</i> rat-type-enrichment rat-type <i>keyword</i> rat-string <i>string</i>
Tree	rat-string
String Length	1 to 31
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect [[http-error-redirect-name](#)] *string*

Synopsis	Enter the http-error-redirect list instance
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i>
Tree	http-error-redirect
Description	Commands in this context configure an HTTP error redirect policy that contains important information relevant to the redirect server.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-error-redirect-name] *string*

Synopsis	HTTP error redirect policy name
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i>
Tree	http-error-redirect
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number http-error-redirect string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-code [[error-code-value](#)] *number*

Synopsis	Enter the error-code list instance
Context	configure application-assurance group number http-error-redirect string error-code number
Tree	error-code
Description	Commands in this context configure the HTTP error status codes to which a redirect action is applied. Only messages with sizes less than that configured for the custom-message-size command are eligible for redirect action.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[error-code-value] *number*

Synopsis	HTTP error code value for an HTTP error redirect
Context	configure application-assurance group number http-error-redirect string error-code number
Tree	error-code
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-message-size *number*

Synopsis	HTTP error redirect error code custom message size
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i> error-code <i>number</i> custom-message-size <i>number</i>
Tree	custom-message-size
Description	This command specifies the maximum message size above which an HTTP error redirect is not performed.
Max. Range	0 to 4294967295
Default	1024
Units	octets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-host *string*

Synopsis	HTTP host for the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i> http-host <i>string</i>
Tree	http-host
Description	This command specifies the HTTP hostname of the landing server (Barefruit or Xerocole). It is used in the HTTP GET operation from the client (which is being redirected) to the redirect search landing server. The hostname must contain a valid IP address or HTTP hostname or URI for the HTTP GET from the client to the landing server.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

participant-id *string*

Synopsis	Participant ID for the HTTP error redirect object
Context	configure application-assurance group <i>number</i> http-error-redirect <i>string</i> participant-id <i>string</i>
Tree	participant-id
Description	This command specifies a string assigned to the operator by Barefruit. It is used by Barefruit landing servers (applies to template # 1 only).
String Length	1 to 32
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis Template ID for the HTTP error redirect object

Context **configure** [application-assurance](#) [group](#) *number* [http-error-redirect](#) *string* [template](#) *number*

Tree [template](#)

Description This command configures the template of parameters passed from the AA-ISA to the redirect server using JavaScript in the redirect packet. The template is specific to the redirect server used in the network. Currently, two partners are supported with AA-ISA redirect solution, Barefruit, and Xerocole.

Max. Range 0 to 4294967295

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification [[http-notification-name](#)] *string*

Synopsis Enter the **http-notification** list instance

Context **configure** [application-assurance](#) [group](#) *number* [http-notification](#) *string*

Tree [http-notification](#)

Description Commands in this context configure an HTTP notification object for the subscriber in-browser notification.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-notification-name] *string*

Synopsis HTTP notification policy name

Context **configure** [application-assurance](#) [group](#) *number* [http-notification](#) *string*

Tree [http-notification](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA HTTP notification object
Context	configure application-assurance group number http-notification string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number http-notification string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval (*number* | *keyword*)

Synopsis	Minimum HTTP response notification interval
Context	configure application-assurance group number http-notification string interval (<i>number</i> <i>keyword</i>)
Tree	interval
Range	1 to 1440
Default	one-time
Units	minutes
Options	one-time
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

script-url *string*

Synopsis	Script URL inserted into the HTTP response
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Context	configure application-assurance group number http-notification string script-url string
Tree	script-url
Description	This command configures the URL of the script used by the HTTP notification policy.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the AA HTTP notification object
Context	configure application-assurance group number http-notification string template number
Tree	template
Description	This command configures the template that defines the format and attributes included in the HTTP notification message.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect [[http-redirect-name](#)] *string*

Synopsis	Enter the http-redirect list instance
Context	configure application-assurance group number http-redirect string
Tree	http-redirect
Description	Commands in this context configure the parameters of the HTTP redirect policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[http-redirect-name] *string*

Synopsis	HTTP redirect policy name
Context	configure application-assurance group number http-redirect string
Tree	http-redirect
Description	This command specifies the applied HTTP redirect name. If no redirect name is specified, HTTP redirect is not enabled.
String Length	1 to 32

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

admin-state *keyword*

Synopsis	Administrative state of the AA HTTP redirect object
Context	configure application-assurance group number http-redirect string admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

captive-redirect

Synopsis	Enter the captive-redirect context
Context	configure application-assurance group number http-redirect string captive-redirect
Tree	captive-redirect
Description	<p>Commands in this context configure the captive redirect capability for an HTTP redirect policy. HTTP redirect policies using captive redirect can be used in conjunction with a session-filter policy to terminate TCP flows in the ISA-AA card before reaching the Internet to redirect subscribers to the predefined redirect URL.</p> <p>Non-HTTP TCP flows are TCP reset. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.</p> <p>The operator can select the URL arguments to include in the redirect URL using either a specific template ID or by configuring the redirect URL using a supported macro substitution keyword.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number*

Synopsis	Captive redirect VLAN ID
Context	configure application-assurance group number http-redirect string captive-redirect vlan-id <i>number</i>

Tree	vlan-id
Description	This command configures the VLAN ID for a captive redirect. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number http-redirect string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redirect-https *boolean*

Synopsis	Enable HTTPS redirect
Context	configure application-assurance group number http-redirect string redirect-https boolean
Tree	redirect-https
Description	When set to true , the HTTP redirect policy redirects HTTPS sessions to the configured redirect URL.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redirect-url *string*

Synopsis	HTTP redirect URL
Context	configure application-assurance group number http-redirect string redirect-url string
Tree	redirect-url
Description	This command configures the HTTP redirect URL which is the URL (page) that the user is redirected to when an HTTP redirect takes effect.

The operator can select the URL arguments to include in the redirect URL, using either a specific template ID or by configuring any of the following macro substitution keywords:

- \$URL - The Request-URI in the HTTP GET Request received
- \$SUB - The subscriber ID
- \$IP - The IP address of the subscriber host
- \$RTRID - The router ID
- \$URLPRM - The HTTP URL parameter associated with the subscriber
- \$MAC - The UE MAC address
- \$SAP - The UE SAP
- \$CID - The circuit ID or interface ID of the subscriber
- \$RID - The remote ID of the subscriber
- \$CATID - The URL filter web-service rating category identifier
- \$CATNAME - The URL filter web-service rating category name

Only ESM and ESM-MAC sub types support \$MAC, \$SAP, \$CID, and \$RID macro substitution.

String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-client-reset *boolean*

Synopsis	Enable TCP client reset
Context	configure application-assurance group number http-redirect string tcp-client-reset <i>boolean</i>
Tree	tcp-client-reset
Description	When set to true , this command enables an HTTP-redirect policy to initiate a TCP reset towards the client if the AA policy results in a redirect with packet drop but the HTTP redirect cannot be delivered. Scenarios for this include HTTP (TLS) sessions, blocking of non-HTTP TCP traffic, and blocking of existing flows after a policy re-evaluation of an existing subscriber.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template *number*

Synopsis	Template ID for the HTTP redirect object
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Context	configure application-assurance group <i>number</i> http-redirect <i>string</i> template <i>number</i>
Tree	template
Description	This command configures the template that defines which parameters are appended to the HTTP host redirect field in the redirect message. The HTTP redirect template provides HTTP 302 redirect containing only the URL specified in the redirect policy, with no other parameters.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-assist

Synopsis	Enter the ip-identification-assist context
Context	configure application-assurance group <i>number</i> ip-identification-assist
Tree	ip-identification-assist
Description	<p>Commands in this context configure the IP identification assist feature, which uses IP addresses to assist in traffic identification.</p> <p>This optional mechanism is enabled by default and consults an internally generated and stored database when app-filters fail to classify the traffic as one of the configured applications from the AppDB.</p> <p>Use the configure application-assurance group ip-identification-assist admin-state command to disable the administrative state of the IP identification assist feature.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IP identification assist
Context	configure application-assurance group <i>number</i> ip-identification-assist admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

passive-dns

Synopsis	Enter the passive-dns context
Context	configure application-assurance group number ip-identification-assist passive-dns
Tree	passive-dns
Description	Commands in this context configure passive DNS monitoring for the IP identification assist feature.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *boolean*



WARNING:

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

Synopsis	Use passive DNS monitoring to collect IP addresses
Context	configure application-assurance group number ip-identification-assist passive-dns monitor boolean
Tree	monitor
Description	When configured to true , the router collects IP addresses by passively monitoring DNS traffic. The router uses the collected IP addresses to build its internal database.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trusted-server [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the trusted-server list instance
Context	configure application-assurance group number ip-identification-assist passive-dns trusted-server (ipv4-address-no-zone ipv6-address-no-zone)
Tree	trusted-server
Description	Commands in this context configure a DNS server that the IP identification assist feature is allowed to passively monitor.
Max. Instances	64
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the DNS server
Context	configure application-assurance group <i>number</i> ip-identification-assist passive-dns trusted-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	trusted-server
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	Name or description to associate with the DNS server
Context	configure application-assurance group <i>number</i> ip-identification-assist passive-dns trusted-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) comment <i>string</i>
Tree	comment
String Length	0 to 32
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

partition [[aa-partition-id](#)] *number*

Synopsis	Enter the partition list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i>
Tree	partition
Description	Commands in this context configure the AA partition-related policies.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[aa-partition-id] *number*

Synopsis	Partition ID within the AA group
Context	configure application-assurance group <i>number</i> partition <i>number</i>
Tree	partition
Range	0 to 65535

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

aa-sub-congestion-detection

Synopsis	Enter the aa-sub-congestion-detection context
Context	configure application-assurance group number partition number aa-sub-congestion-detection
Tree	aa-sub-congestion-detection
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of congestion detection
Context	configure application-assurance group number partition number aa-sub-congestion-detection admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [[rat-type-name](#)] *keyword*

Synopsis	Enter the rat-type list instance
Context	configure application-assurance group number partition number aa-sub-congestion-detection rat-type keyword
Tree	rat-type
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[rat-type-name] keyword

Synopsis	Mobile radio access technology (RAT) type
Context	configure application-assurance group number partition number aa-sub-congestion-detection rat-type keyword
Tree	rat-type
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (number | keyword)

Synopsis	Round trip time congestion threshold for a RAT type
Context	configure application-assurance group number partition number aa-sub-congestion-detection rat-type keyword rtt-threshold (number keyword)
Tree	rtt-threshold
Description	This command configures the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (number | keyword)

Synopsis	Round trip time congestion threshold
Context	configure application-assurance group number partition number aa-sub-congestion-detection rtt-threshold (number keyword)
Tree	rtt-threshold
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine subscriber congestion for NLB-DEM. This default value is used when the current RAT-Type is not known, or has no associated configured RTT threshold.

Range	1 to 500
Default	173
Units	milliseconds
Options	not-applicable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold-tolerance *number*

Synopsis	RTT threshold tolerance for congestion detection
Context	configure application-assurance group number partition number aa-sub-congestion-detection rtt-threshold-tolerance number
Tree	rtt-threshold-tolerance
Description	This command configures the round trip delay threshold tolerance used by the DEM gateway algorithm to determine subscriber-level congestion.
Range	0 to 100
Default	50
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-remote *boolean*

Synopsis	Reverse subscriber traffic direction
Context	configure application-assurance group number partition number aa-sub-remote boolean
Tree	aa-sub-remote
Description	When configured to true , the direction of the from-subscriber and to-subscriber traffic is reversed for this group partition.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-network-location

Synopsis	Enter the access-network-location context
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Context	configure application-assurance group number partition number access-network-location
Tree	access-network-location
Description	Commands in this context configure parameters related to dynamic experience management, also known as Access Network Location (ANL).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source [[source-type](#)] *keyword*

Synopsis	Enter the source list instance
Context	configure application-assurance group number partition number access-network-location source <i>keyword</i>
Tree	source
Description	Commands in this context configure location sources for dynamic experience management.
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-type] *keyword*

Synopsis	Access network location source
Context	configure application-assurance group number partition number access-network-location source <i>keyword</i>
Tree	source
Description	This command specifies the location or access technology. AA supports access points for WLGW access points or ULI-2gpp for mobile (for example, FWA).
Options	mobile-3g, access-point, uli-3gpp
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type [[rat-type-name](#)] *keyword*

Synopsis	Enter the rat-type list instance
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Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rat-type <i>keyword</i>
Tree	rat-type
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[rat-type-name] *keyword*

Synopsis	Access network location RAT type
Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rat-type <i>keyword</i>
Tree	rat-type
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (*number* | *keyword*)

Synopsis	RTT congestion threshold for a RAT type
Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rat-type <i>keyword</i> rtt-threshold (<i>number</i> <i>keyword</i>)
Tree	rtt-threshold
Description	This command specifies the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold (*number* | *keyword*)

Synopsis	Source round trip time congestion threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rtt-threshold (<i>number</i> <i>keyword</i>)
Tree	rtt-threshold
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine ANL congestion. This default value is used when either the ANL RAT-Type is not known or has no associated configured RTT threshold.
Range	1 to 500
Default	173
Units	milliseconds
Options	not-applicable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtt-threshold-tolerance *number*

Synopsis	Source round trip time congestion threshold tolerance
Context	configure application-assurance group <i>number</i> partition <i>number</i> access-network-location source <i>keyword</i> rtt-threshold-tolerance <i>number</i>
Tree	rtt-threshold-tolerance
Description	This command configures the ANL round trip delay threshold tolerance used by the DEM gateway algorithm to determine ANL-level congestion.
Range	0 to 100
Default	50
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-level *keyword***WARNING:**

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

Synopsis	Access network location source level
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Context	configure application-assurance group number partition number access-network-location source keyword source-level keyword
Tree	source-level
Default	cell
Options	cell, transport-network-link, mac-vlan
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aqp-initial-lookup *boolean*

Synopsis	Enable AQP initial lookup
Context	configure application-assurance group number partition number aqp-initial-lookup boolean
Tree	aqp-initial-lookup
Description	<p>When configured to true, this command allows AA to perform application QoS policy (AQP) lookups on flows prior to complete application identification. As usual, AQP will be looked up again when identification is complete. Without this, AA executes AQPs that are part of the sub-default policy. The sub-default policy is formed by regular AQPs that contain ASOs, subID, or flow direction as matching conditions.</p> <p>This behavior is required, for example, to apply GTP and SCTP filtering on the first packet of a new GTP/SCTP flow (AQP matching conditions).</p> <p>When configured to false, AA only performs AQP lookups when identification is complete.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cflowd

Synopsis	Enter the cflowd context
Context	configure application-assurance group number partition number cflowd
Tree	cflowd
Description	Commands in this context configure the AA partition-based cflowd fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-type [[flow-export-type](#)] *keyword*

Synopsis	Enter the export-type list instance
Context	configure application-assurance group number partition number cflowd export-type keyword
Tree	export-type
Description	Commands in this context configure the scope of traffic subjected to AA cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-export-type] *keyword*

Synopsis	Cflowd flow export type for the partition
Context	configure application-assurance group number partition number cflowd export-type keyword
Tree	export-type
Description	This command allows the operator to configure the scope of traffic that can be sampled for cflowd export for the configured cflowd template.
Options	volume, tcp-performance, rtp-performance, comprehensive
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of cflowd export
Context	configure application-assurance group number partition number cflowd export-type keyword admin-state keyword
Tree	admin-state
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [[app-group-name](#)] *reference*

Synopsis	Enter the app-group list instance
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Context	configure application-assurance group number partition number cflowd export-type keyword app-group reference
Tree	app-group
Description	Commands in this context configure application groups for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[app-group-name] reference

Synopsis	Application group name
Context	configure application-assurance group number partition number cflowd export-type keyword app-group reference
Tree	app-group
Reference	configure application-assurance group number partition number policy app-group string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-choice keyword

Synopsis	Cflowd rate to use for sampling
Context	configure application-assurance group number partition number cflowd export-type keyword app-group reference rate-choice keyword
Tree	rate-choice
Default	flow-rate
Options	flow-rate, flow-rate-2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [application-name] reference

Synopsis	Enter the application list instance
Context	configure application-assurance group number partition number cflowd export-type keyword application reference
Tree	application

Description	Commands in this context configure applications for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-name] reference

Synopsis	Application name
Context	configure application-assurance group number partition number cflowd export-type keyword application reference
Tree	application
Reference	configure application-assurance group number partition number policy application string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-choice keyword

Synopsis	Cflowd rate to use for sampling
Context	configure application-assurance group number partition number cflowd export-type keyword application reference rate-choice keyword
Tree	rate-choice
Default	flow-rate
Options	flow-rate, flow-rate-2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number partition number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log [[event-log-name](#)] *string*

Synopsis	Enter the event-log list instance
Context	configure application-assurance group number partition number event-log string
Tree	event-log
Description	Commands in this context configure an event log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[event-log-name] *string*

Synopsis	Partition event log name
Context	configure application-assurance group number partition number event-log string
Tree	event-log
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the event log
Context	configure application-assurance group number partition number event-log string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-type *keyword***WARNING:**

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

Synopsis	Event log buffer type
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i> buffer-type <i>keyword</i>
Tree	buffer-type
Default	linear
Options	linear, circular, syslog
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-entries *number*



WARNING:

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

Synopsis	Maximum number of entries for the event log
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i> max-entries <i>number</i>
Tree	max-entries
Range	1 to 100000
Default	500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syslog



WARNING:

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

Synopsis	Enter the syslog context
Context	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i> syslog
Tree	syslog
Description	Commands in this context configure the syslog options for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

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

Synopsis	Syslog host IP address
Context	configure application-assurance group number partition number event-log string syslog address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number event-log string syslog description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

facility *keyword***WARNING:**

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

Synopsis	AA syslog facility
Context	configure application-assurance group number partition number event-log string syslog facility keyword
Tree	facility
Description	This command configures the syslog facility. The syslog facility is an information field associated with a syslog message. It is defined by the syslog protocol and provides an indication of which part of the system originated the message.
Default	local7

Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number



WARNING:

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

Synopsis	Syslog host UDP port
Context	configure application-assurance group number partition number event-log string syslog port number
Tree	port
Description	This command specifies the UDP port used by application assurance for the syslog events.
Max. Range	0 to 65535
Default	514
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity keyword



WARNING:

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

Synopsis	Syslog message severity level threshold
Context	configure application-assurance group number partition number event-log string syslog severity keyword
Tree	severity
Default	info
Options	emergency, alert, critical, error, warning, notice, info, debug
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number***WARNING:**

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

Synopsis	ISA service port VLAN ID for sending syslog traffic
Context	configure application-assurance group number partition number event-log string syslog vlan-id number
Tree	vlan-id
Description	This command configures the service port VLAN ID to be used by application assurance to provide syslog events. This VLAN ID also needs to be configured for the application assurance interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis	Enter the gtp context
Context	configure application-assurance group number partition number gtp
Tree	gtp
Description	Commands in this context configure GTP parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of GTP
Context	configure application-assurance group number partition number gtp admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter [*gtp-filter-name*] *string*

Synopsis	Enter the gtp-filter list instance
Context	configure application-assurance group number partition number gtp gtp-filter string
Tree	gtp-filter
Description	Commands in this context allow AA to treat traffic on UDP port number 2152 as GTP-U. Without further specifying any other parameters within this GTP context, AA performs basic GTP-U header sanity checks and discards packets that are malformed. This GTP context also allows the operator to configure various GTP filters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[gtp-filter-name] *string*

Synopsis	GTP filter name
Context	configure application-assurance group number partition number gtp gtp-filter string
Tree	gtp-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number gtp gtp-filter string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-in-gtp *keyword*

Synopsis	GTP in GTP packet filtering
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-in-gtp keyword

Tree	gtp-in-gtp
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-tunnel-database

Synopsis	Enter the gtp-tunnel-database context
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database
Tree	gtp-tunnel-database
Description	Commands in this context configure GTP advanced firewall functions, such as validating GTP tunnels, sequence numbers, and source IP addresses).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tunnel-endpoint-limit *number*

Synopsis	Default GTP tunnel endpoint limit
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database default-tunnel-endpoint-limit number
Tree	default-tunnel-endpoint-limit
Description	This command configures the maximum number of GTP endpoints requested in GTP-C messages by using, for example, the PDP Context Create message type. The validate-gtp-tunnels command must be enabled before using this command.
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-gtp-tunnels *boolean*

Synopsis	Enable GTP tunnel validation
Context	configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-gtp-tunnels boolean

Tree	validate-gtp-tunnels
Description	<p>When configured to true, this command configures GTP tunnel validation. This allows for the validation of TEIDs and is a prerequisite for sequence checking and UE IP address validation. This command is only applicable when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. The gtpc-inspection command in the configure application-assurance group partition gtp context must be configured to true before using this command.</p> <p>When configured to false, the GTP tunnels cannot be validated.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-sequence-number *boolean*

Synopsis	Enable GTP sequence number checking
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> gtp-tunnel-database validate-sequence-number <i>boolean</i>
Tree	validate-sequence-number
Description	<p>When configured to true, this command enables GTP sequence number checking. GTP packets that fail the sequence number check are discarded.</p> <p>The validate-gtp-tunnels command in the configure application-assurance group partition gtp gtp-filter gtp-tunnel-database context must be configured to true before using this command.</p> <p>When configured to false, the GTP packet sequence number cannot be checked.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

validate-source-ip-addr *boolean*

Synopsis	Validate source IP address in GTP frames
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> gtp-tunnel-database validate-source-ip-addr <i>boolean</i>
Tree	validate-source-ip-addr
Description	<p>When configured to true, this command enables checking for spoofed or invalid UE IP addresses. Upstream GTP packets that contain invalid UE IP addresses are discarded. When a packet is dropped due to source-ip-address “invalid source IP add”, the statistics counter is updated.</p>

The **validate-gtp-tunnels** command in the **configure application-assurance group partition gtp gtp-filter gtp-tunnel-database** context must be configured to **true** before using this command.

When configured to **false**, the spoofed or invalid UE IP addresses cannot be checked.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi-apn-filter

Synopsis	Enter the imsi-apn-filter context
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter
Tree	imsi-apn-filter
Description	Commands in this context configure IMSI and APN filtering. The gtpc-inspection command in the configure application-assurance group partition gtp context must be configured to true before using this command. This command is only applicable to the GTP packets that contain IMSI or APN information elements (IEs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	IMSI APN filter default action
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter default-action keyword
Tree	default-action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
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Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i>
Tree	entry
Description	Commands in this context configure an entry within the IMSI-APN filter to allow for IMSI-APN match and action configuration.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	AA IMSI-APN filter entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i>
Tree	entry
Description	This command specifies the index in the IMSI-APN list that defines a custom filtering action.
Range	1031 to 2030
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	IMSI APN filter entry action
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i> action <i>keyword</i>
Tree	action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn *string*

Synopsis	APN as GTP filter match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i> apn <i>string</i>

Tree	apn
Description	<p>This command configures a matching condition for an APN configured as a GTP filter. If no APN is specified, the entry is not checked for the APN IE in GTP-C packets. The values for this command are:</p> <ul style="list-style-type: none"> • <code>string</code>: The extracted APN must match string exactly. • <code>^string</code>: The extracted APN must start with string. • <code>string\$</code>: The extracted APN must end with string. • <code>WILDCARD_APN</code>: Special string that indicates that the extracted APN must be "*" (that is, a length octet with value one, followed by the ASCII code for the asterisk) • <code>EMPTY_APN</code>: Special string that indicates that the extracted APN must be empty (that is, "") • <code>ANY_APN</code>: Special string that indicates that the extracted APN IE must be present and can have any value in order for the filter entry to match
String Length	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi-mcc-mnc-prefix *string*

Synopsis	IMSI (MCC-MNC) prefix as GTP filter match criterion
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number imsi-mcc-mnc-prefix string
Tree	imsi-mcc-mnc-prefix
Description	<p>This command configures a matching condition for the IMSI (MCC-MNC) prefix. This string represents the IMSI prefix to be matched against the IMSI IE of the packet, or the special value <code>ANY_IMSI</code> to indicate that an IMSI IE must be present as a matching condition regardless of the IMSI IE value. If no MCC-MNC prefix is specified, the entry will match GTP packets that have an IMSI IE containing any value.</p>
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-gsn

Synopsis	Enter the src-gsn context
Context	configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number src-gsn
Tree	src-gsn

Description	Commands in this context configure a matching condition for the GSN IP address. The IP address value is checked only against the source IP address of the GTP packets that contain an APN IE or an IMSI IE.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source GSN IP address prefix as GTP filter match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i> src-gsn ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Description	This command specifies a valid unicast address associated with the IMSI-APN filter entry.
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	Source GSN IP address prefix list as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> imsi-apn-filter entry <i>number</i> src-gsn ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the log context
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> log
Tree	log
Description	Commands in this context configure the AA group partition GTP filter log.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis GTP filter action to be logged

Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [gtp](#) [gtp-filter](#) [string](#) [log](#)
[action](#) *keyword*

Tree [action](#)

Default deny

Options deny, permit, all

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis Event-log name to capture GTP filter events

Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [gtp](#) [gtp-filter](#) [string](#) [log](#)
[event-log](#) *reference*

Tree [event-log](#)

Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [event-log](#) [string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-payload-length *number*

Synopsis Maximum allowed GTP payload length

Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [gtp](#) [gtp-filter](#) [string](#)
[max-payload-length](#) *number*

Tree [max-payload-length](#)

Range 0 to 65535

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-type

Synopsis Enter the **message-type** context

Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type
Tree	message-type
Description	Commands in this context configure the GTP message-type filtering. If no message type is specified within a filter, all GTP message types are allowed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	GTP message type default action
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type default-action <i>keyword</i>
Tree	default-action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type entry <i>number</i>
Tree	entry
Description	Commands in this context configure an entry for a specific GTPv1 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	GTP filter entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type entry <i>number</i>
Tree	entry
Description	This command specifies the index in the GTPv1 message value list that defines a custom message-type action.

Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTPv1 filter message entry action
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type <i>entry</i> <i>number</i> action <i>keyword</i>
Tree	action
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value (*number* | *keyword*)



WARNING:

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

Synopsis	GTPv1 filter message type value
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type <i>entry</i> <i>number</i> value (<i>number</i> <i>keyword</i>)
Tree	value
Range	1 to 255
Options	echo-request, echo-response, version-not-supported, node-alive-request, node-alive-response, redirection-request, redirection-response, create-pdp-context-request, create-pdp-context-response, update-pdp-context-request, update-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, initiate-pdp-context-activation-request, initiate-pdp-context-activation-response, error-indication, pdu-notification-request, pdu-notification-response, pdu-notification-reject-request, pdu-notification-reject-response, supported-extension-headers-notification, send-routing-information-for-gprs-request, send-routing-information-for-gprs-response, failure-report-request, failure-report-response, note-ms-gprs-present-request, note-ms-gprs-present-response, identification-request, identification-response, sgsn-context-request, sgsn-context-response, sgsn-context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete,

relocation-cancel-request, relocation-cancel-response, forward-srns-context, forward-relocation-complete-acknowledge, forward-srns-context-acknowledge, ran-information-relay, mbms-notification-request, mbms-notification-response, mbms-notification-reject-request, mbms-notification-reject-response, create-mbms-context-request, create-mbms-context-response, update-mbms-context-request, update-mbms-context-response, delete-mbms-context-request, delete-mbms-context-response, mbms-registration-request, mbms-registration-response, mbms-de-registration-request, mbms-de-registration-response, mbms-session-start-request, mbms-session-start-response, mbms-session-stop-request, mbms-session-stop-response, mbms-session-update-request, mbms-session-update-response, ms-info-change-notification-request, ms-info-change-notification-response, data-record-transfer-request, data-record-transfer-response, end-marker, g-pdu

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-type-gtp-v2

Synopsis	Enter the message-type-gtp-v2 context
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2
Tree	message-type-gtp-v2
Description	<p>Commands in this context configure the GTPv2 message-type filtering.</p> <p>If message-type GTPv2 is not specified within a filter, all GTP message types are allowed, except for the messages that are dropped by GTP-C inspection because they violate the expected GTP protocol for the deployment interface (for example, roaming deployment).</p> <p>The gtpc-inspection command in the configure application-assurance group partition gtp context must be configured to true before configuring GTPv2 message-type filtering.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	GTPv2 message type default action
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 default-action keyword
Tree	default-action

Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number
Tree	entry
Description	Commands in this context configure an entry for a specific GTPv2 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	GTPv2 filter entry ID
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number
Tree	entry
Description	This command configures the index in the GTP message value list that defines a custom message-type action.
Range	516 to 770
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTPv2 filter message entry action
Context	configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number action keyword
Tree	action
Description	This command specifies the action to take for packets that match this GTPv2 filter message entry.

Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value (*number* | *keyword*)



WARNING:

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

Synopsis	GTPv2 filter message type value
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i> message-type-gtp-v2 entry <i>number</i> value (<i>number</i> <i>keyword</i>)
Tree	value
Range	1 to 255
Options	echo-request, echo-response, version-not-supported-indication, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, change-notification-request, change-notification-response, remote-ue-report-notification, remote-ue-report-acknowledge, modify-bearer-command, modify-bearer-failure-indication, delete-bearer-command, delete-bearer-failure-indication, bearer-resource-command, bearer-resource-failure-indication, downlink-data-notification-failure-indication, trace-session-activation, trace-session-deactivation, stop-paging-indication, create-bearer-request, create-bearer-response, update-bearer-request, update-bearer-response, delete-bearer-request, delete-bearer-response, delete-pdn-connection-set-request, delete-pdn-connection-set-response, pgw-downlink-triggering-notification, pgw-downlink-triggering-acknowledge, identification-request, identification-response, context-request, context-response, context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete-notification, forward-relocation-complete-acknowledge, forward-access-context-notification, forward-access-context-acknowledge, relocation-cancel-request, relocation-cancel-response, configuration-transfer-tunnel, detach-notification, detach-acknowledge, cs-paging-indication, ran-information-relay, alert-mme-notification, alert-mme-acknowledge, ue-activity-notification, ue-activity-acknowledge, isr-status-indication, create-forwarding-tunnel-request, create-forwarding-tunnel-response, suspend-notification, suspend-acknowledge, resume-notification, resume-acknowledge, create-indirect-data-forwarding-tunnel-request, create-indirect-data-forwarding-tunnel-response, delete-indirect-data-forwarding-tunnel-request, delete-indirect-data-forwarding-tunnel-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-acknowledge, pgw-restart-notification,

pgw-restart-notification-acknowledge, update-pdn-connection-set-request, update-pdn-connection-set-response, modify-access-bearers-request, modify-access-bearers-response, mbms-session-start-request, mbms-session-start-response, mbms-session-update-request, mbms-session-update-response, mbms-session-stop-request, mbms-session-stop-response

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtpc-inspection *boolean*

Synopsis	Enable inspection of GTP-C packets
Context	configure application-assurance group number partition number gtp gtpc-inspection <i>boolean</i>
Tree	gtpc-inspection
Description	<p>When configured to true, this command enables the inspection of GTP-C packets. This is relevant only when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. This command must be enabled before configuring related features, such as APN filtering, GTP tunnel validation, message-type-v2 filtering, sequence number validation, and SRC IP validation.</p> <p>When configured to false, GTP-C packet inspection cannot be performed.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the log context
Context	configure application-assurance group number partition number gtp log
Tree	log
Description	Commands in this context configure the AA group partition GTP log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	GTP log action
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Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp log action <i>keyword</i>
Tree	action
Description	This command specifies the action on which the GTP log is raised.
Default	deny
Options	deny, permit, all
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log reference for logging GTP events
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp log event-log reference
Tree	event-log
Reference	configure application-assurance group <i>number</i> partition <i>number</i> event-log <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*



WARNING:

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

Synopsis	GTP mode
Context	configure application-assurance group <i>number</i> partition <i>number</i> gtp mode <i>keyword</i>
Tree	mode
Default	filtering
Options	filtering, untunneling
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-match-all-requests *boolean*

Synopsis	Enable HTTP matching for all requests for an expression
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Context	configure application-assurance group number partition number http-match-all-requests boolean
Tree	http-match-all-requests
Description	When configured to true , this command enables HTTP matching for all requests for an HTTP expression. When configured to false , this command restores the default and removes the matching request for this particular expression.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-x-online-host boolean

Synopsis	Enable X-Online-Host header field
Context	configure application-assurance group number partition number http-x-online-host boolean
Tree	http-x-online-host
Description	When configured to true , this command enables the X-Online-Host header field as a replacement for the HTTP Host header field.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-contribute boolean

Synopsis	Contribute traffic info from this partition to group
Context	configure application-assurance group number partition number ip-identification-contribute boolean
Tree	ip-identification-contribute
Description	When configured to true , the router collects information from traffic in this partition and contributes it to the database that is built by the IP identification assist feature at the group level.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list [[ip-prefix-list-name](#)] *string*

Synopsis	Enter the ip-prefix-list list instance
Context	configure application-assurance group number partition number ip-prefix-list string
Tree	ip-prefix-list
Description	Commands in this context configure an IP prefix list.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix-list-name] *string*

Synopsis	AA IP prefix list name
Context	configure application-assurance group number partition number ip-prefix-list string
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number ip-prefix-list string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure application-assurance group number partition number ip-prefix-list string prefix (ipv4-prefix ipv6-prefix)
Tree	prefix
Description	Commands in this context configure an IP prefix within the list.

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis AA IP prefix
 Context **configure** [application-assurance group number partition number ip-prefix-list string prefix](#) (*ipv4-prefix* | *ipv6-prefix*)
 Tree [prefix](#)
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis AA IP prefix name
 Context **configure** [application-assurance group number partition number ip-prefix-list string prefix](#) (*ipv4-prefix* | *ipv6-prefix*) **name string**
 Tree [name](#)
 String Length 1 to 32
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy

Synopsis Enter the **policy** context
 Context **configure** [application-assurance group number partition number policy](#)
 Tree [policy](#)
 Description Commands in this context configure the fields for the Application Assurance policy.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-filter

Synopsis Enter the **app-filter** context
 Context **configure** [application-assurance group number partition number policy app-filter](#)

Tree	app-filter
Description	Commands in this context configure an application filter for Application Assurance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i>
Tree	entry
Description	Commands in this context create an application filter entry. Application filter entries are an ordered list. The lowest numerical entry that matches the flow defines the application for that flow. An application filter entry or entries configure match attributes of an application.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	Application filter entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the AA application filter entry
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application *reference*

Synopsis	Application name
Context	configure application-assurance group number partition number policy app-filter entry number application reference
Tree	application
Reference	configure application-assurance group number partition number policy application string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy app-filter entry number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression [[expr-index](#)] *number*

Synopsis	Enter the expression list instance
Context	configure application-assurance group number partition number policy app-filter entry number expression number
Tree	expression
Description	Commands in this context configure string values to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[expr-index] number

Synopsis	Application filter matching expression identifier
Context	configure application-assurance group number partition number policy app-filter entry number expression number
Tree	expression
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match for application filter matching expression
Context	configure application-assurance group number partition number policy app-filter entry number expression number eq string
Tree	eq
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match for application filter matching expression
Context	configure application-assurance group number partition number policy app-filter entry number expression number neq string
Tree	neq
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Application filter matching expression type
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry number expression number type keyword
Tree	type
Options	http-host, http-uri, http-referer, sip-ua, sip-uri, sip-mt, citrix-app, http-user-agent, h323-product-id, tls-cert-subj-org-name, tls-cert-subj-common-name, rtsp-host, rtsp-uri, rtsp-ua, rtmp-page-host, rtmp-page-uri, rtmp-swf-host, rtmp-swf-uri, rtmp-tc-host, rtmp-tc-uri, dns-domain-name
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-direction *keyword*

Synopsis	Traffic flow direction for the application filter entry
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry number flow-setup-direction keyword
Tree	flow-setup-direction
Default	both
Options	subscriber-to-network, network-to-subscriber, both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-match-all-requests *boolean*

Synopsis	Enable HTTP matching for all requests
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry number http-match-all-requests boolean
Tree	http-match-all-requests
Description	When configured to true , this command enables HTTP matching for all requests for an HTTP expression. When configured to false , this command restores the default for this app-filter entry which matches the first request.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-port

Synopsis	Enter the http-port context
Context	configure application-assurance group number partition number policy app-filter entry number http-port
Tree	http-port
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-filter entry number http-port eq
Tree	eq
Description	Commands in this context configure the exact value as the match criterion.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port list name
Context	configure application-assurance group number partition number policy app-filter entry number http-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list or port-number .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number
Context	configure application-assurance group number partition number policy app-filter entry number http-port eq port-number number
Tree	port-number

Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list or port-number .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-filter entry number http-port neq
Tree	neq
Description	Commands in this context configure the non-match criterion used.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port list name
Context	configure application-assurance group number partition number policy app-filter entry number http-port neq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list or port-number .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number
Context	configure application-assurance group number partition number policy app-filter entry number http-port neq port-number number
Tree	port-number
Range	0 1 to 65535

Default	0
Notes	The following elements are part of a choice: port-list or port-number .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-identification-assist *boolean*

Synopsis	Enable IP identification assist for this entry
Context	configure application-assurance group number partition number policy app-filter entry number ip-identification-assist <i>boolean</i>
Tree	ip-identification-assist
Description	<p>When configured to true, the router performs a network IP address lookup that overrides the assigned application if it finds the network IP address in its internal application-IP database.</p> <p>If an IP match is found, the application assigned from the app-filter is overridden with the application from the IP lookup. This also affects the app-group and charging group.</p> <p>If an IP match is not found, the application assigned from the app-filter is not overridden and remains (including the app-group and charging group).</p> <p>When configured to false, this command disables the router from performing a network IP address lookup and overriding the assigned application.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol

Synopsis	Enter the ip-protocol context
Context	configure application-assurance group number partition number policy app-filter entry number ip-protocol
Tree	ip-protocol
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol number
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> ip-protocol eq (<i>number</i> <i>keyword</i>)
Tree	eq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq (*number* | *keyword*)

Synopsis	Non-match criterion used for the IP protocol number
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> ip-protocol neq (<i>number</i> <i>keyword</i>)
Tree	neq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-address

Synopsis	Enter the network-address context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> network-address
Tree	network-address
Description	Commands in this context configure the network address to use for the application filter entry. The network address is the address on the network side of AA, independent of whether the subscriber is acting as a client or server and is not normally used in AA app-filters. The network address will match the destination IP address in a from-sub flow or the source IP address in a to-sub flow.
Notes	The following elements are part of a choice: network-address or server-address .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis Enter the **eq** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-filter entry number](#) [network-address eq](#)

Tree [eq](#)

Description Commands in this context specify an exact value as the match criterion for the network address.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-filter entry number](#) [network-address eq ip-prefix \(*ipv4-prefix* | *ipv6-prefix*\)](#)

Tree [ip-prefix](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis IP prefix list

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-filter entry number](#) [network-address eq ip-prefix-list *reference*](#)

Tree [ip-prefix-list](#)

Reference **configure** [application-assurance group number](#) [partition number](#) [ip-prefix-list *string*](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-filter entry number network-address neq
Tree	neq
Description	Commands in this context specify the non-match criterion used for the network address.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	configure application-assurance group number partition number policy app-filter entry number network-address neq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	configure application-assurance group number partition number policy app-filter entry number network-address neq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enter the protocol context
Context	configure application-assurance group number partition number policy app-filter entry number protocol

Tree	protocol
Description	Commands in this context configure the protocol signature in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq (*string* | *named-item*)

Synopsis	Exact match criterion used for the AA protocol name
Context	configure application-assurance group number partition number policy app-filter entry number protocol eq (<i>string</i> <i>named-item</i>)
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq (*string* | *named-item*)

Synopsis	Non-match criterion used for the AA protocol name
Context	configure application-assurance group number partition number policy app-filter entry number protocol neq (<i>string</i> <i>named-item</i>)
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-address

Synopsis	Enter the server-address context
Context	configure application-assurance group number partition number policy app-filter entry number server-address
Tree	server-address
Description	Commands in this context configure the server address to use for the application filter entry. The server address is the address on the server end of a client-server session.
Notes	The following elements are part of a choice: network-address or server-address .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq
Tree	eq
Description	Commands in this context configure the attributes of the IP address used for the exact match criterion for the application flow.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group number dns-ip-cache string
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	configure application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis IP prefix list

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [server-address eq ip-prefix-list](#) *reference*

Tree [ip-prefix-list](#)

Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*

Notes The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

masked-ip

Synopsis Enter the **masked-ip** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [server-address eq masked-ip](#)

Tree [masked-ip](#)

Description Commands in this context configure the attributes of a masked IP address.

Notes The following elements are part of a choice: **dns-ip-cache**, **ip-prefix**, **ip-prefix-list**, or **masked-ip**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis IPv4 or IPv6 address mask

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-filter entry](#) *number* [server-address eq masked-ip](#) **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address eq masked-ip netmask (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	netmask
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address neq
Tree	neq
Description	Commands in this context configure the attributes of the IP address used for non-matching criteria in the application flow.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address neq dns-ip-cache <i>reference</i>
Tree	dns-ip-cache
Reference	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i>
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix
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Context	configure application-assurance group number partition number policy app-filter entry number server-address neq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP prefix list
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

masked-ip

Synopsis	Enter the masked-ip context
Context	configure application-assurance group number partition number policy app-filter entry number server-address neq masked-ip
Tree	masked-ip
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , ip-prefix-list , or masked-ip .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	IPv4 or IPv6 address mask
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address neq masked-ip address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	address
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

netmask ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	IPv4 or IPv6 address mask
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-address neq masked-ip netmask (ipv4-address-no-zone ipv6-address-no-zone)
Tree	netmask
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server-port

Synopsis	Enter the server-port context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port
Tree	server-port
Description	Commands in this context specify the server TCP or UDP port number to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port eq
Tree	eq
Description	Commands in this context configure the exact value as the match criterion for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-packet-policy *keyword*

Synopsis	First packet policy
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq first-packet-policy keyword
Tree	first-packet-policy
Description	This command configures the action to perform on the first packet.
Options	first-packet-trusted, first-packet-validate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port-list name used in application filter criteria
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-filter entry number server-port eq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enter the **range** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [server-port](#) [eq](#) [range](#)

Tree [range](#)

Description Commands in this context specify the match value as the match criterion based on the starting or ending port number.

Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis TCP/UDP ending port number

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [server-port](#) [eq](#) [range](#) [end](#) *number*

Tree [end](#)

Range 0 | 1 to 65535

Default 1

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis TCP/UDP starting port number

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [server-port](#) [eq](#) [range](#) [start](#) *number*

Tree [start](#)

Range 0 | 1 to 65535

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt

Synopsis	Enter the gt context
Context	configure application-assurance group number partition number policy app-filter entry number server-port gt
Tree	gt
Description	Commands in this context specify the greater than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number number

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-filter entry number server-port gt port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt

Synopsis	Enter the lt context
Context	configure application-assurance group number partition number policy app-filter entry number server-port lt
Tree	lt
Description	Commands in this context specify the less than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port lt port-number <i>number</i>
Tree	port-number
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq
Tree	neq
Description	Commands in this context configure non-match criterion used for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: eq , gt , lt , or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Port-list name used in application filter criteria
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq port-list <i>reference</i>
Tree	port-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> port-list <i>string</i>
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq port-number <i>number</i>
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry <i>number</i> server-port neq range end <i>number</i>
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-filter entry number server-port neq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [[application-group-name](#)] *string*

Synopsis	Enter the app-group list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i>
Tree	app-group
Description	Commands in this context create an application group for an application assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-group-name] *string*

Synopsis	Application group name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i>
Tree	app-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group used in the AA application group policy
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i> charging-group <i>reference</i>
Tree	charging-group
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-group <i>string</i>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	App group export ID used in RADIUS accounting export
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-group <i>string</i> export-id <i>number</i>
Tree	export-id
Description	This command assigns an export ID value to a charging group, an application group, or an application that RADIUS accounting uses for accounting export identification. This export ID is encoded in the top two bytes of the RADIUS accounting VSA to identify which charging group the counter value represents. If no export ID is assigned, the counter cannot be added to the AA subscriber stats RADIUS export-type. After a charging group index is referenced, it cannot be deleted without removing the reference.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile [[app-profile-name](#)] *string*

Synopsis	Enter the app-profile list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Tree	app-profile
Description	Commands in this context create an application profile and configure the profile parameters.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[app-profile-name] *string*

Synopsis	App-profile name
Context	configure application-assurance group number partition number policy app-profile string
Tree	app-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-suppressible *boolean*

Synopsis	Enable AA suppression for subs with this app profile
Context	configure application-assurance group number partition number policy app-profile string aa-sub-suppressible boolean
Tree	aa-sub-suppressible
Description	<p>When configured to true, this command configures the ability to suppress Application Assurance for subscribers with this application profile.</p> <p>This function is used in the context of an SRRP group interface. If an SRRP group interface is configured as configure service ies subscriber-interface group-interface suppress-aa-sub or configure service vprn subscriber-interface group-interface suppress-aa-sub, then subscribers with an application profile configured as suppressible are not diverted to Application Assurance.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

capacity-cost *number*

Synopsis	Application profile capacity cost
Context	configure application-assurance group number partition number policy app-profile string capacity-cost number
Tree	capacity-cost
Description	This command configures an application profile capacity cost.

Capacity cost based load balancing allows a cost to be assigned to diverted SAPs (with the application profile). This allows for load balancing SAPs between ISAs and acts as a threshold to notify the operator if capacity planning is exceeded.

Range	1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group number partition number policy app-profile string characteristic reference
Tree	characteristic
Description	Commands in this context assign one of the existing values of an existing application service option characteristic to the application profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis	Application service option characteristic name
Context	configure application-assurance group number partition number policy app-profile string characteristic reference
Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	ASO characteristic value name
Context	configure application-assurance group number partition number policy app-profile string characteristic reference value reference
Tree	value

Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service-options characteristic <i>string</i> value <i>string</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

divert *boolean*

Synopsis	Enable traffic redirection to AA ISAs or ESA VMs
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> divert <i>boolean</i>
Tree	divert
Description	<p>When configured to true, this command enables the redirection of traffic to AA ISAs or ESA VMs for the system-wide forwarding classes diverted to Application Assurance (configure isa application-assurance-group divert-fc) for AA subscribers using this application profile.</p> <p>When configured to false, this command stops the redirection of traffic to AA ISAs or ESA VMs for the AA subscribers using this application profile.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-qos-policy

Synopsis	Enter the app-qos-policy context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy
Tree	app-qos-policy

Description	Commands in this context configure an application QoS policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i>
Tree	entry
Description	Commands in this context create an application QoS policy (AQP) entry. A flow that matches multiple AQP entries will have multiple AQP entries actions applied. If a conflict occurs for two or more actions, the action from the AQP entry with the lowest numerical value takes precedence.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	AQP entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the action context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> action
Tree	action
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

abandon-tcp-optimization *boolean*

Synopsis	Abandon TCPO for this entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action abandon-tcp-optimization boolean
Tree	abandon-tcp-optimization
Description	When configured to true , this command disables TCPO for flows matching this AQP entry.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth-policer

Synopsis	Enter the bandwidth-policer context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer
Tree	bandwidth-policer
Description	<p>Commands in this context assign an existing bandwidth policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers apply to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anl reference

Synopsis	Access network locator bandwidth policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer anl reference
Tree	anl

Description	This command creates an Application Assurance policy profile for a policer instance for each ANL that limits traffic bandwidth in the scope of that ANL. For ANL, only single-bucket bandwidth policers can be configured.
Reference	configure application-assurance group number policer anl-bandwidth-policer string
Notes	The following elements are part of a choice: anl , dual-bucket , or single-bucket .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-bucket *reference*

Synopsis	Dual bucket bandwidth limiting policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer dual-bucket reference
Tree	dual-bucket
Description	This command creates an Application Assurance policy profile for a dual bucket (PIR) bandwidth limiting policer.
Reference	configure application-assurance group number policer dual-bucket-bandwidth-policer string
Notes	The following elements are part of a choice: anl , dual-bucket , or single-bucket .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-bucket *reference*

Synopsis	Single bucket bandwidth limiting policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer single-bucket reference
Tree	single-bucket
Description	This command creates an Application Assurance policy profile for a single bucket (PIR) bandwidth limiting policer.
Reference	configure application-assurance group number policer single-bucket-bandwidth-policer string
Notes	The following elements are part of a choice: anl , dual-bucket , or single-bucket .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis	DNS IP cache name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group number dns-ip-cache string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop *boolean*

Synopsis	Enable drop action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action drop boolean
Tree	drop
Description	<p>When configured to true, all flow traffic matching this AQP entry is dropped.</p> <p>The drop action is performed first and no other action is invoked on that flow even if multiple other actions exist for the flow because of one or more AQP entry matches.</p> <p>When configured to false, this command disables the drop action on flows matching this AQP entry.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-drop

Synopsis	Enable the error-drop context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action error-drop
Tree	error-drop
Description	Commands in this context configure a drop action for error flows (for instance, bad IP checksums or TCP/UDP port 0).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log reference

Synopsis	Event log action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action error-drop event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-count-limit-policer

Synopsis	Enter the flow-count-limit-policer context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer
Tree	flow-count-limit-policer
Description	<p>Commands in this context assign an existing flow count limit policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log reference

Synopsis	Event log name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-name *reference*

Synopsis	Policer name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer policer-name reference
Tree	policer-name
Description	This command specifies the name of the flow count limit policer for flows matching the AQP entry. The policer name is configured in the configure application-assurance group policer context.
Reference	configure application-assurance group number policer flow-count-limit-policer string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-policer

Synopsis	Enter the flow-setup-rate-policer context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer
Tree	flow-setup-rate-policer
Description	<p>Commands in this context assign an existing flow setup rate policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used for another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks a packet out of profile, the final marking reflects that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Flow drop events log name due to flow-setup rate policer
Context	configure application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-name *reference*

Synopsis Policer name

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer policer-name reference](#)

Tree [policer-name](#)

Description This command specifies the name of the flow setup rate policer for flows matching this AQP entry.

Reference **configure** [application-assurance group number policer flow-setup-rate-policer string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fragment-drop

Synopsis Enter the **fragment-drop** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop](#)

Tree [fragment-drop](#)

Description Commands in this context specify the drop action options to apply to fragments.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-scope *keyword*

Synopsis Fragment-drop scope

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop drop-scope keyword](#)

Tree [drop-scope](#)

Description This command specifies which fragments to drop as an action on flows matching this AQP entry.

Options all, out-of-order

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action fragment-drop event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter *reference*

Synopsis	GTP filter executed for flows matching this AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action gtp-filter reference
Tree	gtp-filter
Reference	configure application-assurance group number partition number gtp gtp-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich *reference*

Synopsis	HTTP header enrichment action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-enrich reference
Tree	http-enrich
Description	This command configures the HTTP header enrichment template name that is applied as defined in the <code>tmnxBsxHttpEnrichTable</code> . An empty value specifies no HTTP header enrichment template.
Reference	configure application-assurance group number http-enrich string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect *reference*

Synopsis	HTTP error redirect for the AQP entry
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Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-error-redirect reference
Tree	http-error-redirect
Description	This command specifies the HTTP error redirect that is applied as defined in the redirect table. An empty value specifies no HTTP error redirect.
Reference	configure application-assurance group number http-error-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification *reference*

Synopsis	HTTP notification to use for flows matching AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-notification reference
Tree	http-notification
Reference	configure application-assurance group number http-notification string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enter the http-redirect context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-redirect
Tree	http-redirect
Description	Commands in this context assign an existing HTTP redirect policy as an action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-type *keyword*

Synopsis	Flow type for HTTP redirect of flows matching the entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-redirect flow-type keyword
Tree	flow-type

Description	<p>This command assigns an existing HTTP redirect policy as an action on flows matching this AQP entry. The redirect only takes effect if the matching flows are HTTP and the condition specified is met.</p> <p>The condition specified by dropped flows means the flow is dropped due to an AQP action, such as flow rate, count policers, or drop actions. The admitted flows condition allows the operator to redirect HTTP traffic to a web portal while allowing non-HTTP traffic matching the same AQP rule to be forwarded.</p> <p>No HTTP redirect takes place if the HTTP redirect action and a drop/flow-police action are part of the default AQP policy. In this case, any flow drop actions take place before identification of the application/application-group.</p>
Options	dropped-flows, admitted-flows
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name reference

Synopsis	HTTP redirect policy name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action http-redirect name reference
Tree	name
Description	This command specifies the name of an existing HTTP policy redirect.
Reference	configure application-assurance group number http-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-source

Synopsis	Enter the mirror-source context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action mirror-source
Tree	mirror-source
Description	<p>Commands in this context configure an application-based policy mirroring service that uses the AQP entry of this AA ISA as a mirror source.</p> <p>When configured, the AQP entry becomes a mirror source for IP packets seen by AA. The mirrored packet is an IP packet analyzed by AA and does not include encapsulations present on the incoming interfaces.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-inclusive *boolean*

Synopsis	Mirror flows matching the AQP subscriber default policy
Context	configure application-assurance group number partition number policy app-qos-policy entry number action mirror-source all-inclusive boolean
Tree	all-inclusive
Description	This command specifies that all packets during the identification phase that could match a given AQP rule are mirrored in addition to packets after an application identification completes that match the AQP rule. This ensures that all packets of a flow are mirrored at a cost of sending some unidentified packets, which after the application is identified no longer match this AQP entry.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-service *reference*

Synopsis	Mirror source service ID for flows matching the entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action mirror-source mirror-service reference
Tree	mirror-service
Description	This command specifies the mirror source service ID to use for flows that match this policy.
Reference	configure mirror mirror-dest string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-drop

Synopsis	Enable the overload-drop context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action overload-drop
Tree	overload-drop
Description	Commands in this context configure a drop action for cases where flow records are not created (overload). This command is only applicable to ISA2 hardware.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action overload-drop event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remark

Synopsis	Enter the remark context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action remark
Tree	remark
Description	Commands in this context configure the remark action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp

Synopsis	Enter the dscp context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action remark dscp
Tree	dscp
Description	<p>Commands in this context configure the DSCP remark action or actions on flows matching this AQP entry.</p> <p>All packets for all flows matching this AQP entry are remarked to the configured DSCP name.</p> <p>DSCP remark can only be applied when the entry remarks forwarding class or forwarding class and priority. In-profile and out-of-profile of a packet for DSCP remark is assessed after all AQP policing and priority remarking actions have taken place.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

in-profile keyword

Synopsis	DSCP name to remark matching in-profile flows
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> action remark dscp in-profile <i>keyword</i>
Tree	in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

out-profile keyword

Synopsis	DSCP name to remark matching out-of-profile flows
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> action remark dscp out-profile <i>keyword</i>
Tree	out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc keyword

Synopsis	FC remark action for flows matching this entry
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> action remark fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *keyword*

Synopsis	Priority to use to remark flows matching this entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action remark priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter *reference*

Synopsis	SCTP filter to use for flows matching the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action sctp-filter reference
Tree	sctp-filter
Reference	configure application-assurance group number partition number sctp-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter *reference*

Synopsis	Session filter to use for flows matching the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action session-filter reference
Tree	session-filter
Reference	configure application-assurance group number partition number session-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-mss-adjust *number*

Synopsis	TCP MSS adjustment traffic action and size
Context	configure application-assurance group number partition number policy app-qos-policy entry number action tcp-mss-adjust number
Tree	tcp-mss-adjust

Range	160 to 10240
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate *reference*

Synopsis	TCP validation policy action for entry matching flows
Context	configure application-assurance group number partition number policy app-qos-policy entry number action tcp-validate reference
Tree	tcp-validate
Description	This command assigns an existing TCP validation policy as an action on flows matching this AQP entry. TCP validation can only be called from AQP entries that: <ul style="list-style-type: none"> • have no matching conditions that relate to information extracted from the incoming IP packets; for example, no application or IP address. • allow the following match conditions: none, aa-sub, characteristic, traffic-direction (both only), traffic-direction cannot be unidirectional (from or to sub). It can either be set to both or left unspecified.
Reference	configure application-assurance group number partition number tcp-validate string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tls-enrich *reference*

Synopsis	HTTP TLS enrichment action for the AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number action tls-enrich reference
Tree	tls-enrich
Reference	configure application-assurance group number http-enrich string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter

Synopsis	Enter the url-filter context
Context	configure application-assurance group number partition number policy app-qos-policy entry number action url-filter

Tree	url-filter
Description	Commands in this context configure a URL filter action for flows matching this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic reference

Synopsis	URL filter characteristic used for matching AQP entries
Context	configure application-assurance group number partition number policy app-qos-policy entry number action url-filter characteristic reference
Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name reference

Synopsis	URL filter name
Context	configure application-assurance group number partition number policy app-qos-policy entry number action url-filter name reference
Tree	name
Reference	configure application-assurance group number url-filter string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the AA AQP entry
Context	configure application-assurance group number partition number policy app-qos-policy entry number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match
Tree	match
Description	Commands in this context configure flow match rules for this AQP entry. A flow matches this AQP entry only if it matches all match rules defined (logical AND of all rules). If no match rule is specified, the entry will match all flows.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the aa-sub context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match aa-sub
Tree	aa-sub
Description	Commands in this context specify a Service Access Point (SAP) or an Enhanced Subscriber Management (ESM) subscriber as matching criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm

Synopsis	Enter the esm context
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Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm
Tree	esm
Description	Commands in this context configure the ESM fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for the ESM subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for ESM subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm-mac

Synopsis	Enter the esm-mac context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac

Tree	esm-mac
Description	Commands in this context configure the ESM MAC fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for ESM MAC subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for AA subscriber ESM MAC
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap

Synopsis	Enter the sap context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap
Tree	sap

Description	Commands in this context configure the SAP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for the SAP subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap eq string
Tree	eq
String Length	1 to 45
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for the SAP subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap neq string
Tree	neq
String Length	1 to 45
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp

Synopsis	Enter the spoke-sdp context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub spoke-sdp
Tree	spoke-sdp
Description	Commands in this context configure the spoke SDP fields for the AA subscriber match entry.

Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for a spoke SDP subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub spoke-sdp eq string
Tree	eq
String Length	3 to 16
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for a spoke SDP subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub spoke-sdp neq string
Tree	neq
String Length	3 to 16
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit

Synopsis	Enter the transit context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit
Tree	transit
Description	Commands in this context configure the transit fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: esm , esm-mac , sap , spoke-sdp , or transit .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion used for a transit AA subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit eq string
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq string

Synopsis	Non-match criterion used for a transit AA subscriber
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit neq string
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-tethering keyword

Synopsis	Tethering detection status for flow match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match aa-sub-tethering keyword
Tree	aa-sub-tethering
Description	This command configures the match criteria for subscribers in a tethering state.
Default	not-applicable
Options	not-applicable, detected, not-detected
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group

Synopsis Enter the **app-group** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-qos-policy entry number match app-group](#)

Tree [app-group](#)

Description Commands in this context add an application group to the match criteria used by this AQP entry.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq reference

Synopsis Exact match criterion used for the application group

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-qos-policy entry number match app-group eq reference](#)

Tree [eq](#)

Reference **configure** [application-assurance group number](#) [partition number](#) [policy app-group string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq reference

Synopsis Non-match criterion used for the application group

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-qos-policy entry number match app-group neq reference](#)

Tree [neq](#)

Reference **configure** [application-assurance group number](#) [partition number](#) [policy app-group string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the application context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match application
Tree	application
Description	Commands in this context add an application to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq reference

Synopsis	Exact match criterion used for the application
Context	configure application-assurance group number partition number policy app-qos-policy entry number match application eq reference
Tree	eq
Reference	configure application-assurance group number partition number policy application string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq reference

Synopsis	Non-match criterion used for the application
Context	configure application-assurance group number partition number policy app-qos-policy entry number match application neq reference
Tree	neq
Reference	configure application-assurance group number partition number policy application string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] reference

Synopsis	Enter the characteristic list instance
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Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference
Tree	characteristic
Description	Commands in this context configure an existing characteristic and its value to the match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**characteristic-name**] *reference*

Synopsis	ASO characteristic name for AQP entry matching
Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference
Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Match criterion used for AQP match characteristic
Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference eq reference
Tree	eq
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-match criterion used for AQP match characteristic
Context	configure application-assurance group number partition number policy app-qos-policy entry number match characteristic reference neq reference

Tree	neq
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	The following elements are part of a mandatory choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group

Synopsis	Enter the charging-group context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match charging-group
Tree	charging-group
Description	Commands in this context add a charging group to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq reference

Synopsis	Match criterion used for the charging group
Context	configure application-assurance group number partition number policy app-qos-policy entry number match charging-group eq reference
Tree	eq
Reference	configure application-assurance group number partition number policy charging-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq reference

Synopsis	Non-match criterion used for the charging group
Context	configure application-assurance group number partition number policy app-qos-policy entry number match charging-group neq reference
Tree	neq

Reference	configure application-assurance group number partition number policy charging-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dscp

Synopsis	Enter the dscp context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dscp
Tree	dscp
Description	Commands in this context add a DSCP name to the match criteria used by this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq keyword

Synopsis	Exact match criterion used for the DSCP
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dscp eq keyword
Tree	eq
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq keyword

Synopsis	Non-match criterion used for the DSCP
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dscp neq keyword
Tree	neq

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip

Synopsis	Enter the dst-ip context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip
Tree	dst-ip
Description	Commands in this context configure a destination IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip eq
Tree	eq
Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-ip eq ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix

Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-ip neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-ip neq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis IP address prefix list used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match dst-ip neq ip-prefix-list reference](#)

Tree [ip-prefix-list](#)

Reference **configure** [application-assurance group number partition number ip-prefix-list string](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis Enter the **dst-port** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match dst-port](#)

Tree [dst-port](#)

Description Commands in this context configure a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis Enter the **eq** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match dst-port eq](#)

Tree [eq](#)

Description Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match dst-port neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list reference

Synopsis	IP port list used as match criterion
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq port-list reference
Tree	port-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq port-number <i>number</i>
Tree	port-number
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	TCP/UDP ending port number
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq range end <i>number</i>
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match dst-port neq range start <i>number</i>
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [[flow-attribute-name](#)] *string*

Synopsis	Enter the flow-attribute list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match flow-attribute <i>string</i>
Tree	flow-attribute
Description	Commands in this context configure a flow attribute to use as match criteria. The supported options are: <ul style="list-style-type: none"> • abr_service • audio • download • encrypted • esni • real_time_communication • upload • video
Max. Instances	10

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-attribute-name] *string*

Synopsis	Flow attribute name used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string
Tree	flow-attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

confidence

Synopsis	Enter the confidence context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence
Tree	confidence
Description	Commands in this context configure the confidence level of the flow attribute for use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Exact match criterion used for the flow-attribute confidence
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence eq number
Tree	eq
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gte number

Synopsis	Greater than or equal to for confidence match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence gte number
Tree	gte
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Less than value for confidence match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence lt number
Tree	lt
Range	1 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol

Synopsis	Enter the ip-protocol context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match ip-protocol
Tree	ip-protocol
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq (number | keyword)

Synopsis	Exact match criterion used for the IP protocol
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match ip-protocol eq (<i>number</i> <i>keyword</i>)
Tree	eq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq (*number* | *keyword*)

Synopsis	Non-match criterion used for the IP protocol
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match ip-protocol neq (<i>number</i> <i>keyword</i>)
Tree	neq
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-ip

Synopsis	Enter the src-ip context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-qos-policy entry <i>number</i> match src-ip
Tree	src-ip
Description	Commands in this context configure a source IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip eq
Tree	eq
Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis	Enter the neq context
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Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip neq
Tree	neq
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix (ipv4-prefix ipv6-prefix)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port
Tree	src-port

Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq

Synopsis	Enter the eq context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq
Tree	eq
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	IP port list used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis	Server port number used as match criterion
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-number number
Tree	port-number
Range	0 1 to 65535
Default	0

Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port eq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq

Synopsis Enter the **neq** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-port neq](#)

Tree [neq](#)

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis IP port list used as match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-list reference](#)

Tree [port-list](#)

Reference **configure** [application-assurance group number partition number port-list string](#)

Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-number *number*

Synopsis Server port number used as match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-number number](#)

Tree [port-number](#)

Range 0 | 1 to 65535

Default 0

Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enter the range context
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq range
Tree	range
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: port-list , port-number , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	TCP/UDP ending port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	TCP/UDP starting port number
Context	configure application-assurance group number partition number policy app-qos-policy entry number match src-port neq range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-direction *keyword*

Synopsis	Traffic direction to which AQP match entry is applied
Context	configure application-assurance group number partition number policy app-qos-policy entry number match traffic-direction keyword
Tree	traffic-direction
Default	both
Options	subscriber-to-network, network-to-subscriber, both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-service-options

Synopsis	Enter the app-service-options context
Context	configure application-assurance group number partition number policy app-service-options
Tree	app-service-options
Description	Commands in this context configure application service option characteristics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group number partition number policy app-service-options characteristic string
Tree	characteristic
Description	Commands in this context create the characteristic of the application service options.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *string*

Synopsis	ASO characteristic name
Context	configure application-assurance group number partition number policy app-service-options characteristic string
Tree	characteristic

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-value *string*

Synopsis	ASO characteristic default value
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service-options characteristic <i>string</i> default-value <i>string</i>
Tree	default-value
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for value
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service-options characteristic <i>string</i> value <i>string</i>
Tree	value
Description	Commands in this context configure a characteristic value.
Max. Instances	64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[value-name] *string*

Synopsis	ASO characteristic value name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service-options characteristic <i>string</i> value <i>string</i>
Tree	value
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Enter the **application** list instance

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#) *string*

Tree [application](#)

Description Commands in this context configure the policy application of the Application Assurance group partition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-name] *string*

Synopsis Application name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#) *string*

Tree [application](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group *reference*

Synopsis Application group associated with the application

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#) *string* [app-group](#) *reference*

Tree [app-group](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-group](#) *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group associated with the application
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy application <i>string</i> charging-group <i>reference</i>
Tree	charging-group
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-group <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy application <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	Application export ID used for RADIUS accounting
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy application <i>string</i> export-id <i>number</i>
Tree	export-id
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-filter

Synopsis	Enter the charging-filter context
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-filter
Tree	charging-filter
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [**entry-id**] *number*

Synopsis Enter the **entry** list instance

Context **configure application-assurance group number partition number policy charging-filter entry number**

Tree **entry**

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis Charging filter entry ID in the AA partition policy

Context **configure application-assurance group number partition number policy charging-filter entry number**

Tree **entry**

Description This command defines a charging filter entry ID. Charging filter entries are an ordered list; the lowest numerical entry that matches the flow, defines the charging filter for this flow.

Range 1 to 65535

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the AA charging filter entry

Context **configure application-assurance group number partition number policy charging-filter entry number admin-state keyword**

Tree **admin-state**

Default disable

Options enable, disable

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group *reference*

Synopsis	Charging group to associate to flows matching the entry
Context	configure application-assurance group number partition number policy charging-filter entry number charging-group reference
Tree	charging-group
Description	This command associates a charging group to the flows that match the charging filter entry.
Reference	configure application-assurance group number partition number policy charging-group string
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy charging-filter entry number description string
Tree	description
String Length	1 to 80
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure application-assurance group number partition number policy charging-filter entry number match
Tree	match
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group

Synopsis	Enter the app-group context
Context	configure application-assurance group number partition number policy charging-filter entry number match app-group
Tree	app-group

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis	Exact value as the match criterion
Context	configure application-assurance group number partition number policy charging-filter entry number match app-group eq reference
Tree	eq
Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	configure application-assurance group number partition number policy app-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis	Non-matching application to resolve to a charging group
Context	configure application-assurance group number partition number policy charging-filter entry number match app-group neq reference
Tree	neq
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	configure application-assurance group number partition number policy app-group string
Notes	The following elements are part of a choice: eq or neq .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the application context
Context	configure application-assurance group number partition number policy charging-filter entry number match application
Tree	application
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *reference*

Synopsis Exact value as the match criterion

Context **configure** [application-assurance group number partition number policy charging-filter entry number match application eq reference](#)

Tree [eq](#)

Description This command specifies that the value configured and the value in the flow must be equal for a match to occur.

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

neq *reference*

Synopsis Non-matching application to resolve to a charging group

Context **configure** [application-assurance group number partition number policy charging-filter entry number match application neq reference](#)

Tree [neq](#)

Description This command specifies that the value configured and the value in the flow must differ for a match to occur.

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [\[flow-attribute-name\]](#) *string*

Synopsis Enter the **flow-attribute** list instance

Context **configure** [application-assurance group number partition number policy charging-filter entry number match flow-attribute string](#)

Tree [flow-attribute](#)

Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-attribute-name] *string*

Synopsis	Flow attribute name match criteria
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string
Tree	flow-attribute
Description	This command adds a flow attribute to the match criteria used by this charging filter entry.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

confidence

Synopsis	Enter the confidence context
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence
Tree	confidence
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Exact value as the match criterion
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence eq number
Tree	eq
Description	This command specifies that a successful match occurs when the flow attribute confidence level is equal to the specified value.
Range	0 to 100

Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gte number

Synopsis	Confidence value to resolve to a charging group
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence gte number
Tree	gte
Description	This command specifies that a successful match occurs when the flow attribute confidence level is greater than or equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Less than value as the match criterion
Context	configure application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence lt number
Tree	lt
Description	This command specifies that a successful match occurs when the flow attribute confidence level is less than the specified value.
Range	1 to 100
Notes	The following elements are part of a choice: eq , gte , or lt .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethered-flow

Synopsis	Enable the tethered-flow context
Context	configure application-assurance group number partition number policy charging-filter entry number match tethered-flow
Tree	tethered-flow

Description	Commands in this context add the tethering status to the match criteria used by this charging filter entry.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group [**charging-group-name**] *string*

Synopsis	Enter the charging-group list instance
Context	configure application-assurance group number partition number policy charging-group string
Tree	charging-group
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[charging-group-name] *string*

Synopsis	Charging group name
Context	configure application-assurance group number partition number policy charging-group string
Tree	charging-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number policy charging-group string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-id *number*

Synopsis	Charging group export ID used for RADIUS accounting
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-group <i>string</i> export-id <i>number</i>
Tree	export-id
Description	This command assigns an export ID value to a charging group, an app application group, or an application to be used for accounting export identification in RADIUS accounting. This ID is encoded in the top 2 bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

notify-start-stop *keyword*

Synopsis	Start and stop notification for the charging group
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy charging-group <i>string</i> notify-start-stop <i>keyword</i>
Tree	notify-start-stop
Default	none
Options	none, flow, charging-group
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-protocol [[custom-protocol-id](#)] *string*

Synopsis	Enter the custom-protocol list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy custom-protocol <i>string</i>
Tree	custom-protocol
Description	<p>Commands in this context configure custom protocols.</p> <p>Custom protocols allow the creation of TCP and UDP-based custom protocols that employ pattern-match at offset in the protocol signature definition.</p> <p>Operator-configurable custom protocols are evaluated ahead of any Nokia-provided protocol signature in order of custom protocol ID within the context the protocol is defined. The lower ID is matched first in case of flow matching multiple custom protocols.</p>

Custom protocols must be created before they can be used in an application definition but do not have to be enabled. To reference a custom protocol in an application definition, or any other CLI configuration one must use the protocol name that is a concatenation of “custom_” and, (for example, custom_01, custom_02 ... custom_10, and so on). This concatenation is also used when reporting custom protocol statistics.

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[custom-protocol-id] string

Synopsis Custom protocol ID for the AA policy custom protocol
 Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [custom-protocol](#) [string](#)
 Tree [custom-protocol](#)
 Description This command configures the index into the protocol list that defines a custom protocol for Application Assurance.
 String Length 9
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the custom protocol
 Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [custom-protocol](#) [string](#) [admin-state](#) [keyword](#)
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description
 Context **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [custom-protocol](#) [string](#) [description](#) [string](#)

Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression [[expr-index](#)] *number*

Synopsis	Enter the expression list instance
Context	configure application-assurance group number partition number policy custom-protocol string expression number
Tree	expression
Description	<p>Commands in this context configure an expression string value for pattern-based custom protocols match.</p> <p>A flow matches a custom protocol if the specified string is found at an offset of a TCP/UDP of the first payload packet.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[expr-index](#)] *number*

Synopsis	Expression substrings index for custom protocol matching
Context	configure application-assurance group number partition number policy custom-protocol string expression number
Tree	expression
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Flow direction for custom-protocol expression matching
Context	configure application-assurance group number partition number policy custom-protocol string expression number direction keyword
Tree	direction
Description	This command configures the protocol direction to match against for a custom protocol.

Options	client-to-server, server-to-client, any
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq string

Synopsis	Exact match criterion for custom protocol expression
Context	configure application-assurance group number partition number policy custom-protocol string expression number eq string
Tree	eq
String Length	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

offset number

Synopsis	Offset in protocol flow to start custom-protocol match
Context	configure application-assurance group number partition number policy custom-protocol string expression number offset number
Tree	offset
Description	This command configures the offset into the protocol payload where the expr-string match criteria starts.
Range	0 to 127
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol keyword**WARNING:**

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

Synopsis	IP protocol number for custom-protocol match criterion
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Context	configure application-assurance group number partition number policy custom-protocol string ip-protocol keyword
Tree	ip-protocol
Description	This command configures the IP protocol number of the TCP and UDP-based custom protocols.
Options	tcp, udp
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-charging-group *reference*

Synopsis	Default charging group
Context	configure application-assurance group number partition number policy default-charging-group reference
Tree	default-charging-group
Description	This command associates a charging group with any applications or application groups that do not have an explicitly assigned charging group for the Application Assurance policy.
Reference	configure application-assurance group number partition number policy charging-group string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-tethered-charging-group *reference*

Synopsis	Default charging group for tethered traffic
Context	configure application-assurance group number partition number policy default-tethered-charging-group reference
Tree	default-tethered-charging-group
Description	This command configures the default charging group to be assigned to all flows which are classified as tethered. For flows that have been identified as tethered, the AA will replace the charging group configured at the application level with the charging group configured for tethered traffic (that is, configured with default-tethered-charging-group).
Reference	configure application-assurance group number partition number policy charging-group string
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-override

Synopsis Enter the **policy-override** context

Context **configure** [application-assurance group number partition number policy-override](#)

Tree [policy-override](#)

Description Commands in this context configure policy override parameters.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis Enter the **aa-sub** context

Context **configure** [application-assurance group number partition number policy-override aa-sub](#)

Tree [aa-sub](#)

Description Commands in this context configure the AA policy override subscriber fields.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance

Context **configure** [application-assurance group number partition number policy-override aa-sub](#)
[sap string](#)

Tree [sap](#)

Description Commands in this context configure the Service Access Point (SAP) within the partition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[sap-id](#)] *string*

Synopsis AA subscriber SAP ID

Context **configure** [application-assurance group number partition number policy-override aa-sub](#)
[sap string](#)

Tree [sap](#)

String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group number partition number policy-override aa-sub sap string characteristic reference
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis	ASO characteristic name
Context	configure application-assurance group number partition number policy-override aa-sub sap string characteristic reference
Tree	characteristic
Reference	configure application-assurance group number partition number policy app-service-options characteristic string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	configure application-assurance group number partition number policy-override aa-sub sap string characteristic reference value reference
Tree	value
Reference	configure application-assurance group number partition number policy app-service-options characteristic string value string
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure application-assurance group number partition number policy-override aa-sub spoke-sdp string
Tree	spoke-sdp
Description	Commands in this context configure the Service Distribution Point (SDP) for the policy override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	configure application-assurance group number partition number policy-override aa-sub spoke-sdp string
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group number partition number policy-override aa-sub spoke-sdp string characteristic reference
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis	ASO characteristic name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub spoke-sdp <i>string</i> characteristic <i>reference</i>
Tree	characteristic
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service- options characteristic <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub spoke-sdp <i>string</i> characteristic <i>reference</i> value <i>reference</i>
Tree	value
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service- options characteristic <i>string</i> value <i>string</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit [[transit-sub-name](#)] *string*

Synopsis	Enter the transit list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub transit <i>string</i>
Tree	transit
Description	Commands in this context configure the AA transit subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[transit-sub-name] *string*

Synopsis	Transit subscriber name
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Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub transit <i>string</i>
Tree	transit
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

characteristic [[characteristic-name](#)] *reference*

Synopsis	Enter the characteristic list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub transit <i>string</i> characteristic <i>reference</i>
Tree	characteristic
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[characteristic-name] *reference*

Synopsis	ASO characteristic name
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub transit <i>string</i> characteristic <i>reference</i>
Tree	characteristic
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service- options characteristic <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	configure application-assurance group <i>number</i> partition <i>number</i> policy-override aa-sub transit <i>string</i> characteristic <i>reference</i> value <i>reference</i>
Tree	value

Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-service-options characteristic <i>string</i> value <i>string</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list [[port-list-name](#)] *string*

Synopsis	Enter the port-list list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> port-list <i>string</i>
Tree	port-list
Description	Commands in this context define an AA group or partition named port list, which contains a list of port numbers or port ranges. The port list is then referenced in AA policy application filters, allowing increased flexibility in the use of server ports or HTTP proxy ports for application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[port-list-name] *string*

Synopsis	Port list name
Context	configure application-assurance group <i>number</i> partition <i>number</i> port-list <i>string</i>
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> port-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port [**port-number**] *number*

Synopsis Add a list entry for **port**

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [port-list](#) *string* **port** *number*

Tree [port](#)

Description Commands in this context specify the server TCP or UDP port number to use in the port list definition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[port-number] *number*

Synopsis Port number

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [port-list](#) *string* **port** *number*

Tree [port](#)

Range 0 to 65535

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range **start** *number* **end** *number*

Synopsis Add a list entry for **range**

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [port-list](#) *string* **range** [start](#) *number* **end** *number*

Tree [range](#)

Description Commands in this context configure the AA group or partition named port-list range.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Start value for the port range in the AA port list
Context	configure application-assurance group number partition number port-list string range start number end number
Tree	range
Range	0 to 65534
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	End value for the port range in the AA port list
Context	configure application-assurance group number partition number port-list string range start number end number
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter [[sctp-filter-name](#)] *string*

Synopsis	Enter the sctp-filter list instance
Context	configure application-assurance group number partition number sctp-filter string
Tree	sctp-filter
Description	Commands in this context configure the Stream Control Transmission Protocol (SCTP) fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sctp-filter-name] *string*

Synopsis	SCTP filter name
Context	configure application-assurance group number partition number sctp-filter string

Tree	sctp-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number sctp-filter string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log for packets dropped by the SCTP filter
Context	configure application-assurance group number partition number sctp-filter string event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ppid

Synopsis	Enter the ppid context
Context	configure application-assurance group number partition number sctp-filter string ppid
Tree	ppid
Description	Commands in this context configure actions for specific or default Payload Protocol Identifiers (PPIDs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action *keyword*

Synopsis	Default action for all SCTP PPIDs
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid default-action <i>keyword</i>
Tree	default-action
Default	permit
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid entry <i>number</i>
Tree	entry
Description	Commands in this context specify SCTP PPID values and the corresponding action to apply.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	SCTP filter PPID entry ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i> ppid entry <i>number</i>
Tree	entry
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	SCTP filter PPID entry action
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Context	configure application-assurance group number partition number sctp-filter string ppid entry number action keyword
Tree	action
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value (*number* | *keyword*)



WARNING:

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

Synopsis	PPID entry value
Context	configure application-assurance group number partition number sctp-filter string ppid entry number value (<i>number</i> <i>keyword</i>)
Tree	value
Range	0 to 4294967295
Options	iaa, m2ua, m3ua, sua, m2pa, v5ua, h.248, bicc/q.2150.3, tali, dua, asap, enrp, h.323, q.ipc/q.2150.3, simco, ddp-segment-chunk, ddp-stream-session-control, s1-application-protocol, rua, hnbap, forces-hp, forces-mp, forces-lp, sbc-ap, nbap, x2ap, ircp, lcs-ap, mpich2, service-area-broadcast-protocol, fractal-generator-protocol, ping-pong-protocol, calcapp-protocol, scripting-service-protocol, netperformer-protocol-control-channel, netperformer-protocol-data-channel, echo, discard, daytime, character-generator, 3gpp-rna, 3gpp-m2ap, 3gpp-m3ap, ssh-over-sctp, diameter-in-a-sctp-data-chunk, diameter-in-a-dtls/sctp-data-chunk, r14p.-ber-encoded-asn.1-over-sctp, webrtc-control, domstring-last, binary-data-partial, binary-data-last, domstring-partial, 3gpp-pua, webrtc-string-empty, webrtc-binary-empty, 3gpp-xwap, 3gpp-xw-control-plane, 3gpp-ng-application-protocol, 3gpp-xn-application-protocol, 3gpp-f1-application-protocol, http-sctp, 3gpp-e1-application-protocol, ele2-lawful-interception, 3gpp-ngap-over-dtls-over-sctp, 3gpp-xnap-over-dtls-over-sctp, 3gpp-f1ap-over-dtls-over-sctp, 3gpp-e1ap-over-dtls-over-sctp, e2-cp, e2-up, e2-du, 3gpp-w1ap
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ppid-range

Synopsis	Enter the ppid-range context
Context	configure application-assurance group number partition number sctp-filter string ppid-range
Tree	ppid-range
Description	Commands in this context specify the range of PPID values that are allowed by the AA SCTP filter firewall.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis	Maximum PPID value
Context	configure application-assurance group number partition number sctp-filter string ppid-range max number
Tree	max
Description	This command configures the maximum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be greater or equal to the minimum PPID value.
Range	0 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min number

Synopsis	Minimum PPID value
Context	configure application-assurance group number partition number sctp-filter string ppid-range min number
Tree	min
Description	This command configures the minimum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be less than or equal to the maximum PPID value.
Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter [*session-filter-name*] *string*

Synopsis	Enter the session-filter list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i>
Tree	session-filter
Description	Commands in this context create a session filter.
Max. Instances	1000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[session-filter-name] *string*

Synopsis	Session filter name
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i>
Tree	session-filter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> default-action
Tree	default-action
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Default action for packets not matching filter entries
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> default-action action <i>keyword</i>
Tree	action

Default	deny
Options	deny, permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event logging of default action
Context	configure application-assurance group number partition number session-filter string default-action event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number session-filter string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number session-filter string entry number
Tree	entry
Description	Commands in this context configure an AA session filter match entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] number

Synopsis	Entry ID for the session filter entry
Context	configure application-assurance group number partition number session-filter string entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis	Enter the action context
Context	configure application-assurance group number partition number session-filter string entry number action
Tree	action
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deny

Synopsis	Deny sessions matching the criteria
Context	configure application-assurance group number partition number session-filter string entry number action deny
Tree	deny
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log reference

Synopsis	Event log name used to log the action
Context	configure application-assurance group number partition number session-filter string entry number action event-log reference
Tree	event-log

Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect for matching sessions
Context	configure application-assurance group number partition number session-filter string entry number action http-redirect reference
Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

permit

Synopsis	Permit sessions that match the criteria
Context	configure application-assurance group number partition number session-filter string entry number action permit
Tree	permit
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-optimizer *reference*

Synopsis	TCP optimizer to handle sessions matching the criteria
Context	configure application-assurance group number partition number session-filter string entry number action tcp-optimizer reference
Tree	tcp-optimizer
Reference	configure application-assurance group number tcp-optimizer string
Notes	The following elements are part of a choice: deny , http-redirect , permit , or tcp-optimizer .

Introduced 22.2.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*
[entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis Enter the **match** context
 Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*
[entry](#) *number* [match](#)
 Tree [match](#)
 Description Commands in this context configure session conditions for this entry.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-ip

Synopsis Enter the **dst-ip** context
 Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*
[entry](#) *number* [match](#) [dst-ip](#)
 Tree [dst-ip](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-ip-cache *reference*

Synopsis Destination IPs in specified DNS IP Cache

Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-ip dns-ip-cache reference
Tree	dns-ip-cache
Reference	configure application-assurance group <i>number</i> dns-ip-cache <i>string</i>
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-ip ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	IP address prefix list as match criterion
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group <i>number</i> partition <i>number</i> ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: dns-ip-cache , ip-prefix , or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match dst-port
Tree	dst-port

Description	Commands in this context specify a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis	Match criterion used for destination or source port
Context	configure application-assurance group number partition number session-filter string entry number match dst-port eq number
Tree	eq
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis	Greater than match criterion for the port number
Context	configure application-assurance group number partition number session-filter string entry number match dst-port gt number
Tree	gt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis	Less than match criterion for the port
Context	configure application-assurance group number partition number session-filter string entry number match dst-port lt number
Tree	lt
Range	0 1 to 65535

Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Destination or source port list
Context	configure application-assurance group number partition number session-filter string entry number match dst-port port-list reference
Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure application-assurance group number partition number session-filter string entry number match dst-port range
Tree	range
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match dst-port range end number
Tree	end
Range	0 1 to 65535
Default	1

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match dst-port range start number
Tree	start
Range	0 1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-protocol (*number | keyword*)

Synopsis	IP protocol as a match criterion
Context	configure application-assurance group number partition number session-filter string entry number match ip-protocol (number keyword)
Tree	ip-protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-ip

Synopsis	Enter the src-ip context
Context	configure application-assurance group number partition number session-filter string entry number match src-ip
Tree	src-ip
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source IP address prefix as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match src-ip ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix-list *reference*

Synopsis	Source IP address prefix list as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match src-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure application-assurance group number partition number ip-prefix-list string
Notes	The following elements are part of a choice: ip-prefix or ip-prefix-list .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

src-port

Synopsis	Enter the src-port context
Context	configure application-assurance group number partition number session-filter string entry number match src-port
Tree	src-port
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis	Match criterion used for destination or source port
Context	configure application-assurance group number partition number session-filter string entry number match src-port eq number

Tree	eq
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis	Less than match criterion for the port
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	0 1 to 65535
Default	0
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-list *reference*

Synopsis	Destination or source port list
Context	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i> entry <i>number</i> match src-port port-list <i>reference</i>

Tree	port-list
Reference	configure application-assurance group number partition number port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure application-assurance group number partition number session-filter string entry number match src-port range
Tree	range
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match src-port range end number
Tree	end
Range	0 1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the port range as match criterion
Context	configure application-assurance group number partition number session-filter string entry number match src-port range start number
Tree	start
Range	0 1 to 65535

Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shallow-inspection *boolean*

Synopsis	Enable shallow inspection
Context	configure application-assurance group number partition number shallow-inspection <i>boolean</i>
Tree	shallow-inspection
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistics

Synopsis	Enter the statistics context
Context	configure application-assurance group number partition number statistics
Tree	statistics
Description	Commands in this context configure accounting and billing statistics for this AA group.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-admit-deny

Synopsis	Enter the aa-admit-deny context
Context	configure application-assurance group number partition number statistics aa-admit-deny
Tree	aa-admit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
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Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter-stats *boolean*

Synopsis	Include GTP filter statistics in admit-deny accounting records
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny gtp-filter-stats <i>boolean</i>
Tree	gtp-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-stats *boolean*

Synopsis	Include admit-deny policer statistics in accounting records
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-admit-deny policer-stats <i>boolean</i>
Tree	policer-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer-stats-resources *boolean*

Synopsis	Allocate ISA/ ESA resources for policer admit-deny statistics
Context	configure application-assurance group number partition number statistics aa-admit-deny policer-stats-resources <i>boolean</i>
Tree	policer-stats-resources
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter-stats *boolean*

Synopsis	Include SCTP filter admit-deny statistics in accounting
Context	configure application-assurance group number partition number statistics aa-admit-deny sctp-filter-stats <i>boolean</i>
Tree	sctp-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter-stats *boolean*

Synopsis	Include session filter admit-deny statistics in accounting
Context	configure application-assurance group number partition number statistics aa-admit-deny session-filter-stats <i>boolean</i>
Tree	session-filter-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate-stats *boolean*

Synopsis	Include TCP validate admit-deny statistics in accounting
Context	configure application-assurance group number partition number statistics aa-admit-deny tcp-validate-stats <i>boolean</i>
Tree	tcp-validate-stats

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-app-group

Synopsis	Enter the aa-app-group context
Context	configure application-assurance group number partition number statistics aa-app-group
Tree	aa-app-group
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure application-assurance group number partition number statistics aa-app-group accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-app-group collect-stats boolean
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-application

Synopsis	Enter the aa-application context
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Context	configure application-assurance group number partition number statistics aa-application
Tree	aa-application
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure application-assurance group number partition number statistics aa-application accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-application collect-stats boolean
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-partition

Synopsis	Enter the aa-partition context
Context	configure application-assurance group number partition number statistics aa-partition
Tree	aa-partition
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure application-assurance group number partition number statistics aa-partition accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-partition collect-stats boolean
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethering-stats *boolean*

Synopsis	Collect tethering statistics
Context	configure application-assurance group number partition number statistics aa-partition tethering-stats boolean
Tree	tethering-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

traffic-type-stats *boolean*

Synopsis	Collect traffic type statistics
Context	configure application-assurance group number partition number statistics aa-partition traffic-type-stats boolean
Tree	traffic-type-stats
Default	false

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-protocol

Synopsis	Enter the aa-protocol context
Context	configure application-assurance group number partition number statistics aa-protocol
Tree	aa-protocol
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure application-assurance group number partition number statistics aa-protocol accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of protocol statistics
Context	configure application-assurance group number partition number statistics aa-protocol admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
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Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-protocol collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub

Synopsis	Enter the aa-sub context
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub
Tree	aa-sub
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aggregate-stats-export-using *keyword*

Synopsis	Method of statistics export to be used
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub aggregate-stats-export-using <i>keyword</i>
Tree	aggregate-stats-export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-group [[app-group-name](#)] *reference*

Synopsis	Enter the app-group list instance
Context	configure application-assurance group number partition number statistics aa-sub app-group reference
Tree	app-group
Description	Commands in this context configure accounting and statistics collection parameters for AA application groups for a specific AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[app-group-name] *reference*

Synopsis	Application group name
Context	configure application-assurance group number partition number statistics aa-sub app-group reference
Tree	app-group
Reference	configure application-assurance group number partition number policy app-group string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	configure application-assurance group number partition number statistics aa-sub app-group reference export-using keyword
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [[application-name](#)] *reference*

Synopsis	Enter the application list instance
Context	configure application-assurance group number partition number statistics aa-sub application reference
Tree	application
Description	Commands in this context configure the AA subscriber accounting statistics for the export of AA applications for an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[application-name] *reference*

Synopsis	Application name
Context	configure application-assurance group number partition number statistics aa-sub application reference
Tree	application
Reference	configure application-assurance group number partition number policy application string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	configure application-assurance group number partition number statistics aa-sub application reference export-using keyword
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-group [[charging-group-name](#)] *reference*

Synopsis	Enter the charging-group list instance
Context	configure application-assurance group number partition number statistics aa-sub charging-group reference
Tree	charging-group
Description	Commands in this context configure AA subscriber accounting statistics for the export of AA charging groups of an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[charging-group-name] *reference*

Synopsis	Charging group name
Context	configure application-assurance group number partition number statistics aa-sub charging-group reference
Tree	charging-group
Description	This command specifies the AA charging group to be included in the exported accounting records.
Reference	configure application-assurance group number partition number policy charging-group string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	configure application-assurance group number partition number statistics aa-sub charging-group reference export-using keyword
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-sub collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

exclude-tcp-retrans *boolean*

Synopsis	Exclude TCP retransmission and error statistics
Context	configure application-assurance group number partition number statistics aa-sub exclude-tcp-retrans <i>boolean</i>
Tree	exclude-tcp-retrans
Description	When configured to true , TCP errors and retransmission packets are not counted for the purpose of content-based billing. Note: This command is only applicable to EPC. This setting has no impact on app/app-group aggregate AA stats.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-stats *boolean*

Synopsis	Collect maximum throughput statistics
Context	configure application-assurance group number partition number statistics aa-sub max-throughput-stats <i>boolean</i>
Tree	max-throughput-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the protocol list instance
Context	configure application-assurance group number partition number statistics aa-sub protocol <i>string</i>

Tree	protocol
Description	Commands in this context configure AA subscriber accounting statistics for the export of aa-sub protocols of an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[protocol-name] *string*

Synopsis	AA protocol name
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub protocol <i>string</i>
Tree	protocol
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-using *keyword*

Synopsis	Method used to export statistics
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub protocol <i>string</i> export-using <i>keyword</i>
Tree	export-using
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy name
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy
Reference	configure application-assurance radius-accounting-policy <i>string</i>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

usage-monitoring *boolean*

Synopsis	Collect usage monitoring statistics
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub usage-monitoring <i>boolean</i>
Tree	usage-monitoring
Description	When configured to true , this command allows the system to activate Gx usage monitoring at AA group/partition level, if enough usage monitoring resources exist for all existing subs. When configured to false , this command silently removes all monitoring instances (no PCRf notifications) for AA subscribers and all subsequent AA Gx usage monitoring messages are ignored.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-study [[study-type](#)] *keyword*

Synopsis	Enter the aa-sub-study list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i>
Tree	aa-sub-study
Description	Commands in this context configure accounting and statistics collection parameters per AA special study subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[study-type] *keyword*

Synopsis	Statistic type that the study is using
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i>
Tree	aa-sub-study
Options	protocol, application

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

aa-sub

Synopsis	Enter the aa-sub context
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword aa-sub</i>
Tree	aa-sub
Description	Commands in this context add an existing subscriber identification to a group of special study subscribers. Identifying a group of special study subscribers allows statistics and accounting records for those subscribers to be collected for protocols and applications through Application Assurance. When adding a subscriber to the special study group, accounting records and statistics generation commence immediately. When removing a subscriber from the group, special study statistics and accounting records for that subscriber in the current interval are lost.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm [[esm-sub-name](#)] *string*

Synopsis	Add a list entry for esm
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword aa-sub esm string</i>
Tree	esm
Description	Commands in this context configure the ESM fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[esm-sub-name\]](#) *string*

Synopsis	ESM subscriber name
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword aa-sub esm string</i>
Tree	esm
String Length	1 to 32

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

esm-mac [[esm-mac-sub-name](#)] *string*

Synopsis	Add a list entry for esm-mac
Context	configure application-assurance group number partition number statistics aa-sub-study keyword aa-sub esm-mac <i>string</i>
Tree	esm-mac
Description	Commands in this context configure the ESM MAC fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[esm-mac-sub-name] *string*

Synopsis	ESM MAC subscriber name
Context	configure application-assurance group number partition number statistics aa-sub-study keyword aa-sub esm-mac <i>string</i>
Tree	esm-mac
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis	Add a list entry for sap
Context	configure application-assurance group number partition number statistics aa-sub-study keyword aa-sub sap <i>string</i>
Tree	sap
Description	Commands in this context configure the Service Access Point (SAP) for the purpose of enabling special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis	AA subscriber SAP ID
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i> aa-sub sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for spoke-sdp
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i> aa-sub spoke-sdp <i>string</i>
Tree	spoke-sdp
Description	Commands in this context specify the spoke SDP ID and VC ID for the purpose of including the subscriber into AA special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	configure application-assurance group <i>number</i> partition <i>number</i> statistics aa-sub-study <i>keyword</i> aa-sub spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit [[transit-sub-name](#)] *string*

Synopsis	Add a list entry for transit
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Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub transit <i>string</i>
Tree	transit
Description	Commands in the context specify an existing transit subscriber to be included in AA sub special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[transit-sub-name] *string*

Synopsis	Transit subscriber name
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> aa-sub transit <i>string</i>
Tree	transit
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure application-assurance group number partition number statistics aa-sub-study <i>keyword</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate [**tcp-validate-name**] *string*

Synopsis Enter the **tcp-validate** list instance
 Context **configure** [application-assurance group number partition number tcp-validate string](#)
 Tree [tcp-validate](#)
 Description Commands in this context configure a TCP validation policy.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tcp-validate-name] *string*

Synopsis TCP validation policy name
 Context **configure** [application-assurance group number partition number tcp-validate string](#)
 Tree [tcp-validate](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [application-assurance group number partition number tcp-validate string description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis Enter the **log** context

Context	configure application-assurance group number partition number tcp-validate string log
Tree	log
Description	Commands in this context enable event logging of traffic dropped by TCP validation.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all *boolean*

Synopsis	Enable logging of all dropped TCP packets
Context	configure application-assurance group number partition number tcp-validate string log all boolean
Tree	all
Description	<p>When configured to true, all dropped TCP packets are logged, including the following:</p> <ul style="list-style-type: none"> • packets received after an RST and discarded • packets received before TCP session establishment (before SYN) and discarded <p>An event log must also be configured to enable logging of all dropped packets.</p> <p>When configured to false, discards related to the described cases are not captured in any event log.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event-log *reference*

Synopsis	Event log name
Context	configure application-assurance group number partition number tcp-validate string log event-log reference
Tree	event-log
Reference	configure application-assurance group number partition number event-log string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict *boolean*

Synopsis	Enable strict checking of TCP traffic
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Context	configure application-assurance group number partition number tcp-validate string strict boolean
Tree	strict
Description	<p>When configured to true, the command specifies whether enforcement of TCP sequence and acknowledgment numbers are applied. If a packet does not meet the expected sequence or acknowledgment number, it is dropped. This command should only be enabled if the expected bit error rate or packet loss is low.</p> <p>For example, if acknowledgments are lost before being detected by AA, the server timeouts are triggered and retransmissions occur. If strict is enabled, these retransmissions resemble a reply attack and are dropped by AA.</p> <p>When configured to false, the command removes the TCP sequence and acknowledgment number enforcement.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tethering-detection

Synopsis	Enter the tethering-detection context
Context	configure application-assurance group number partition number tethering-detection
Tree	tethering-detection
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of tethering detection
Context	configure application-assurance group number partition number tethering-detection admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-device

Synopsis	Enter the single-device context
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Context	configure application-assurance group number partition number tethering-detection single-device
Tree	single-device
Description	Commands in this context configure the single-device fields and expected TTL values for flow-level tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expected-ttl [[ttl](#)] *number*

Synopsis	Add a list entry for expected-ttl
Context	configure application-assurance group number partition number tethering-detection single-device expected-ttl number
Tree	expected-ttl
Description	Commands in this context configure the TTL values for single-device tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[ttl\]](#) *number*

Synopsis	Expected TTL traffic value from host devices
Context	configure application-assurance group number partition number tethering-detection single-device expected-ttl number
Tree	expected-ttl
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

invert-match *boolean*



WARNING:

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

Synopsis	Mark flows with expected TTL values as tethered
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Context	configure application-assurance group number partition number tethering-detection single-device invert-match boolean
Tree	invert-match
Description	When configured to true , AA classifies flows with expected TTL values as coming from a connected device (tethered). When configured to false , AA classifies flows with expected TTL values as coming from the host device (untethered).
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ttl-monitor

Synopsis	Enter the ttl-monitor context
Context	configure application-assurance group number partition number tethering-detection ttl-monitor
Tree	ttl-monitor
Description	Commands in this context configure the scope of analysis for TCP and UDP traffic for tethering detection.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-protocols *keyword*



WARNING:

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

Synopsis	Scope of analysis for TCP traffic
Context	configure application-assurance group number partition number tethering-detection ttl-monitor tcp-protocols keyword
Tree	tcp-protocols
Description	This command configures whether AA analyzes all TCP traffic or only traffic from standard applications that generate consistent TTL values. Configuring AA to analyze all TCP traffic is typically recommended.
Default	standard
Options	standard, all
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-protocols *keyword*



WARNING:

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

Synopsis	Scope of analysis for UDP traffic
Context	configure application-assurance group number partition number tethering-detection ttl-monitor udp-protocols keyword
Tree	udp-protocols
Description	This command configures whether AA analyzes all UDP traffic or only traffic from standard applications that generate consistent TTL values. Configuring AA to analyze only standard UDP traffic is recommended.
Default	standard
Options	standard, all
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

threshold-crossing-alert

Synopsis	Enter the threshold-crossing-alert context
Context	configure application-assurance group number partition number threshold-crossing-alert
Tree	threshold-crossing-alert
Description	Commands in this context configure the generation of threshold crossing alerts (TCAs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria [*criteria-id*] *keyword direction keyword*

Synopsis	Enter the criteria list instance
Context	configure application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword
Tree	criteria
Description	Commands in this context configure the TCA criteria for the partition.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[criteria-id] *keyword*

Synopsis	Statistics TCA criteria ID
Context	configure application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword
Tree	criteria
Options	error-drop, fragment-drop-out-of-order, fragment-drop-all, overload-drop, gtp-sanity-drop
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the criteria statistics TCA
Context	configure application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword
Tree	criteria
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert criteria <i>keyword</i> direction <i>keyword</i> low-watermark <i>number</i>
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter [[gtp-filter-name](#)] *reference* [criteria](#) *keyword* [direction](#) *keyword*

Synopsis	Enter the gtp-filter list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i>
Tree	gtp-filter
Description	Commands in this context configure TCA generation for a GTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[gtp-filter-name] *reference*

Synopsis	GTP filter name for TCA generation
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i>
Tree	gtp-filter
Reference	configure application-assurance group <i>number</i> partition <i>number</i> gtp gtp-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	Criteria ID for GTP filter TCA
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Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter reference criteria <i>keyword</i> direction <i>keyword</i>
Tree	gtp-filter
Options	max-payload-length, message-type-default-action, header-sanity, message-type-gtpv2-default-action, imsi-apn-filter-default-action, validate-gtp-tunnels, validate-sequence-number, validate-src-ip-addr, missing-mandatory-ie, gtp-in-gtp, gtp-tunnel-database-full, gtp-tunnel-endpoint-limit
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the GTP filter TCA
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter reference criteria <i>keyword</i> direction <i>keyword</i>
Tree	gtp-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert gtp-filter reference criteria <i>keyword</i> direction <i>keyword</i> high-watermark <i>number</i>
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
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Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter reference criteria keyword direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-filter-entry [[gtp-filter-name](#)] *reference* [entry-id number direction keyword](#)

Synopsis	Enter the gtp-filter-entry list instance
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword
Tree	gtp-filter-entry
Description	Commands in this context configure the AA GTP filter entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[gtp-filter-name] *reference*

Synopsis	AA GTP filter name for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword
Tree	gtp-filter-entry
Reference	configure application-assurance group number partition number gtp gtp-filter string
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id number

Synopsis	Entry ID
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword
Tree	gtp-filter-entry

Description	This command configures the identifier for the statistics TCA GTP filter V1 message type entry, V2 message type entry, or imsi-apn filter entry.
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Traffic direction for GTP filter entry TCA
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword
Tree	gtp-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert gtp-filter-entry reference entry-id number direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294

Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer [**policer-name**] *string direction keyword*

Synopsis	Enter the policer list instance
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword
Tree	policer
Description	Commands in this context configure a TCA for the counter capturing drops or admit events.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] *string*

Synopsis	Policer name for TCA generation
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword
Tree	policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for the policer TCA
Context	configure application-assurance group number partition number threshold-crossing-alert policer string direction keyword
Tree	policer
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert policer <i>string</i> direction <i>keyword</i> high-watermark <i>number</i>
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert policer <i>string</i> direction <i>keyword</i> low-watermark <i>number</i>
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter [[sctp-filter-name](#)] *reference* [criteria](#) *keyword* [direction](#) *keyword*

Synopsis	Enter the sctp-filter list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert sctp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i>
Tree	sctp-filter
Description	Commands in this context configure TCA generation for an SCTP filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sctp-filter-name] *reference*

Synopsis	SCTP filter name for TCA generation
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Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert sctp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i>
Tree	sctp-filter
Reference	configure application-assurance group <i>number</i> partition <i>number</i> sctp-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	Criteria ID for SCTP filter TCA
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert sctp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i>
Tree	sctp-filter
Options	ppid-default-action, packet-sanity, ppid-range
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for SCTP filter TCA
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert sctp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i>
Tree	sctp-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert sctp-filter <i>reference</i> criteria <i>keyword</i> direction <i>keyword</i> high-watermark <i>number</i>
Tree	high-watermark

Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword low-watermark number
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp-filter-entry [[sctp-filter-name](#)] *reference entry-id reference direction keyword*

Synopsis	Enter the sctp-filter-entry list instance
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword
Tree	sctp-filter-entry
Description	Commands in this context configure the AA SCTP filter PPID entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[sctp-filter-name](#)] *reference*

Synopsis	AA SCTP filter name for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword
Tree	sctp-filter-entry
Reference	configure application-assurance group number partition number sctp-filter string
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *reference*

Synopsis ID for SCTP filter entry TCA

Context **configure** [application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword](#)

Tree [sctp-filter-entry](#)

Reference **configure** [application-assurance group number partition number sctp-filter string ppid entry number](#)

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis Direction of traffic for TCA configuration

Context **configure** [application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword](#)

Tree [sctp-filter-entry](#)

Options from-sub, to-sub

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis High watermark threshold

Context **configure** [application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword high-watermark number](#)

Tree [high-watermark](#)

Range 1 to 4294967295

Default 4294967295

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert sctp-filter-entry <i>reference</i> entry-id <i>reference</i> direction keyword low-watermark <i>number</i>
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter [[session-filter-name](#)] *reference* [criteria](#) [keyword](#) [direction](#) [keyword](#)

Synopsis	Enter the session-filter list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert session-filter <i>reference</i> criteria keyword direction keyword
Tree	session-filter
Description	Commands in this context configure TCA generation for a session filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[session-filter-name] *reference*

Synopsis	AA session filter name for TCA configuration
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert session-filter <i>reference</i> criteria keyword direction keyword
Tree	session-filter
Reference	configure application-assurance group <i>number</i> partition <i>number</i> session-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

criteria *keyword*

Synopsis	ID for session filter entry TCA
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Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword
Tree	session-filter
Options	default-action
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword
Tree	session-filter
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword high-watermark number
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword low-watermark number
Tree	low-watermark

Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-filter-entry [*session-filter-name*] *reference* *entry-id* *reference* *direction* *keyword*

Synopsis	Enter the session-filter-entry list instance
Context	configure <i>application-assurance</i> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>threshold-crossing-alert</i> <i>session-filter-entry</i> <i>reference</i> <i>entry-id</i> <i>reference</i> <i>direction</i> <i>keyword</i>
Tree	<i>session-filter-entry</i>
Description	Commands in this context configure the AA session filter entry TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[session-filter-name] *reference*

Synopsis	AA session filter name for TCA configuration
Context	configure <i>application-assurance</i> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>threshold-crossing-alert</i> <i>session-filter-entry</i> <i>reference</i> <i>entry-id</i> <i>reference</i> <i>direction</i> <i>keyword</i>
Tree	<i>session-filter-entry</i>
Reference	configure <i>application-assurance</i> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>session-filter</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry-id *reference*

Synopsis	ID for session filter entry TCA
Context	configure <i>application-assurance</i> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>threshold-crossing-alert</i> <i>session-filter-entry</i> <i>reference</i> <i>entry-id</i> <i>reference</i> <i>direction</i> <i>keyword</i>
Tree	<i>session-filter-entry</i>
Reference	configure <i>application-assurance</i> <i>group</i> <i>number</i> <i>partition</i> <i>number</i> <i>session-filter</i> <i>string</i> <i>entry</i> <i>number</i>
Notes	This element is part of a list key.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction <i>keyword</i>
Tree	session-filter-entry
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction <i>keyword</i> high-watermark <i>number</i>
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction <i>keyword</i> low-watermark <i>number</i>
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-validate [[tcp-validate-name](#)] *reference* [direction](#) *keyword*

Synopsis Enter the **tcp-validate** list instance

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert tcp-validate](#) *reference* [direction](#) *keyword*

Tree [tcp-validate](#)

Description Commands in this context configure TCP validation policy TCA fields for the partition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tcp-validate-name] *reference*

Synopsis AA TCP validate name for configuration

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert tcp-validate](#) *reference* [direction](#) *keyword*

Tree [tcp-validate](#)

Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [tcp-validate](#) *string*

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis Direction of traffic for TCA configuration

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert tcp-validate](#) *reference* [direction](#) *keyword*

Tree [tcp-validate](#)

Options from-sub, to-sub

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high-watermark *number*

Synopsis	High watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert tcp-validate reference direction keyword high-watermark <i>number</i>
Tree	high-watermark
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low-watermark *number*

Synopsis	Low watermark threshold
Context	configure application-assurance group <i>number</i> partition <i>number</i> threshold-crossing-alert tcp-validate reference direction keyword low-watermark <i>number</i>
Tree	low-watermark
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-ip-policy [[ip-policy-id](#)] *number*

Synopsis	Enter the transit-ip-policy list instance
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i>
Tree	transit-ip-policy
Description	Commands in this context define a transit AA subscriber IP policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subs are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-policy-id] *number*

Synopsis	IP transit policy ID
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Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i>
Tree	transit-ip-policy
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-app-profile *reference*

Synopsis	Default AA application profile
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> default-app-profile <i>reference</i>
Tree	default-app-profile
Reference	configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detect-seen-ip *boolean*

Synopsis	Detect transit subscribers based on IP address
Context	configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> detect-seen-ip <i>boolean</i>
Tree	detect-seen-ip
Default	false
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp

Synopsis Enter the **dhcp** context

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) **dhcp**

Tree [dhcp](#)

Description Commands in this context enable dynamic DHCP-based management of transit aa-subs for the transit IP policy. Dynamic DHCP-based management and other types of management of transit subs for a transit IP policy are mutually exclusive.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state for learning DHCP dynamic transits

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) **dhcp** [admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis Enter the **diameter** context

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) **diameter**

Tree [diameter](#)

Description Commands in this context configure dynamic Diameter-based management of transit AA subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state for Diameter dynamic transits
Context	configure application-assurance group number partition number transit-ip-policy number diameter admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-policy *reference*

Synopsis	Diameter application policy name for IP transit policy
Context	configure application-assurance group number partition number transit-ip-policy number diameter application-policy reference
Tree	application-policy
Reference	configure subscriber-mgmt diameter-gx-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address-prefix-length *number*

Synopsis	Length of the AA transit IP policy IPv6 address prefix
Context	configure application-assurance group number partition number transit-ip-policy number ipv6-address-prefix-length number
Tree	ipv6-address-prefix-length
Range	32 to 64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure application-assurance group number partition number transit-ip-policy number radius

Tree	radius
Description	Commands in this context enable dynamic RADIUS-based management of transit aa-subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of learning RADIUS dynamic transit
Context	configure application-assurance group number partition number transit-ip-policy number radius admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	configure application-assurance group number partition number transit-ip-policy number radius authentication-policy reference
Tree	authentication-policy
Reference	configure subscriber-mgmt radius-authentication-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

seen-ip-radius-acct-policy *reference*

Synopsis	RADIUS accounting policy to enable seen-IP notification
Context	configure application-assurance group number partition number transit-ip-policy number radius seen-ip-radius-acct-policy reference
Tree	seen-ip-radius-acct-policy
Reference	configure application-assurance radius-accounting-policy string
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-aa-sub [[transit-aa-sub-name](#)] *string*

Synopsis Enter the **static-aa-sub** list instance

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) [static-aa-sub string](#)

Tree [static-aa-sub](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[transit-aa-sub-name] *string*

Synopsis Static transit subscriber name

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) [static-aa-sub string](#)

Tree [static-aa-sub](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis Application profile name

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) [static-aa-sub string](#) [app-profile reference](#)

Tree [app-profile](#)

Reference **configure** [application-assurance group number](#) [partition number](#) [policy app-profile string](#)

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip [[address](#)] (*ipv4-unicast-address* | *ipv6-prefix*)

Synopsis Add a list entry for **ip**

Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub string ip (ipv4-unicast-address ipv6-prefix)
Tree	ip
Description	Commands in this context configure the IP address for a static transit aa-sub.
Max. Instances	32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[**address**] ([ipv4-unicast-address](#) | [ipv6-prefix](#))

Synopsis	IP address for an AA static transit subscriber
Context	configure application-assurance group number partition number transit-ip-policy number static-aa-sub string ip (ipv4-unicast-address ipv6-prefix)
Tree	ip
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis	Subscriber identification policy
Context	configure application-assurance group number partition number transit-ip-policy number sub-ident-policy <i>reference</i>
Tree	sub-ident-policy
Description	<p>This command defines the subscriber identification policy for the transit IP policy that will be associated with a SAP. The subscriber identification policy must be defined prior to associating the profile with a SAP in the configure subscriber-mgmt sub-ident-policy context. Subscribers are managed by the system through the use of subscriber identification strings. A subscriber identification string uniquely identifies a subscriber. For static hosts, the subscriber identification string is explicitly defined with each static subscriber host.</p> <p>For dynamic hosts, the subscriber identification string must be derived from the DHCP ACK message sent to the subscriber host. The default value for the string is the content of Option 82 CIRCUIT-ID and REMOTE-ID fields interpreted as an octet string. As an option, the DHCP ACK message may be processed by a subscriber identification policy which has the capability to parse the message into an alternative ASCII or octet string value.</p> <p>When multiple hosts on the same port are associated with the same subscriber identification string, they are considered to be host members of the same subscriber.</p>

A subscriber identification policy can also be used for identifying dynamic transit subscriber names.

Reference	configure subscriber-mgmt sub-ident-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-auto-create

Synopsis	Enter the transit-auto-create context
Context	configure application-assurance group number partition number transit-ip-policy number transit-auto-create
Tree	transit-auto-create
Description	Commands in this context enable the seen-IP auto creation of transit subscribers using the transit IP policy name and subscriber IP address as the aa-sub name. The default app-profile configured against the transit IP policy is applied to these subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the automatic dynamic transits
Context	configure application-assurance group number partition number transit-ip-policy number transit-auto-create admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inactivity-monitor *boolean*

Synopsis	Monitor inactivity on auto-created transit subscribers
Context	configure application-assurance group number partition number transit-ip-policy number transit-auto-create inactivity-monitor boolean
Tree	inactivity-monitor
Description	When configured to true , this command enables the auto-removal of inactive transit subscribers. Periodically, AA removes any inactive auto-created subscribers. An inactive subscriber is defined as having no active flows in the last period.

When configured to **false**, this command disables the auto-removal of inactive transit subscribers.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-prefix-policy [[prefix-policy-id](#)] *number*

Synopsis	Enter the transit-prefix-policy list instance
Context	configure application-assurance group number partition number transit-prefix-policy number
Tree	transit-prefix-policy
Description	Commands in this context define a transit AA subscriber prefix policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subscribers are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[prefix-policy-id] *number*

Synopsis	Transit prefix policy ID
Context	configure application-assurance group number partition number transit-prefix-policy number
Tree	transit-prefix-policy
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number partition number transit-prefix-policy number description string
Tree	description
String Length	1 to 80

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number partition number transit-prefix-policy number entry number
Tree	entry
Description	Commands in this context configure the index to a specific entry of a transit prefix policy.
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis	ID for a transit prefix policy entry
Context	configure application-assurance group number partition number transit-prefix-policy number entry number
Tree	entry
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub *reference*

Synopsis	Name of the transit prefix AA subscriber
Context	configure application-assurance group number partition number transit-prefix-policy number entry number aa-sub reference
Tree	aa-sub
Reference	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis	Enter the match context
Context	configure application-assurance group number partition number transit-prefix-policy number entry number match
Tree	match
Description	Commands in this context configure transit prefix policy entry match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-ip (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	AA subscriber IP address prefix
Context	configure application-assurance group number partition number transit-prefix-policy number entry number match aa-sub-ip (ipv4-prefix ipv6-prefix)
Tree	aa-sub-ip
Description	This command configures a transit prefix subscriber IP address prefix. It is used when the site is on the local side, the same side of the system as the parent SAP. The local aa-sub-ip addresses represent the source IP in the from-SAP direction and destination IP in the to-SAP direction.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-ip (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Network IP address prefix
Context	configure application-assurance group number partition number transit-prefix-policy number entry number match network-ip (ipv4-prefix ipv6-prefix)
Tree	network-ip
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-aa-sub [[transit-aa-sub-name](#)] *string*

Synopsis	Enter the static-aa-sub list instance
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub string

Tree	static-aa-sub
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[transit-aa-sub-name] *string*

Synopsis	Static transit subscriber name
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub string
Tree	static-aa-sub
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis	Application profile name
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub string app-profile reference
Tree	app-profile
Reference	configure application-assurance group number partition number policy app-profile string
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

is-remote *boolean*



WARNING:

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

Synopsis	Set transit subscriber as remote
Context	configure application-assurance group number partition number transit-prefix-policy number static-aa-sub string is-remote boolean

Tree	is-remote
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wap1x

Synopsis	Enter the wap1x context
Context	configure application-assurance group number partition number wap1x
Tree	wap1x
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WAP1x detection
Context	configure application-assurance group number partition number wap1x admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer

Synopsis	Enter the policer context
Context	configure application-assurance group number policer
Tree	policer
Description	<p>Commands in this context create application assurance policer profiles of a specified type. Policers can be bandwidth or flow-limiting and can have a granularity of system scope (limits traffic entering AA ISA for all or a subset of AA subscribers) or a subscriber scope (limits apply to each AA subscriber traffic).</p> <p>The policer type and granularity can only be configured during creation. They cannot be modified. The policer profile must be removed from all AQPs to be removed. Changes to policer profile parameters take effect immediately for policers instantiated as a result of AQP actions using this profile.</p>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

anl-bandwidth-policer [*policer-name*] *string*

Synopsis	Enter the anl-bandwidth-policer list instance
Context	configure application-assurance group number policer anl-bandwidth-policer string
Tree	anl-bandwidth-policer
Description	Commands in this context configure the AA ANL policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] *string*

Synopsis	Policer name
Context	configure application-assurance group number policer anl-bandwidth-policer string
Tree	anl-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer anl-bandwidth-policer string action keyword
Tree	action
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.</p>

Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group number policer anl-bandwidth-policer string adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir keyword

Synopsis	Peak information rate value for the adaptation rule
Context	configure application-assurance group number policer anl-bandwidth-policer string adaptation-rule pir keyword
Tree	pir
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Default	closest
Options	max, min, closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number policer anl-bandwidth-policer string description string

Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs number

Synopsis	ANL bandwidth policer maximum burst size
Context	configure application-assurance group number policer anl-bandwidth-policer string mbs number
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-percentage number

Synopsis	Rate used by Access-Network-Location policers
Context	configure application-assurance group number policer anl-bandwidth-policer string rate-percentage number
Tree	rate-percentage
Description	This command configures the stage 1 congestion percentage used by Access-Network-Location (ANL) policers. Because ANL total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL policer as the policer rate. No limiting is performed if not specified.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-percentage-stage-2 *number*

Synopsis	Rate used by Access-Network-Location policers
Context	configure application-assurance group <i>number</i> policer anl-bandwidth-policer <i>string</i> rate-percentage-stage-2 <i>number</i>
Tree	rate-percentage-stage-2
Description	This command configures the stage 2 congestion percentage rate used by Access-Network-Location (ANL) policers. Because ANL stage2 total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL stage2 policer as the policer rate. When unconfigured, limiting is not performed.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-bucket-bandwidth-policer [[policer-name](#)] *string*

Synopsis	Enter the dual-bucket-bandwidth-policer list instance
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i>
Tree	dual-bucket-bandwidth-policer
Description	Commands in this context configure the dual-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] *string*

Synopsis	Policer name
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i>
Tree	dual-bucket-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule
Tree	adaptation-rule
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir keyword

Synopsis	Committed information rate value for adaptation rule
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule cir keyword
Tree	cir
Description	This command configures the CIR for the dual-bucket-bandwidth-policer adaptation rule policer. Nokia recommends configuring CIR larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Default	closest
Options	max, min, closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir keyword

Synopsis	Peak information rate value for the adaptation rule
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string adaptation-rule pir keyword
Tree	pir
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Default	closest

Options	max, min, closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs number

Synopsis	Committed burst size when in congested state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer <i>string</i> cbs number
Tree	cbs
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends that CBS is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (number | keyword)

Synopsis	Committed information rate value for the policer
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer <i>string</i> cir (number keyword)
Tree	cir
Description	This command configures the CIR for the dual-bucket-bandwidth-policer policer. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override

Synopsis	Enter the congestion-override context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override
Tree	congestion-override
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs *number*

Synopsis	Committed burst size in a congested stage 2 state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override cbs <i>number</i>
Tree	cbs
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis	Committed information rate value for the policer override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000

Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override-stage-2

Synopsis	Enter the congestion-override-stage-2 context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2
Tree	congestion-override-stage-2
Description	This command enables the context to configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs number

Synopsis	Committed burst size in a congested stage 2 state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cbs number
Tree	cbs
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (number | keyword)

Synopsis	Committed information rate value for the policer override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cir (number keyword)
Tree	cir
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000

Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string congestion-override-stage-2 pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Bandwidth policer maximum burst size
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i> mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the bandwidth policer
Context	configure application-assurance group <i>number</i> policer dual-bucket-bandwidth-policer <i>string</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis Enter the **time-of-day-override** list instance

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#)

Tree [time-of-day-override](#)

Description Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.

Max. Instances 8

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis ID for time of day override

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#)

Tree [time-of-day-override](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of this time of day policer

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs number

Synopsis	Committed burst size for time of day override policer
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number cbs number
Tree	cbs
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends configuring CBS larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (number | keyword)

Synopsis	Committed information rate for time of day override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number cir (number keyword)
Tree	cir
Description	This command configures the committed information rate (CIR) for the dual-bucket-bandwidth-policer policer time of day override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Default	0
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
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Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size for the policer time of day override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends that MBS is configured larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the time of day override
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the daily context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily end string
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily on keyword
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily start string
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly end day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis Weekly end time

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly end time string](#)

Tree [time](#)

Description This command configures the weekly end time of the policer override.

The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length 3 to 5

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis Enable the **start** context

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly start](#)

Tree [start](#)

Description Commands in this context configure the weekly start time for policer override.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis Weekly start day

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly start day keyword](#)

Tree [day](#)

Options sunday, monday, tuesday, wednesday, thursday, friday, saturday

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly start time
Context	configure application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly start time string
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-count-limit-policer [policer-name] string

Synopsis	Enter the flow-count-limit-policer list instance
Context	configure application-assurance group number policer flow-count-limit-policer string
Tree	flow-count-limit-policer
Description	Commands in this context configure the AA flow count limit policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] string

Synopsis	Policer name
Context	configure application-assurance group number policer flow-count-limit-policer string
Tree	flow-count-limit-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer flow-count-limit-policer string action <i>keyword</i>
Tree	action
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.</p>
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number policer flow-count-limit-policer string description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword***WARNING:**

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

Synopsis	Policer granularity
Context	configure application-assurance group number policer flow-count-limit-policer string granularity <i>keyword</i>

Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

limit-gtp-flows *boolean*



WARNING:

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

Synopsis	Limit concurrent GTP flows
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> limit-gtp-flows <i>boolean</i>
Tree	limit-gtp-flows
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-count (*number* | *keyword*)

Synopsis	Peak flow count limit
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> peak-flow-count (<i>number</i> <i>keyword</i>)
Tree	peak-flow-count
Range	0 to 100000000
Default	max
Units	flows
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the time-of-day-override list instance
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Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i>
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a specific policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override ID overrides the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis	ID for time of day override
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i>
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
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Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-count (*number* | *keyword*)

Synopsis	Peak flow count limit
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> peak-flow-count (<i>number</i> <i>keyword</i>)
Tree	peak-flow-count
Range	0 to 100000000
Default	max
Units	flows
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the daily context
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range daily end string
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range daily on <i>keyword</i>
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range daily start <i>string</i>
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly end day
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly end <i>day</i> <i>keyword</i>
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly end time
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly end <i>time</i> <i>string</i>
Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the start context
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day *keyword*

Synopsis	Weekly start day
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly start <i>day keyword</i>
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *string*

Synopsis	Weekly start time
Context	configure application-assurance group <i>number</i> policer flow-count-limit-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly start <i>time string</i>
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-policer [*policer-name*] *string*

Synopsis	Enter the flow-setup-rate-policer list instance
Context	configure application-assurance group number policer flow-setup-rate-policer <i>string</i>
Tree	flow-setup-rate-policer
Description	Commands in this context configure the flow setup rate policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] *string*

Synopsis	Policer name
Context	configure application-assurance group number policer flow-setup-rate-policer <i>string</i>
Tree	flow-setup-rate-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer flow-setup-rate-policer <i>string</i> action <i>keyword</i>
Tree	action
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic. Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic. When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis Enter the **adaptation-rule** context

Context **configure** [application-assurance group number policer flow-setup-rate-policer string adaptation-rule](#)

Tree [adaptation-rule](#)

Description Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate *keyword*

Synopsis Peak flow setup rate adaptation rule

Context **configure** [application-assurance group number policer flow-setup-rate-policer string adaptation-rule peak-flow-setup-rate keyword](#)

Tree [peak-flow-setup-rate](#)

Default closest

Options max, min, closest

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance group number policer flow-setup-rate-policer string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-burst-size *number*

Synopsis	Maximum flow setup rate burst size
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> flow-setup-rate-burst-size <i>number</i>
Tree	flow-setup-rate-burst-size
Range	0 to 131071
Default	0
Units	flows
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword***WARNING:**

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

Synopsis	Policer granularity
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> granularity <i>keyword</i>
Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate (*number* | *keyword*)

Synopsis	Peak flow setup rate
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> peak-flow-setup-rate (<i>number</i> <i>keyword</i>)
Tree	peak-flow-setup-rate
Range	1 to 100000000
Default	max
Units	flows per second
Options	max

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the time-of-day-override list instance
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] *number*

Synopsis	ID for time of day override
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of this time of day policer
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [policer flow-setup-rate-policer string](#) [time-of-day-override number](#) [description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-burst-size *number*

Synopsis Maximum flow setup rate burst size

Context **configure** [application-assurance group number](#) [policer flow-setup-rate-policer string](#) [time-of-day-override number](#) [flow-setup-rate-burst-size number](#)

Tree [flow-setup-rate-burst-size](#)

Range 0 to 131071

Default 0

Units flows

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peak-flow-setup-rate (*number | keyword*)

Synopsis Peak flow setup rate

Context **configure** [application-assurance group number](#) [policer flow-setup-rate-policer string](#) [time-of-day-override number](#) [peak-flow-setup-rate \(number | keyword\)](#)

Tree [peak-flow-setup-rate](#)

Range 1 to 100000000

Default max

Units flows per second

Options max

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the daily context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> time-of-day-override <i>number</i> time-range daily end <i>string</i>
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on keyword

Synopsis	Policer override on selected days
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> time-of-day-override <i>number</i> time-range daily on <i>keyword</i>
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start string

Synopsis	Daily start time
Context	configure application-assurance group <i>number</i> policer flow-setup-rate-policer <i>string</i> time-of-day-override <i>number</i> time-range daily start <i>string</i>
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis Weekly end time

Context **configure** application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end time string

Tree time

Description This command configures the weekly end time of the policer override.
The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length 3 to 5

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis Enable the **start** context

Context **configure** application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start

Tree start

Description Commands in this context configure the weekly start time for policer override.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis Weekly start day

Context **configure** application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start day keyword

Tree day

Options sunday, monday, tuesday, wednesday, thursday, friday, saturday

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly start time
Context	configure application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start time string
Tree	time
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

single-bucket-bandwidth-policer [policer-name] string

Synopsis	Enter the single-bucket-bandwidth-policer list instance
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string
Tree	single-bucket-bandwidth-policer
Description	Commands in this context configure the single-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[policer-name] string

Synopsis	Policer name
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string
Tree	single-bucket-bandwidth-policer
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action keyword

Synopsis	Action for packets violating configured policer rate
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string action keyword
Tree	action
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.</p>
Default	permit-deny
Options	permit-deny, priority-mark
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string adaptation-rule
Tree	adaptation-rule
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir keyword

Synopsis	Peak information rate value for the adaptation rule
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string adaptation-rule pir keyword
Tree	pir
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Default	closest

Options	max, min, closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override

Synopsis	Enter the congestion-override context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string congestion-override
Tree	congestion-override
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string congestion-override mbs number
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string congestion-override pir (number keyword)
Tree	pir
Range	1 to 100000000

Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

congestion-override-stage-2

Synopsis	Enter the congestion-override-stage-2 context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string congestion-override-stage-2
Tree	congestion-override-stage-2
Description	Commands in this context configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string congestion-override-stage-2 mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
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Context	configure application-assurance group number policer single-bucket-bandwidth-policer string congestion-override-stage-2 pir (<i>number keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

granularity *keyword*



WARNING:

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

Synopsis	Policer granularity
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string granularity keyword
Tree	granularity
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Bandwidth policer maximum burst size
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for the bandwidth policer
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the time-of-day-override list instance
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i>
Tree	time-of-day-override
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.

Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tod-override-id] number

Synopsis	ID for time of day override
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number
Tree	time-of-day-override
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of this time of day policer
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs *number*

Synopsis	Bandwidth policer maximum burst size for time of day override
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> mbs <i>number</i>
Tree	mbs
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Default	0
Units	kilobytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis	Peak information rate value for time of day override
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-range

Synopsis	Enter the time-range context
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> time-range
Tree	time-range
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the

operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

daily

Synopsis	Enable the daily context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily
Tree	daily
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

all-days

Synopsis	Enable policer override on every day
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days
Tree	all-days
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end string

Synopsis	Daily end time
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily end string
Tree	end
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

on *keyword*

Synopsis	Policer override on selected days
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range daily on <i>keyword</i>
Tree	on
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: all-days or on .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *string*

Synopsis	Daily start time
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer string time-of-day-override <i>number</i> time-range daily start <i>string</i>
Tree	start
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

weekly

Synopsis	Enable the weekly context
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Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly
Tree	weekly
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: daily or weekly .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end

Synopsis	Enable the end context
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly end
Tree	end
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly end day
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly end day <i>keyword</i>
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly end time
Context	configure application-assurance group <i>number</i> policer single-bucket-bandwidth-policer <i>string</i> time-of-day-override <i>number</i> time-range weekly end time <i>string</i>

Tree	time
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start

Synopsis	Enable the start context
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start
Tree	start
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

day keyword

Synopsis	Weekly start day
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start day keyword
Tree	day
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time string

Synopsis	Weekly start time
Context	configure application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start time string
Tree	time

Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-optimizer [**tcp-optimizer-name**] *string*

Synopsis	Enter the tcp-optimizer list instance
Context	configure application-assurance group <i>number</i> tcp-optimizer <i>string</i>
Tree	tcp-optimizer
Description	Commands in this context configure the TCP optimizer policy. When a TCP optimizer policy is removed or deleted, the existing flows using this policy are abandoned, and optimization is stopped.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tcp-optimizer-name] *string*

Synopsis	TCP optimizer name
Context	configure application-assurance group <i>number</i> tcp-optimizer <i>string</i>
Tree	tcp-optimizer
Description	This command configures the name of the TCP optimizer policy.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dack-timeout *number*

Synopsis	Delayed acknowledgment timeout for client and server
Context	configure application-assurance group <i>number</i> tcp-optimizer <i>string</i> dack-timeout <i>number</i>
Tree	dack-timeout

Description	This command configures a delay ACK (DACK) timeout for the TCP optimizer. By entering this command a default of 200 ms timeout is enabled for delayed acknowledgment. This value is not configurable.
Range	200
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number tcp-optimizer string description string
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial-cwnd *number*

Synopsis	Initial congestion window of the TCP optimizer
Context	configure application-assurance group number tcp-optimizer string initial-cwnd number
Tree	initial-cwnd
Description	This command configures the initial TCP congestion window (cwnd) used during the TCP Slow Start (SS) period.
Range	1 to 256
Default	8
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial-ss-threshold (*number* | *keyword*)

Synopsis	Initial TCP Slow Start threshold for client and server
Context	configure application-assurance group number tcp-optimizer string initial-ss-threshold (number keyword)
Tree	initial-ss-threshold

Description	This command configures the initial Slow Start (SS) threshold for a specific TCP optimizer policy. Nokia recommends setting the threshold close to the access network Bandwidth Delay Product (BDP).
Range	0 to 1000000
Default	1000000
Units	kilobytes
Options	auto
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-rtt-threshold *number*

Synopsis	Network round trip time threshold
Context	configure application-assurance group <i>number</i> tcp-optimizer <i>string</i> network-rtt-threshold <i>number</i>
Tree	network-rtt-threshold
Description	This command configures the threshold of the Round Trip Time (RTT) delay of the network side (between AA and the content provider) above which TCP Optimization (TCPO) is performed. This enables the operator to disable optimization for content that is served from a location close to the TCP optimizer.
Range	1 to 100
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-stack *keyword*

Synopsis	TCP stack congestion control algorithm
Context	configure application-assurance group <i>number</i> tcp-optimizer <i>string</i> tcp-stack <i>keyword</i>
Tree	tcp-stack
Description	This command configures the TCP stack used toward the subscriber. Note: The TCP stack used toward the core network is new-reno, and it is not configurable. TCP BBR, TCP Illinois, and TCP Westwood implement a sender-side modification of the TCP congestion window algorithm that improves the performance of TCP Reno in wireless networks with lossy links.
Default	westwood
Options	westwood, illinois, new-reno, bbr

Introduced 22.2.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter [*url-filter-name*] *string*

Synopsis Enter the **url-filter** list instance
 Context **configure** *application-assurance group number url-filter string*
 Tree *url-filter*
 Description Commands in this context configure a URL filter action for flows of a specific type matching this entry. If no URL filters are specified, then no URL filters are evaluated.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[url-filter-name] *string*

Synopsis URL filter name
 Context **configure** *application-assurance group number url-filter string*
 Tree *url-filter*
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the AA URL filter
 Context **configure** *application-assurance group number url-filter string admin-state keyword*
 Tree *admin-state*
 Default disable
 Options enable, disable
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apply-function-specific-behaviour *boolean*

Synopsis	Use function-specific behavior for action or redirect
Context	configure application-assurance group number url-filter string apply-function-specific-behaviour <i>boolean</i>
Tree	apply-function-specific-behaviour
Description	When configured to true , the function-specific configurations for URL list, ICAP, and web service (url-list , icap , and web-service) are used for default action (default-action) and HTTP redirect (http-redirect). When configured to false , the configuration at the URL filter level (url-filter) is used for default action and HTTP redirect.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group number url-filter string default-action
Tree	default-action
Description	Commands in this context configure the default action to take effect when the URL filter cannot be used. This may occur in the following cases: <ul style="list-style-type: none"> • for the local URL list when the URL list is shut down or the file is not loaded due to an error. • in the case of ICAP or web filtering when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default URL filter action
Context	configure application-assurance group number url-filter string default-action allow
Tree	allow
Description	When configured, this command allows all requests as the default URL filter action when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis Block all requests as the default URL filter action

Context **configure** [application-assurance group number url-filter string default-action block-all](#)

Tree [block-all](#)

Description When configured, this command blocks all requests as the default URL filter action when the URL filter cannot be used.

Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis HTTP URL name for block and redirect request action

Context **configure** [application-assurance group number url-filter string default-action block-http-redirect reference](#)

Tree [block-http-redirect](#)

Description This command blocks traffic and redirects the user to an information page that can be different from the page the user is redirected to when the site that the user tried to access is found in the URL filter. This page is configured using the **configure AA group url-filter http-redirect** command

Reference **configure** [application-assurance group number http-redirect string](#)

Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance group number url-filter string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect for a blocked HTTP request
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> http-redirect <i>reference</i>
Tree	http-redirect
Reference	configure application-assurance group <i>number</i> http-redirect <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-request-filtering *keyword*

Synopsis	HTTP filtering for all HTTP requests
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> http-request-filtering <i>keyword</i>
Tree	http-request-filtering
Description	This command selects between HTTP filtering for all HTTP requests in a flow or only the first HTTP request.
Default	all
Options	all, first
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icap

Synopsis	Enter the icap context
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> icap
Tree	icap
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

custom-x-header *string*

Synopsis	Custom x-header field name to include in ICAP requests
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> icap custom-x-header <i>string</i>
Tree	custom-x-header

Description	This command configures the URL filter ICAP policy to include a new x-header field; the content of the x-header is populated based on the AQP URL filter action which can optionally specify the ASO characteristic value to include in the x-header.
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> icap default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> icap default-action allow
Tree	allow
Description	When configured, this command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> icap default-action block-all
Tree	block-all
Description	When configured, this command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis HTTP URL for redirection when URL filter cannot be used
 Context **configure** [application-assurance group number url-filter string icap default-action block-http-redirect reference](#)
 Tree [block-http-redirect](#)
 Description This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the **configure application-assurance group url-filter http-redirect** command.
 Reference **configure** [application-assurance group number http-redirect string](#)
 Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis HTTP redirect object used when ICAP blocks HTTP request
 Context **configure** [application-assurance group number url-filter string icap http-redirect reference](#)
 Tree [http-redirect](#)
 Reference **configure** [application-assurance group number http-redirect string](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Enter the **server** list instance
 Context **configure** [application-assurance group number url-filter string icap server \(ipv4-address-no-zone | ipv6-address-no-zone\) port number](#)
 Tree [server](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	ICAP server IP address
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number
Tree	server
Description	This command configures the ICAP server address. In the current release, the system supports IPv4 addresses only for the ICAP server.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	ICAP server port
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number
Tree	server
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of this URL filter ICAP server
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number url-filter string icap server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id *number***WARNING:**

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

Synopsis	VLAN ID of the ICAP server service port
Context	configure application-assurance group number url-filter string icap vlan-id number
Tree	vlan-id
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-filtering

Synopsis	Enter the local-filtering context
Context	configure application-assurance group number url-filter string local-filtering
Tree	local-filtering
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow-list *reference***WARNING:**

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

Synopsis	Local filtering URL list for allowed URLs
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Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering allow-list <i>reference</i>
Tree	allow-list
Reference	configure application-assurance group <i>number</i> url-list <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the deny-list list instance
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering deny-list <i>reference</i>
Tree	deny-list
Description	Commands in this context configure a list of denied URLs to be added to the local URL filter policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[url-list-name] *reference*

Synopsis	URL list name
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering deny-list <i>reference</i>
Tree	deny-list
Description	This command adds a deny-list URL list to the local URL filter policy.
Reference	configure application-assurance group <i>number</i> url-list <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering deny-list <i>reference</i> default-action
Tree	default-action

Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen in the case of a local URL list when the URL list is disabled or the file is not loaded due to an error.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action allow
Tree	allow
Description	This command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action block-all
Tree	block-all
Description	This command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	configure application-assurance group number url-filter string local-filtering deny-list reference default-action block-http-redirect <i>reference</i>
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access

was found in the URL filter; this page is configured using the **configure application-assurance group url-filter http-redirect** command.

Reference	configure application-assurance group <i>number</i> http-redirect <i>string</i>
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	HTTP redirect object applied to blocked HTTP requests
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> local-filtering deny-list <i>reference</i> http-redirect <i>reference</i>
Tree	http-redirect
Reference	configure application-assurance group <i>number</i> http-redirect <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

web-service

Synopsis	Enter the web-service context
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service
Tree	web-service
Description	Commands in this context configure the URL filter policy using web-service filtering. The operator must configure the web service, hostname, DNS server to use, the AA interface VLAN ID, and provision the category profiles.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-set *number*



WARNING:

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

Synopsis	Web service category ID
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service category-set <i>number</i>

Tree	category-set
Range	1 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classification-overrides

Synopsis	Enter the classification-overrides context
Context	configure application-assurance group number url-filter string web-service classification-overrides
Tree	classification-overrides
Description	Commands in this context create a classification override and allow the operator to manually set the category of a hostname.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure application-assurance group number url-filter string web-service classification-overrides entry number
Tree	entry
Description	Commands in this context configure a classification override, manually setting the category of a hostname.
Max. Instances	200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[entry-id](#)] *number*

Synopsis	Classification override entry ID
Context	configure application-assurance group number url-filter string web-service classification-overrides entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-name *string*

Synopsis Web service category name
 Context **configure** [application-assurance group number url-filter string web-service classification-overrides entry number category-name string](#)
 Tree [category-name](#)
 String Length 1 to 32
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

expression *string*

Synopsis Hostname of the configured override category
 Context **configure** [application-assurance group number url-filter string web-service classification-overrides entry number expression string](#)
 Tree [expression](#)
 String Length 1 to 255
 Notes This element is mandatory.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier *keyword*



WARNING:

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

Synopsis Web service classifier
 Context **configure** [application-assurance group number url-filter string web-service classifier keyword](#)
 Tree [classifier](#)
 Options web-service-1
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-action

Synopsis	Enter the default-action context
Context	configure application-assurance group number url-filter string web-service default-action
Tree	default-action
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

allow

Synopsis	Allow all requests as the default action
Context	configure application-assurance group number url-filter string web-service default-action allow
Tree	allow
Description	This command allows all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-all

Synopsis	Block all requests as the default action
Context	configure application-assurance group number url-filter string web-service default-action block-all
Tree	block-all
Description	This command blocks all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-http-redirect *reference*

Synopsis	HTTP URL for redirection when the web service is unavailable
Context	configure application-assurance group number url-filter string web-service default-action block-http-redirect reference
Tree	block-http-redirect
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the configure application-assurance group url-filter http-redirect command.
Reference	configure application-assurance group number http-redirect string
Notes	The following elements are part of a choice: allow , block-all , or block-http-redirect .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-profile *reference***WARNING:**

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

Synopsis	Web service default profile
Context	configure application-assurance group number url-filter string web-service default-profile reference
Tree	default-profile
Reference	configure application-assurance group number url-filter string web-service profile string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns-server (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

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

Synopsis	Web service DNS server
Context	configure application-assurance group number url-filter string web-service dns-server (ipv4-address-no-zone ipv6-address-no-zone)
Tree	dns-server

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*



WARNING:

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

Synopsis	Web service fully qualified domain name
Context	configure application-assurance group number url-filter string web-service fqdn string
Tree	fqdn
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect *reference*

Synopsis	Web service HTTP redirect
Context	configure application-assurance group number url-filter string web-service http-redirect reference
Tree	http-redirect
Reference	configure application-assurance group number http-redirect string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the profile list instance
Context	configure application-assurance group number url-filter string web-service profile string
Tree	profile
Description	Commands in this context configure the category profiles of the web service.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[profile-name] *string*

Synopsis	Web service profile name
Context	configure application-assurance group number url-filter string web-service profile string
Tree	profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block

Synopsis	Enter the block context
Context	configure application-assurance group number url-filter string web-service profile string block
Tree	block
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for category
Context	configure application-assurance group number url-filter string web-service profile string block category string
Tree	category
Description	Commands in this context configure the category that is blocked in the category profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[category-name] *string*

Synopsis	Web service profile category name to be blocked
Context	configure application-assurance group number url-filter string web-service profile string block category string
Tree	category
String Length	1 to 32

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

description *string*

Synopsis	Text description
Context	configure application-assurance group number url-filter string web-service profile string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the server list instance
Context	configure application-assurance group number url-filter string web-service server (ipv4-address-no-zone ipv6-address-no-zone) port number
Tree	server
Max. Instances	4
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	AA web service server IP address
Context	configure application-assurance group number url-filter string web-service server (ipv4-address-no-zone ipv6-address-no-zone) port number
Tree	server
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	AA web service server port
Context	configure application-assurance group number url-filter string web-service server (ipv4-address-no-zone ipv6-address-no-zone) port number
Tree	server
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of URL filter web service server
Context	configure application-assurance group number url-filter string web-service server (ipv4-address-no-zone ipv6-address-no-zone) port number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure application-assurance group number url-filter string web-service server (ipv4-address-no-zone ipv6-address-no-zone) port number description string
Tree	description
String Length	1 to 80
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-id number**WARNING:**

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

Synopsis	Web-service VLAN ID
Context	configure application-assurance group <i>number</i> url-filter <i>string</i> web-service vlan-id <i>number</i>
Tree	vlan-id
Description	This command configures the VLAN ID on which the AA ISA emits the traffic mapping to a preconfigured AA interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the url-list list instance
Context	configure application-assurance group <i>number</i> url-list <i>string</i>
Tree	url-list
Description	Commands in this context configure a URL list object. The URL list points to a file containing a list of URLs located on the system Compact Flash and is then referenced in a URL filter object to filter and redirect subscribers when a URL from this file is accessed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[url-list-name] *string*

Synopsis	URL list name
Context	configure application-assurance group <i>number</i> url-list <i>string</i>
Tree	url-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the URL list
Context	configure application-assurance group <i>number</i> url-list <i>string</i> admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure application-assurance group number url-list string description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

file *string*

Synopsis	File name of the URL list on compact flash
Context	configure application-assurance group number url-list string file string
Tree	file
String Length	1 to 180
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-expressions *boolean*



WARNING:

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

Synopsis	Allow URL list to contain hostnames with wildcards
Context	configure application-assurance group number url-list string host-expressions boolean
Tree	host-expressions
Description	When configured to true , this command adds hostnames with wildcards to the URL list. When configured to false , the URL list containing hostnames with wildcards is removed from the configuration.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key string

Synopsis	URL list decryption key
Context	configure application-assurance group number url-list string key string
Tree	key
Description	This command configures the secret key for decrypting the URL list.
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

size keyword



WARNING:

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

Synopsis	Size limit of the URL list
Context	configure application-assurance group number url-list string size keyword
Tree	size
Default	standard
Options	standard, extended
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich

Synopsis	Enter the http-enrich context
Context	configure application-assurance http-enrich
Tree	http-enrich
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the field list instance
Context	configure application-assurance http-enrich field <i>string</i>
Tree	field
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[field-name] *string*

Synopsis	HTTP enrich field name (void, do not use)
Context	configure application-assurance http-enrich field <i>string</i>
Tree	field
Description	This command should not be used by the operators. Configuring it has no effect. Operators should use the commands in the application-assurance group context.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-enrich field <i>string</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-error-redirect

Synopsis	Enter the http-error-redirect context
Context	configure application-assurance http-error-redirect
Tree	http-error-redirect
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

error-code [[error-code-number](#)] *number*

Synopsis	Enter the error-code list instance
Context	configure application-assurance http-error-redirect error-code <i>number</i>
Tree	error-code
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[error-code-number](#)] *number*

Synopsis	Error code for HTTP error redirection
Context	configure application-assurance http-error-redirect error-code <i>number</i>
Tree	error-code
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-error-redirect error-code <i>number</i> comment <i>string</i>
Tree	comment

String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [[template-id](#)] *number*

Synopsis	Enter the template list instance
Context	configure application-assurance http-error-redirect template <i>number</i>
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[template-id] *number*

Synopsis	HTTP error redirect template ID
Context	configure application-assurance http-error-redirect template <i>number</i>
Tree	template
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-error-redirect template <i>number</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-notification

Synopsis	Enter the http-notification context
Context	configure application-assurance http-notification
Tree	http-notification
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [[template-id](#)] *number*

Synopsis	Enter the template list instance
Context	configure application-assurance http-notification template <i>number</i>
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[template-id](#)] *number*

Synopsis	HTTP notification template ID
Context	configure application-assurance http-notification template <i>number</i>
Tree	template
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-notification template <i>number</i> comment <i>string</i>
Tree	comment

String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enter the http-redirect context
Context	configure application-assurance http-redirect
Tree	http-redirect
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

template [[template-id](#)] *number*

Synopsis	Enter the template list instance
Context	configure application-assurance http-redirect template <i>number</i>
Tree	template
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the application-assurance group context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[template-id\]](#) *number*

Synopsis	HTTP redirect template ID
Context	configure application-assurance http-redirect template <i>number</i>
Tree	template
Description	This command specifies the HTTP policy redirect template ID. The available options are: 1 - JavaScript based redirect embedded in HTTP 200 OK response with a predefined number of arguments automatically appended to the redirect URL 2 - HTTP 302 redirect with a predefined number of arguments automatically appended to the redirect URL

	3 - HTTP 302 redirect with no parameters appended to the URL (empty)
	4 - Empty redirect format using JavaScript
	5 - Redirect supporting macro substitution using HTTP 302
	6 - Redirect supporting macro substitution using JavaScript
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

comment *string*

Synopsis	User information comment
Context	configure application-assurance http-redirect template <i>number</i> comment <i>string</i>
Tree	comment
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the protocol list instance
Context	configure application-assurance protocol <i>string</i>
Tree	protocol
Description	Commands in this context configure the administrative state of system-wide protocols. Some protocols are always enabled and cannot be disabled. These are "base protocols" that were present in R1 of the release. Some protocols are disabled by default and can be enabled. There are protocols that were introduced post R1, which are all enabled by default but may be disabled if not desired.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[protocol-name] *string*

Synopsis	AA protocol name
Context	configure application-assurance protocol <i>string</i>
Tree	protocol

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the protocol
Context	configure application-assurance protocol <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy [[rad-acct-plcy-name](#)] *string*

Synopsis	Enter the radius-accounting-policy list instance
Context	configure application-assurance radius-accounting-policy <i>string</i>
Tree	radius-accounting-policy
Description	Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the configure application-assurance radius-accounting-policy context.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[rad-acct-plcy-name] *string*

Synopsis	AA RADIUS accounting policy name
Context	configure application-assurance radius-accounting-policy <i>string</i>
Tree	radius-accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interim-update-interval *number*

Synopsis AA RADIUS accounting policy interim update interval

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [interim-update-interval](#) *number*

Tree [interim-update-interval](#)

Range 5 to 1080

Units minutes

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-server

Synopsis Enter the **radius-accounting-server** context

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#)

Tree [radius-accounting-server](#)

Description Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the **configure application-assurance radius-accounting-policy** context.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-algorithm *keyword*

Synopsis	Access algorithm for the list of RADIUS servers
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server access-algorithm <i>keyword</i>
Tree	access-algorithm
Default	direct
Options	direct, round-robin
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server retry <i>number</i>
Tree	retry
Range	1 to 10
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router or VPRN service name
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server router-instance <i>string</i>
Tree	router-instance
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [[server-index](#)] *number*

Synopsis	Enter the server list instance
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i>
Tree	server

Description	<p>Commands in this context configure the RADIUS server and the RADIUS server IP address, index, and key values.</p> <p>RADIUS servers are accessed in order from lowest to highest index for authentication requests until a response from a server is received. A higher indexed server is only queried if no response is received from a lower indexed server (which implies that the server is not available). If a response from a server is received, no other RADIUS servers are queried.</p>
Max. Instances	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[server-index] number

Synopsis	RADIUS accounting server index
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i>
Tree	server
Description	This command configures the index for the RADIUS server. The index determines the sequence in which the servers are queried for authentication requests. Servers are queried in order from lowest to highest index.
Range	1 to 5
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address string

Synopsis	RADIUS server IP address
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i> address <i>string</i>
Tree	address
Description	This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	RADIUS server UDP port used for authentication
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i> port <i>number</i>
Tree	port
Range	1 to 65535
Default	1813
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secret string

Synopsis	RADIUS server secret key
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server server <i>number</i> secret <i>string</i>
Tree	secret
Description	This command configures the secret key to access the RADIUS server. This secret key must match the password on the RADIUS server.
String Length	1 to 54
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address string

Synopsis	Source IP address of RADIUS packets
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server source-address <i>string</i>
Tree	source-address
Description	This command configures the source IP address of the RADIUS packet. The system IP address must be configured for the RADIUS client to work. The system IP address must only be configured if the source address is not specified. When this command reverts to its default, the source address is determined at the moment the request is sent. This address is also used in the nas-ip-address command in the configure aaa radius isa-policy accounting include-attributes and configure aaa radius isa-policy

authentication include-attributes contexts as it is set to the system IP address if no source address was given.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis	RADIUS accounting server response timeout
Context	configure application-assurance radius-accounting-policy <i>string</i> radius-accounting-server <i>timeout</i> <i>number</i>
Tree	timeout
Range	1 to 90
Default	5
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

significant-change *number*

Synopsis	Change delta for RADIUS accounting record updates
Context	configure application-assurance radius-accounting-policy <i>string</i> significant-change <i>number</i>
Tree	significant-change
Description	This command configures the number of changes required to generate the record.
Range	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

usage-alert-thresholds

Synopsis	Enter the usage-alert-thresholds context
Context	configure application-assurance usage-alert-thresholds
Tree	usage-alert-thresholds
Description	Commands in this context configure the AA performance monitoring alerts.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit-rate-high-wmark (*number* | *keyword*)

Synopsis	High watermark for bit rate alarms
Context	configure application-assurance usage-alert-thresholds bit-rate-high-wmark (<i>number</i> <i>keyword</i>)
Tree	bit-rate-high-wmark
Description	This command configures the high watermark for bit rate alarms. The value must be larger than or equal to the low watermark value.
Range	1 to 100000
Default	max
Units	megabps
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit-rate-low-wmark *number*

Synopsis	Low watermark for bit rate alarms
Context	configure application-assurance usage-alert-thresholds bit-rate-low-wmark <i>number</i>
Tree	bit-rate-low-wmark
Description	This command configures the utilization of the flow records on the ISA-AA group when the full alarm is cleared by the agent.
Range	0 to 99999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

datapath-cpu-high-wmark (*number* | *keyword*)

Synopsis	High watermark for datapath CPU alarms
Context	configure application-assurance usage-alert-thresholds datapath-cpu-high-wmark (<i>number</i> <i>keyword</i>)
Tree	datapath-cpu-high-wmark
Description	This command configures the system-wide high watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.

Range	0 to 100
Default	95
Units	percent
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

datapath-cpu-low-wmark *number*

Synopsis	Low watermark for datapath CPU alarms
Context	configure application-assurance usage-alert-thresholds datapath-cpu-low-wmark <i>number</i>
Tree	datapath-cpu-low-wmark
Description	This command configures the system-wide low watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Default	90
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-high-wmark (*number* | *keyword*)

Synopsis	High watermark for flow setup rate
Context	configure application-assurance usage-alert-thresholds flow-setup-rate-high-wmark (<i>number</i> <i>keyword</i>)
Tree	flow-setup-rate-high-wmark
Description	This command configures the system-wide high watermark threshold for per-ISA throughput in packets/second when an alarm is raised by the agent. The value must be larger than or equal to the packet-rate-low-wmark value.
Range	1 to 2000000
Default	max
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-setup-rate-low-wmark *number*

Synopsis	Low watermark for flow setup rate
Context	configure application-assurance usage-alert-thresholds flow-setup-rate-low-wmark <i>number</i>
Tree	flow-setup-rate-low-wmark
Description	This command configures the flow setup rate on the ISA-AA when a flow setup alarm is raised by the agent.
Range	0 to 1999999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-table-high-wmark *number*

Synopsis	Flow table high watermark
Context	configure application-assurance usage-alert-thresholds flow-table-high-wmark <i>number</i>
Tree	flow-table-high-wmark
Description	This command configures the system-wide high watermark threshold as a percentage of the flow table size for the per-ISA utilization of the flow records when a full alarm is raised by the agent.
Range	0 to 100
Default	95
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-table-low-wmark *number*

Synopsis	Flow table low watermark
Context	configure application-assurance usage-alert-thresholds flow-table-low-wmark <i>number</i>
Tree	flow-table-low-wmark
Description	This command configures the system-wide low watermark threshold as a percentage of the flow table size for per-ISA.
Range	0 to 100
Default	90

Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-rate-high-wmark (*number* | *keyword*)

Synopsis	Packet rate high watermark
Context	configure application-assurance usage-alert-thresholds packet-rate-high-wmark (<i>number</i> <i>keyword</i>)
Tree	packet-rate-high-wmark
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is raised by the agent.
Range	1 to 148809524
Default	max
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-rate-low-wmark *number*

Synopsis	Packet rate low watermark
Context	configure application-assurance usage-alert-thresholds packet-rate-low-wmark <i>number</i>
Tree	packet-rate-low-wmark
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is cleared by the agent.
Range	0 to 148809523
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.4 aps commands

```
configure
- aps number
- advertise-interval number
- annexb
- wait-to-restore-time number
- working-circuit reference
- apply-groups reference
- apply-groups-exclude reference
- hold-time number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- protect-circuit reference
- revert
- time number
- switching-mode keyword
- working-circuit reference
```

3.4.1 aps command descriptions

aps [*group-id*] *number*

Synopsis	Enter the aps list instance
Context	configure <i>aps</i> <i>number</i>
Tree	<i>aps</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[group-id] *number*

Synopsis	APS group ID
Context	configure <i>aps</i> <i>number</i>
Tree	<i>aps</i>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

advertise-interval *number*

Synopsis	Time between subsequent advertisement messages
Context	configure <i>aps</i> <i>number</i> <i>advertise-interval</i> <i>number</i>
Tree	<i>advertise-interval</i>
Range	10 to 650
Default	10
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

annexb

Synopsis	Enable the annexb context
Context	configure <i>aps</i> <i>number</i> <i>annexb</i>

Tree	annexb
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

wait-to-restore-time *number*

Synopsis	Annex B mode operation wait to restore time
Context	configure aps <i>number</i> annexb wait-to-restore-time <i>number</i>
Tree	wait-to-restore-time
Description	This command specifies the delay after which the newly active section becomes the primary section after a switchover from the primary section to the secondary section occurs and the switch request clears normally.
Range	0 to 3600
Default	300
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

working-circuit *reference*

Synopsis	Working circuit port for the APS group
Context	configure aps <i>number</i> annexb working-circuit <i>reference</i>
Tree	working-circuit
Reference	configure port <i>string</i>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

hold-time *number*

Synopsis	Time to wait for an advertisement packet
Context	configure aps <i>number</i> hold-time <i>number</i>

Tree	hold-time
Range	10 to 650
Default	30
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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

Synopsis	Neighbor IP address for multi-chassis APS
Context	configure aps <i>number</i> neighbor (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	neighbor
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

protect-circuit *reference*

Synopsis	Protection circuit port for the APS group
Context	configure aps <i>number</i> protect-circuit <i>reference</i>
Tree	protect-circuit
Reference	configure port <i>string</i>
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

revert

Synopsis	Enable the revert context
Context	configure aps <i>number</i> revert
Tree	revert
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

time *number*

Synopsis	Wait time before switching back to the working circuit
Context	configure <i>aps number revert time number</i>
Tree	<i>time</i>
Range	0 60 to 3600
Default	300
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

switching-mode *keyword*

Synopsis	Switching mode for the APS port
Context	configure <i>aps number switching-mode keyword</i>
Tree	<i>switching-mode</i>
Default	bi-directional
Options	uni-directional, bi-directional
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

working-circuit *reference*

Synopsis	Working circuit port for the APS group
Context	configure <i>aps number working-circuit reference</i>
Tree	<i>working-circuit</i>
Reference	configure <i>port string</i>
Notes	The following elements are part of a choice: annexb or (neighbor , protect-circuit , revert , and working-circuit).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

3.5 bfd commands

```
configure
- bfd
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - echo-receive number
    - multiplier number
    - receive-interval number
    - transmit-interval number
    - type keyword
  - seamless-bfd
    - reflector string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - discriminator number
      - local-state keyword
```


3.5.1 bfd command descriptions

bfd

Synopsis	Enter the bfd context
Context	configure bfd
Tree	bfd
Introduced	16.0.R1
Platforms	All

bfd-template [[name](#)] *string*

Synopsis	Enter the bfd-template list instance
Context	configure bfd bfd-template <i>string</i>
Tree	bfd-template
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	BFD template name
Context	configure bfd bfd-template <i>string</i>
Tree	bfd-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Echo receive interval
Context	configure bfd bfd-template <i>string</i> echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Default	100

Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Detection multiplier
Context	configure bfd bfd-template <i>string multiplier number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive interval
Context	configure bfd bfd-template <i>string receive-interval number</i>
Tree	receive-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit interval
Context	configure bfd bfd-template <i>string transmit-interval number</i>
Tree	transmit-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Local termination point for the BFD session
Context	configure bfd bfd-template <i>string type keyword</i>
Tree	type
Options	cpm-np, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

seamless-bfd

Synopsis	Enter the seamless-bfd context
Context	configure bfd seamless-bfd
Tree	seamless-bfd
Introduced	19.7.R1
Platforms	All

reflector [name] string

Synopsis	Enter the reflector list instance
Context	configure bfd seamless-bfd reflector <i>string</i>
Tree	reflector
Max. Instances	1
Introduced	19.7.R1
Platforms	All

[name] string

Synopsis	S-BFD reflector name
Context	configure bfd seamless-bfd reflector <i>string</i>
Tree	reflector
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the seamless BFD reflector
 Context **configure** [bfd seamless-bfd reflector](#) *string* **admin-state** *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 19.7.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [bfd seamless-bfd reflector](#) *string* **description** *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 19.7.R1
 Platforms All

discriminator *number*



WARNING:

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

Synopsis Discriminator of the seamless BFD reflector
 Context **configure** [bfd seamless-bfd reflector](#) *string* **discriminator** *number*
 Tree [discriminator](#)
 Range 524288 to 526335
 Introduced 19.7.R1
 Platforms All

local-state *keyword*

Synopsis	Local state of the seamless BFD reflector
Context	configure bfd seamless-bfd reflector <i>string</i> local-state <i>keyword</i>
Tree	local-state
Default	up
Options	admin-down, up
Introduced	19.7.R1
Platforms	All

3.6 bmp commands

```

configure
-  bmp
  -  admin-state keyword
  -  apply-groups reference
  -  apply-groups-exclude reference
  -  collector
    -  admin-state keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  connection
      -  ipv4
        -  address string
        -  port number
      -  ipv6
        -  address string
        -  port number
  -  station string
    -  admin-state keyword
    -  apply-groups reference
    -  apply-groups-exclude reference
    -  connection
      -  connect-retry number
      -  local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      -  router-instance string
      -  station-address
        -  ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        -  port number
      -  tcp-keepalive
        -  admin-state keyword
        -  keep-count number
        -  keep-idle number
        -  keep-interval number
    -  description string
  -  family
    -  evpn boolean
    -  ipv4 boolean
    -  ipv6 boolean
    -  l2-vpn boolean
    -  label-ipv4 boolean
    -  label-ipv6 boolean
    -  mcast-ipv4 boolean
    -  mcast-ipv6 boolean
    -  mcast-vpn-ipv4 boolean
    -  mcast-vpn-ipv6 boolean
    -  sr-policy-ipv4 boolean
    -  sr-policy-ipv6 boolean
    -  vpn-ipv4 boolean
    -  vpn-ipv6 boolean
  -  initiation-message string
  -  report-local-routes boolean
  -  stats-report-interval number

```

3.6.1 bmp command descriptions

bmp

Synopsis	Enter the bmp context
Context	configure bmp
Tree	bmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BMP operation
Context	configure bmp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collector

Synopsis	Enter the collector context
Context	configure bmp collector
Tree	collector
Introduced	19.10.R1
Platforms	VSR-NRC

admin-state *keyword*

Synopsis	Administrative state of the BMP collector
Context	configure bmp collector admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 19.10.R1
Platforms VSR-NRC

connection

**WARNING:**

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

Synopsis Enter the **connection** context
Context **configure** bmp collector connection
Tree [connection](#)
Introduced 19.10.R1
Platforms VSR-NRC

ipv4

**WARNING:**

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

Synopsis Enter the **ipv4** context
Context **configure** bmp collector connection ipv4
Tree [ipv4](#)
Introduced 19.10.R1
Platforms VSR-NRC

address *string*

**WARNING:**

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

Synopsis IPv4 address
Context **configure** bmp collector connection ipv4 address *string*
Tree [address](#)
Introduced 19.10.R1

Platforms VSR-NRC

port number



WARNING:

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

Synopsis IPv4 TCP destination port number
 Context **configure** bmp collector connection ipv4 port number
 Tree port
 Range 1 to 65535
 Default 4210
 Introduced 19.10.R1
 Platforms VSR-NRC

ipv6



WARNING:

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

Synopsis Enter the **ipv6** context
 Context **configure** bmp collector connection ipv6
 Tree ipv6
 Introduced 19.10.R1
 Platforms VSR-NRC

address string



WARNING:

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

Synopsis IPv6 address
 Context **configure** bmp collector connection ipv6 address string
 Tree address
 Introduced 19.10.R1

Platforms VSR-NRC

port *number*



WARNING:

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

Synopsis IPv6 TCP destination port
 Context **configure bmp collector connection ipv6 port** *number*
 Tree [port](#)
 Range 1 to 65535
 Default 4210
 Introduced 19.10.R1
 Platforms VSR-NRC

station [[name](#)] *string*

Synopsis Enter the **station** list instance
 Context **configure bmp station** *string*
 Tree [station](#)
 Max. Instances 8
 Introduced 16.0.R1
 Platforms All

[name] *string*

Synopsis BMP monitoring station name
 Context **configure bmp station** *string*
 Tree [station](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis	Administrative state of the BMP monitoring station
Context	configure bmp station <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

connection

Synopsis	Enter the connection context
Context	configure bmp station <i>string</i> connection
Tree	connection
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	Maximum time between connection attempts
Context	configure bmp station <i>string</i> connection connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

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

Synopsis	Local IP address to communicate with monitoring station
Context	configure bmp station <i>string</i> connection local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address

Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router instance used to reach the BMP station
Context	configure bmp station <i>string</i> connection router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R4
Platforms	All

station-address

Synopsis	Enter the station-address context
Context	configure bmp station <i>string</i> connection station-address
Tree	station-address
Introduced	16.0.R1
Platforms	All

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

Synopsis	IP address of the remote BMP monitoring station
Context	configure bmp station <i>string</i> connection station-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	BMP monitoring station port
Context	configure bmp station <i>string</i> connection station-address port <i>number</i>
Tree	port
Range	1 to 65535
Introduced	16.0.R1

Platforms All

tcp-keepalive

Synopsis Enter the **tcp-keepalive** context

Context **configure** [bmp station string connection tcp-keepalive](#)

Tree [tcp-keepalive](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the TCP keepalive

Context **configure** [bmp station string connection tcp-keepalive admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

keep-count *number*

Synopsis Keepalive threshold before connection is declared down

Context **configure** [bmp station string connection tcp-keepalive keep-count number](#)

Tree [keep-count](#)

Range 3 to 100

Default 4

Introduced 16.0.R1

Platforms All

keep-idle *number*

Synopsis Time until the first TCP keepalive probe is sent

Context **configure** [bmp station string connection tcp-keepalive keep-idle number](#)

Tree [keep-idle](#)

Range	1 to 100000
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

keep-interval *number*

Synopsis	Time between two TCP keepalive probes
Context	configure bmp station <i>string</i> connection tcp-keepalive keep-interval <i>number</i>
Tree	keep-interval
Range	1 to 100000
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure bmp station <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure bmp station <i>string</i> family
Tree	family
Description	Commands in this context specify the address families that are reported to a BMP monitoring station.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Support EVPN address family
Context	configure bmp station string family evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support IPv4 address family
Context	configure bmp station string family ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Support IPv6 address family
Context	configure bmp station string family ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Support L2 VPN address family
Context	configure bmp station string family l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support labeled IPv4 address family
Context	configure bmp station <i>string</i> family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Support labeled IPv6 address family
Context	configure bmp station <i>string</i> family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Support IPv4 multicast address family
Context	configure bmp station <i>string</i> family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Support IPv6 multicast address family
Context	configure bmp station <i>string</i> family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Support IPv4 VPN multicast address family
Context	configure bmp station <i>string</i> family mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Support IPv6 VPN multicast address family
Context	configure bmp station <i>string</i> family mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Support SR policy IPv4 address family
Context	configure bmp station <i>string</i> family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Default	false
Introduced	22.5.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Support SR policy IPv6 address family
Context	configure bmp station <i>string</i> family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Default	false
Introduced	22.5.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support VPN IPv4 address family
Context	configure bmp station <i>string</i> family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support VPN IPv6 address family
Context	configure bmp station <i>string</i> family vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

initiation-message *string*

Synopsis	Free form initiation message sent to monitoring station
Context	configure bmp station <i>string</i> initiation-message <i>string</i>
Tree	initiation-message
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

report-local-routes *boolean*

Synopsis	Allow local route reporting to BMP monitoring station
Context	configure bmp station <i>string</i> report-local-routes <i>boolean</i>
Tree	report-local-routes
Default	false
Introduced	16.0.R1
Platforms	All

stats-report-interval *number*

Synopsis	Frequency of reports sent to the BMP monitoring station
Context	configure bmp station <i>string</i> stats-report-interval <i>number</i>
Tree	stats-report-interval
Range	15 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

3.7 bof commands

```

bof
- auto-boot
- dhcp
  - client-id (keyword | hex-string | string)
  - inband
    - disabled boolean
    - null-encapsulation boolean
    - vlan number
    - vlan-discovery boolean
  - include-user-class boolean
  - ipv4 boolean
  - ipv6 boolean
  - management-port boolean
- ospf
  - mtu number
  - neid string
  - neip-ipv4 string
  - neip-ipv6 string
  - vendor-id number
- port-mtu number
- timeout number
- auto-configure
- ipv4
  - dhcp
    - client-id (hex-string | string)
    - include-user-class boolean
    - timeout number
  - ipv6
    - dhcp
      - client-id (hex-string | string)
      - client-type keyword
      - include-user-class boolean
      - timeout number
- configuration
  - encrypt boolean
  - encryption-key string
  - password string
  - primary-location string
  - secondary-location string
  - tertiary-location string
- console
  - speed number
  - wait-time number
- dns
  - domain string
  - primary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - tertiary-server (ipv4-address-no-zone | ipv6-address-no-zone)
- image
  - primary-location string
  - secondary-location string
  - tertiary-location string
- li
  - local-save boolean
  - separate boolean
- license
  - primary-location string
- port string
  - autonegotiate keyword

```

bof port duplex

```
- duplex keyword
- speed number
- router string
- interface string
  - cpm keyword
    - ipv4
      - ip-address string
      - prefix-length number
    - ipv6
      - ipv6-address string
      - prefix-length number
  - ip-mtu number
- static-routes
  - route (ipv4-prefix | ipv6-prefix)
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- system
  - base-mac-address string
  - fips-140-2 boolean
  - persistent-indices boolean
  - profile keyword
```

3.7.1 bof command descriptions

bof

Synopsis	Configure system boot options
Context	bof
Tree	bof
Description	<p>This command creates or edits the boot option file (BOF) for the specified local storage device.</p> <p>A BOF file specifies where the system searches for runtime images, configuration files, and other operational parameters during system initialization.</p> <p>BOF parameters can be modified. Changes can be saved to a specified compact flash. The BOF must be located in the root directory of either an internal or external compact flash local to the system and have the mandatory filename of bof.cfg.</p> <p>When modifications are made to in-memory parameters that are currently in use or operating, the changes are effective immediately. For example, if the IP address of the management port is changed, the change takes place immediately.</p> <p>Only one entry of the BOF configuration command statement can be saved once the statement has been found to be syntactically correct.</p> <p>When opening an existing BOF that is not the BOF used in the most recent boot, a message is issued notifying the user that the parameters will not affect the operation of the node.</p> <p>No default boot option file exists. The router boots with the factory default boot sequence and options.</p>
Introduced	20.10.R1
Platforms	All

auto-boot



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the auto-boot context
Context	bof auto-boot
Tree	auto-boot
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-boot dhcp
Tree	dhcp
Notes	The following elements are part of a choice: dhcp or ospf .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-id (*keyword | hex-string | string*)



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-boot dhcp client-id (<i>keyword hex-string string</i>)
Tree	client-id
String Length	3 to 118
Options	use-chassis-mac-address
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

inband



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the inband context
Context	bof auto-boot dhcp inband
Tree	inband
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

disabled *boolean***Note:**

The new value of this element takes effect when the router boots.

Synopsis	Do not use in-band ports
Context	bof auto-boot dhcp inband disabled <i>boolean</i>
Tree	disabled
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

null-encapsulation *boolean***Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use null encapsulation
Context	bof auto-boot dhcp inband null-encapsulation <i>boolean</i>
Tree	null-encapsulation
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

vlan *number***Note:**

The new value of this element takes effect when the router boots.

Synopsis	In-band VLAN ID
Context	bof auto-boot dhcp inband vlan <i>number</i>
Tree	vlan
Range	1 to 4094

Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

vlan-discovery *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use VLAN discovery
Context	bof auto-boot dhcp inband vlan-discovery <i>boolean</i>
Tree	vlan-discovery
Default	true
Notes	The following elements are part of a choice: disabled , null-encapsulation , vlan , or vlan-discovery .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

include-user-class *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Include user class in auto boot provisioning
Context	bof auto-boot dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv4 *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv4
----------	-------------------------

Context	bof auto-boot dhcp ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv6 *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv6
Context	bof auto-boot dhcp ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

management-port *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot on the management port
Context	bof auto-boot dhcp management-port <i>boolean</i>
Tree	management-port
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ospf



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the ospf context
Context	bof auto-boot ospf

Tree	ospf
Notes	The following elements are part of a choice: dhcp or ospf .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

mtu number



Note:

The new value of this element takes effect when the router boots.

Synopsis	OSPF MTU
Context	bof auto-boot ospf mtu number
Tree	mtu
Range	512 to 9786
Default	1500
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

neid string



Note:

The new value of this element takes effect when the router boots.

Synopsis	Network element ID
Context	bof auto-boot ospf neid string
Tree	neid
String Length	3
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

neip-ipv4 string



Note:

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv4 address
Context	bof auto-boot ospf neip-ipv4 string
Tree	neip-ipv4
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

neip-ipv6 *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv6 address
Context	bof auto-boot ospf neip-ipv6 string
Tree	neip-ipv6
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

vendor-id *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Vendor ID
Context	bof auto-boot ospf vendor-id number
Tree	vendor-id
Range	1 to 254
Default	140
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

port-mtu *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Port MTU setting
Context	bof auto-boot port-mtu number

Tree	port-mtu
Range	512 to 9800
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

timeout *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis	ZTP timeout
Context	bof auto-boot timeout <i>number</i>
Tree	timeout
Description	This command configures the Zero Touch Provisioning timeout, which is the total time allowed for the ZTP process to execute successfully. If the ZTP process is unsuccessful (in the case of auto-boot using OSPF, if no OSPF adjacency is found), the node is first rebooted, then the ZTP process is retried.
Range	30 to 1440
Units	minutes
Introduced	22.7.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

auto-configure

Synopsis	Enter the auto-configure context
Context	bof auto-configure
Tree	auto-configure
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv4

Synopsis	Enter the ipv4 context
Context	bof auto-configure ipv4
Tree	ipv4

Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-configure ipv4 dhcp
Tree	dhcp
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-id (*hex-string* | *string*)



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv4 dhcp client-id (<i>hex-string</i> <i>string</i>)
Tree	client-id
String Length	3 to 256
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

include-user-class *boolean*



WARNING:

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

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv4 dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

timeout *number***WARNING:**

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

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv4 dhcp timeout <i>number</i>
Tree	timeout
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

ipv6

Synopsis	Enter the ipv6 context
Context	bof auto-configure ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

dhcp



Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the dhcp context
Context	bof auto-configure ipv6 dhcp
Tree	dhcp
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-id (*hex-string* | *string*)



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	bof auto-configure ipv6 dhcp client-id (<i>hex-string</i> <i>string</i>)
Tree	client-id
String Length	3 to 250
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

client-type *keyword*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client type
Context	bof auto-configure ipv6 dhcp client-type <i>keyword</i>
Tree	client-type

Options	duid-enterprise, duid-link-local
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

include-user-class *boolean*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	bof auto-configure ipv6 dhcp include-user-class <i>boolean</i>
Tree	include-user-class
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

timeout *number*



WARNING:

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



Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	bof auto-configure ipv6 dhcp timeout <i>number</i>
Tree	timeout
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

configuration

Synopsis	Enter the configuration context
Context	bof configuration
Tree	configuration
Introduced	20.10.R1
Platforms	All

encrypt *boolean*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable encryption of BOF configuration files
Context	bof configuration encrypt <i>boolean</i>
Tree	encrypt
Description	<p>When configured to true, this command enables encryption of the BOF using AES256 and SHA256.</p> <p>When the BOF is encrypted on the compact flash, it is still reachable using the BOF interactive menu during node startup, and fields can be modified using the BOF interactive menu.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Secret key for encryption of configuration files
Context	bof configuration encryption-key <i>string</i>
Tree	encryption-key
Description	<p>This command creates a key to be used by AES256 and SHA256 for configuration file encryption and hashing. This key is used for all configuration files (primary, secondary, and tertiary).</p> <p>After creating or deleting a key, save the configuration file with the current encryption key state.</p>

String Length 1 to 71
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Password for boot-time modification of boot options
Context [bof configuration password string](#)
Tree [password](#)
String Length 1 to 71
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary-location *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Primary configuration location
Context [bof configuration primary-location string](#)
Tree [primary-location](#)
String Length 1 to 180
Introduced 20.10.R1
Platforms All

secondary-location *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Secondary configuration location
Context [bof configuration secondary-location string](#)
Tree [secondary-location](#)
String Length 1 to 180

Introduced	20.10.R1
Platforms	All

tertiary-location *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary configuration location
Context	bof configuration tertiary-location <i>string</i>
Tree	tertiary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

console

Synopsis	Enter the console context
Context	bof console
Tree	console
Introduced	20.10.R1
Platforms	All

speed *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Console port speed
Context	bof console speed <i>number</i>
Tree	speed
Range	9600 19200 38400 57600 115200
Default	19200
Units	bps
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

wait-time *number*



Note:

The new value of this element takes effect when the router boots.

Synopsis Wait time for interrupt to change boot parameters

Context [bof console wait-time number](#)

Tree [wait-time](#)

Range 1 to 10

Default 3

Units seconds

Introduced 20.10.R1

Platforms All

dns

Synopsis Enter the **dns** context

Context [bof dns](#)

Tree [dns](#)

Introduced 20.10.R1

Platforms All

domain *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis System DNS domain name for DNS address resolution

Context [bof dns domain string](#)

Tree [domain](#)

String Length 1 to 178

Introduced 20.10.R1

Platforms All

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

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary DNS server
Context	bof dns primary-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	primary-server
Introduced	20.10.R1
Platforms	All

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

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary DNS server
Context	bof dns secondary-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	secondary-server
Introduced	20.10.R1
Platforms	All

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

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary DNS server
Context	bof dns tertiary-server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	tertiary-server
Introduced	20.10.R1
Platforms	All

image

Synopsis	Enter the image context
Context	bof image

Tree	image
Introduced	20.10.R1
Platforms	All

primary-location *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Primary image location
Context	bof image primary-location <i>string</i>
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

secondary-location *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Secondary image location
Context	bof image secondary-location <i>string</i>
Tree	secondary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

tertiary-location *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Tertiary image location
Context	bof image tertiary-location <i>string</i>
Tree	tertiary-location
String Length	1 to 180

Introduced 20.10.R1
 Platforms All

li

Synopsis Enter the **li** context
 Context [bof li](#)
 Tree [li](#)
 Introduced 20.10.R1
 Platforms All

local-save *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis Save the LI configuration locally
 Context [bof li local-save *boolean*](#)
 Tree [local-save](#)
 Introduced 20.10.R1
 Platforms All

separate *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis Separate access to the LI information
 Context [bof li separate *boolean*](#)
 Tree [separate](#)
 Introduced 20.10.R1
 Platforms All

license

Synopsis Enter the **license** context

Context	bof license
Tree	license
Introduced	20.10.R1
Platforms	All

primary-location *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary license file location
Context	bof license primary-location <i>string</i>
Tree	primary-location
String Length	1 to 180
Introduced	20.10.R1
Platforms	All

port [[router-name](#)] *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the port list instance
Context	bof port <i>string</i>
Tree	port
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[router-name] *string*

Synopsis	Administrative router name
Context	bof port <i>string</i>
Tree	port
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

autonegotiate *keyword*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Auto-negotiate speed and duplex type on Ethernet port
Context	bof port string autonegotiate keyword
Tree	autonegotiate
Default	true
Options	false, true
Introduced	20.10.R1
Platforms	All

duplex *keyword*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Duplex type for the Ethernet port
Context	bof port string duplex keyword
Tree	duplex
Default	full
Options	full, half
Introduced	20.10.R1
Platforms	All

speed *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Speed of the Ethernet port
----------	----------------------------

Context	<code>bof port string speed number</code>
Tree	<code>speed</code>
Range	10 100 1000
Default	100
Units	megabps
Introduced	20.10.R1
Platforms	All

router [`router-name`] *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the router list instance
Context	<code>bof router string</code>
Tree	<code>router</code>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[router-name] *string*

Synopsis	Administrative router name
Context	<code>bof router string</code>
Tree	<code>router</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

interface [`interface-name`] *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the interface list instance
Context	bof router <i>string interface string</i>
Tree	interface
Max. Instances	1
Introduced	20.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	bof router <i>string interface string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

cpm [**cpm-type**] *keyword*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the cpm list instance
Context	bof router <i>string interface string cpm keyword</i>
Tree	cpm
Introduced	20.10.R1
Platforms	All

[cpm-type] *keyword*

Synopsis	CPM type
Context	bof router <i>string interface string cpm keyword</i>
Tree	cpm
Options	active, standby, a, b, c, d
Notes	This element is part of a list key.

Introduced	20.10.R1
Platforms	All

ipv4



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the ipv4 context
Context	bof router string interface string cpm keyword ipv4
Tree	ipv4
Introduced	20.10.R1
Platforms	All

ip-address *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address assigned to the interface
Context	bof router string interface string cpm keyword ipv4 ip-address string
Tree	ip-address
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

prefix-length *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address prefix length
Context	bof router string interface string cpm keyword ipv4 prefix-length number
Tree	prefix-length
Range	0 to 32

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

ipv6



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the ipv6 context
Context	bof router <i>string</i> interface <i>string</i> cpm <i>keyword</i> ipv6
Tree	ipv6
Introduced	20.10.R1
Platforms	All

ipv6-address *string*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address assigned to the interface
Context	bof router <i>string</i> interface <i>string</i> cpm <i>keyword</i> ipv6 ipv6-address <i>string</i>
Tree	ipv6-address
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Introduced	20.10.R1
Platforms	All

prefix-length *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address prefix length
Context	bof router <i>string</i> interface <i>string</i> cpm <i>keyword</i> ipv6 prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 128

Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

ip-mtu *number*



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Interface IP MTU
Context	bof router <i>string</i> interface <i>string</i> ip-mtu <i>number</i>
Tree	ip-mtu
Description	<p>This command configures the MTU for IP packets transmitted out the interface of the management router instance associated to the management port.</p> <p>The operational MTU for the port is set to the lesser of the values configured with this command and the management port MTU.</p> <p>If the interface supports IPv6 packets, the command value must be set to 1280 or higher.</p>
Range	512 to 9786
Units	bytes
Introduced	20.10.R1
Platforms	All

static-routes

Synopsis	Enter the static-routes context
Context	bof router <i>string</i> static-routes
Tree	static-routes
Introduced	20.10.R1
Platforms	All

route [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the route list instance
----------	--------------------------------------

Context	<code>bof router string static-routes route (ipv4-prefix ipv6-prefix)</code>
Tree	<code>route</code>
Introduced	20.10.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the static route
Context	<code>bof router string static-routes route (ipv4-prefix ipv6-prefix)</code>
Tree	<code>route</code>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

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



WARNING:

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



Note:

The new value of this element takes effect when the candidate is committed.

Synopsis	Next-hop IP address
Context	<code>bof router string static-routes route (ipv4-prefix ipv6-prefix) next-hop (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>next-hop</code>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

system

Synopsis	Enter the system context
Context	<code>bof system</code>
Tree	<code>system</code>

Introduced	20.10.R1
Platforms	All

base-mac-address *string*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Base system MAC address
Context	bof system base-mac-address <i>string</i>
Tree	base-mac-address
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS-20, 7950 XRS-20e, VSR

fips-140-2 *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Operate in FIPS 140-2 mode
Context	bof system fips-140-2 <i>boolean</i>
Tree	fips-140-2
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS

persistent-indices *boolean*



Note:

The new value of this element takes effect when the router boots.

Synopsis	Classic and mixed management mode persistent indices
Context	bof system persistent-indices <i>boolean</i>
Tree	persistent-indices
Introduced	20.10.R1
Platforms	All

profile *keyword*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	System capabilities profile
Context	bof system profile <i>keyword</i>
Tree	profile
Options	profile-a, profile-b
Introduced	20.10.R1
Platforms	All

3.8 call-trace commands

```
configure
- call-trace
- apply-groups reference
- apply-groups-exclude reference
- buffering boolean
- location keyword
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- size-limit (number | keyword)
- max-files-number number
- primary-cf keyword
- trace-profile string
- applications
- connectivity-management boolean
- gx boolean
- gy boolean
- ladb boolean
- msap boolean
- nasreq boolean
- ppp-event boolean
- python boolean
- radius-acct boolean
- radius-auth boolean
- apply-groups reference
- apply-groups-exclude reference
- description string
- events keyword
- output
- debug
- live
- fqdn string
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- port number
- router-instance string
- local-storage
- size-limit number
- time-limit number
```

3.8.1 call-trace command descriptions

call-trace

Synopsis	Enter the call-trace context
Context	configure call-trace
Tree	call-trace
Description	Commands in this context configure the attributes of the call trace debugging functionality.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

buffering *boolean*

Synopsis	Buffer messages until the trace key is known
Context	configure call-trace buffering boolean
Tree	buffering
Description	<p>When configured to true, the router buffers initial messages for sessions where the trace key is not yet known, for example, a username for a PPP session.</p> <p>When the trace key, for example, a username, indicates a match for a traced session, the router sends the buffered messages immediately. If the key does not match a trace, the router discards the buffered messages.</p> <p>When configured to false, the router does not buffer any messages and therefore initial messages may not be traced.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

location [[location-type](#)] *keyword*

Synopsis	Enter the location list instance
Context	configure call-trace location keyword
Tree	location
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[location-type] keyword

Synopsis	Compact flash card to be used
Context	configure call-trace location <i>keyword</i>
Tree	location
Options	cf1, cf2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of compact flash for log storage
Context	configure call-trace location <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

size-limit (number | keyword)

Synopsis	Maximum cumulative size of call trace files on the card
Context	configure call-trace location <i>keyword</i> size-limit (<i>number</i> <i>keyword</i>)
Tree	size-limit
Range	1 to 65536
Default	1000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-files-number number

Synopsis	Maximum number of files call trace can create
Context	configure call-trace max-files-number <i>number</i>

Tree	max-files-number
Range	1 to 1024
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary-cf *keyword*

Synopsis	Primary CF card as local storage location
Context	configure call-trace primary-cf <i>keyword</i>
Tree	primary-cf
Default	cf1
Options	cf1, cf2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-profile [[name](#)] *string*

Synopsis	Enter the trace-profile list instance
Context	configure call-trace trace-profile <i>string</i>
Tree	trace-profile
Description	Commands in this context configure the attributes of the call-trace profile list.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Call trace profile name
Context	configure call-trace trace-profile <i>string</i>
Tree	trace-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis	Enter the applications context
Context	configure call-trace trace-profile <i>string</i> applications
Tree	applications
Description	Commands in this context configure call trace attributes for the specified application.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

connectivity-management *boolean*

Synopsis	Trace messages used for connectivity protocols
Context	configure call-trace trace-profile <i>string</i> applications connectivity-management <i>boolean</i>
Tree	connectivity-management
Description	When configured to true , this command enables call trace for connectivity protocols, such as DHCP, ARP, and DHCPv6, and events related to connectivity management; for example, migrant or data-triggered host creation, idling, or session timeout. When configured to false , connectivity protocols are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gx *boolean*

Synopsis	Trace Diameter messages used for the Gx application
Context	configure call-trace trace-profile <i>string</i> applications gx <i>boolean</i>
Tree	gx
Description	When configured to true , this command enables call trace for Diameter messages used for the Gx application. When configured to false , Diameter Gx messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gy *boolean*

Synopsis	Trace Diameter messages used for the Gy application
----------	---

Context	configure call-trace trace-profile <i>string applications gy boolean</i>
Tree	gy
Description	When configured to true , this command enables call trace for Diameter messages used for the Gy application. When configured to false , Diameter Gy messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ludb boolean

Synopsis	Trace local user database lookups
Context	configure call-trace trace-profile <i>string applications ludb boolean</i>
Tree	ludb
Description	When configured to true , this command enables call trace for Local User Data Base (LUDB) lookups. When configured to false , LUDB lookups are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap boolean

Synopsis	Trace MSAP creation events
Context	configure call-trace trace-profile <i>string applications msap boolean</i>
Tree	msap
Description	When configured to true , this command enables tracing of Managed Service Access Point (MSAP) creation events. When configured to false , MSAP create events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq boolean

Synopsis	Trace Diameter messages used for NASREQ application
Context	configure call-trace trace-profile <i>string applications nasreq boolean</i>

Tree	nasreq
Description	When configured to true , this command enables call trace for Diameter messages used for the Diameter Network Access Server Requirements (NASREQ) application. When configured to false , Diameter NASREQ messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-event *boolean*

Synopsis	Allow tracing for PPP state machine related events
Context	configure call-trace trace-profile <i>string</i> applications ppp-event <i>boolean</i>
Tree	ppp-event
Description	When configured to true , events related to the PPP state machine are traced. This configuration may result in a large amount of event messages. When configured to false , tracing is not activated for PPP state machine events.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python *boolean*

Synopsis	Trace Python script execution
Context	configure call-trace trace-profile <i>string</i> applications python <i>boolean</i>
Tree	python
Description	When configured to true , this command enables tracing of Python script execution. When configured to false , Python script execution is not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-acct *boolean*

Synopsis	Trace messages and events for RADIUS-based accounting
Context	configure call-trace trace-profile <i>string</i> applications radius-acct <i>boolean</i>
Tree	radius-acct

Description	When configured to true , this command enables tracing of messages and events related to RADIUS-based accounting. When configured to false , RADIUS-based accounting messages and events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth *boolean*

Synopsis	Trace RADIUS authentication messages and events
Context	configure call-trace trace-profile <i>string</i> applications radius-auth <i>boolean</i>
Tree	radius-auth
Description	When configured to true , this command enables tracing of messages and events related to RADIUS authentication, including CoA and Disconnect. When configured to false , messages and events related to RADIUS authentication are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure call-trace trace-profile <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events *keyword*

Synopsis	Events to include in the captured trace
Context	configure call-trace trace-profile <i>string</i> events <i>keyword</i>
Tree	events
Options	public-only, all

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

output

Synopsis	Enter the output context
Context	configure call-trace trace-profile <i>string</i> output
Tree	output
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debug

Synopsis	Enable output to the debug log
Context	configure call-trace trace-profile <i>string</i> output debug
Tree	debug
Notes	The following elements are part of a choice: debug , live , or local-storage .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

live

Synopsis	Enable the live context
Context	configure call-trace trace-profile <i>string</i> output live
Tree	live
Notes	The following elements are part of a choice: debug , live , or local-storage .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fqdn *string*

Synopsis	Fully qualified domain name of live output destination
Context	configure call-trace trace-profile <i>string</i> output live fqdn <i>string</i>
Tree	fqdn
String Length	1 to 255

Notes	The following elements are part of a mandatory choice: fqdn or ip-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the live output destination server
Context	configure call-trace trace-profile <i>string</i> output live ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a mandatory choice: fqdn or ip-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port number

Synopsis	TCP IP port
Context	configure call-trace trace-profile <i>string</i> output live port <i>number</i>
Tree	port
Range	1 to 65536
Default	29770
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance or VPRN service name
Context	configure call-trace trace-profile <i>string</i> output live router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-storage

Synopsis	Destination for output
Context	configure call-trace trace-profile <i>string</i> output local-storage
Tree	local-storage
Notes	The following elements are part of a choice: debug , live , or local-storage .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

size-limit *number*

Synopsis	Maximum data output for a single call trace operation
Context	configure call-trace trace-profile <i>string</i> size-limit <i>number</i>
Tree	size-limit
Range	1 to 1000
Default	10
Units	megabytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time-limit *number*

Synopsis	Maximum time for a single call trace job
Context	configure call-trace trace-profile <i>string</i> time-limit <i>number</i>
Tree	time-limit
Range	1 to 604800
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.9 card commands

```

configure
- card number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- card-type keyword
- fail-on-error boolean
- filter-profile keyword
- fp number
- apply-groups reference
- apply-groups-exclude reference
- egress
- hs-fixed-high-thresh-delta number
- hs-pool-policy reference
- wred-queue-control
- admin-state keyword
- buffer-allocation decimal-number
- reserved-cbs decimal-number
- slope-policy reference
- fp-resource-policy reference
- hi-bw-mcast-src
- alarm boolean
- default-paths-only boolean
- group number
- ingress
- access
- queue-group reference instance-id number
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- description string
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-threshold-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- policer-overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- dist-cpu-protection
- dynamic-enforcement-policer-pool number
- mcast-path-management
- admin-state keyword

```

configure card fp ingress mcast-path-management bandwidth-policy

```

- bandwidth-policy reference
- network
- pool string
  - amber-alarm-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - red-alarm-threshold number
  - resv-cbs
    - amber-alarm-action
      - max number
      - step number
    - cbs number
  - slope-policy reference
- queue-group reference instance-id number
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description string
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-threshold-separation (number | keyword)
        - priority number
          - apply-groups reference
          - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
    - policy-name reference
  - policer-overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue-policy reference
- policy-accounting
  - classes number
  - policers number
- ingress-buffer-allocation decimal-number
- init-extract-prio-mode keyword
- stable-pool-sizing boolean
- level keyword
- mda number
- access
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - apply-groups reference
  - apply-groups-exclude reference
- ingress
  - apply-groups reference
  - apply-groups-exclude reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- egress-xpl

```

configure card mda egress-xpl threshold

- **threshold** *number*
- **window** *number*
- **event** *keyword*
- **action** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fail-on-error** *boolean*
- **ingress-xpl**
 - **threshold** *number*
 - **window** *number*
- **level** *keyword*
- **mda-type** *keyword*
- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **power-priority-level** *number*
- **reset-on-recoverable-error** *boolean*
- **sync-e** *keyword*
- **upgrade** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path** *keyword*
- **xconnect**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **loopback** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **description** *string*
- **power-save** *boolean*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path** *keyword*
- **virtual-scheduler-adjustment**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **internal-scheduler-weight-mode** *keyword*
 - **interval**
 - **rate-calculation-minimum**
 - **fast-queue** *decimal-number*
 - **slow-queue** *decimal-number*
 - **scheduler-run-minimum** *decimal-number*
 - **task-scheduling** *decimal-number*
 - **slow-queue-threshold-rate** *number*
- **xiom** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fail-on-error** *boolean*
 - **level** *keyword*
 - **mda** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure card xiom mda apply-groups-exclude

- **apply-groups-exclude** *reference*
- **mda-type** *keyword*
- **power-priority-level** *number*
- **sync-e** *keyword*
- **xconnect**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **loopback** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **description** *string*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path** *keyword*
- **xiom-type** *keyword*

3.9.1 card command descriptions

card [[slot-number](#)] *number*

Synopsis	Enter the card list instance
Context	configure card <i>number</i>
Tree	card
Description	Commands in this context cover attributes for specific chassis slots for physical cards. Cards include IOM, IMM, and XCM. In SR OS, cards cover IOM, IMM, and XCM.
Introduced	16.0.R1
Platforms	All

[slot-number] *number*

Synopsis	Slot number within the chassis
Context	configure card <i>number</i>
Tree	card
Description	This command configures a unique value that identifies the card slot within a chassis in the system.
Range	1 to 20
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the card
Context	configure card <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

card-type keyword**WARNING:**

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

Synopsis Card type

Context **configure** *card number* **card-type** *keyword*

Tree **card-type**

Description This command adds an IOM, IMM, XCM to the device configuration for the slot.

The card type can be pre-provisioned, meaning that the card does not need to be installed in the chassis.

A card must be provisioned before any contained object can be configured: MDA, XIOM, XMA, MDA-s, connector, or port. A card can only be provisioned in a slot if the card type is allowed in the slot. An error message is generated if an attempt is made to provision a card type that is not allowed.

If a card is inserted that does not match the configured card type for the slot, a log event and facility alarm is raised. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event and facility alarm are raised if an administratively enabled card is removed from the chassis. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event is issued when a card is removed that is administratively disabled.

Because IMM's do not have the capability to install separate MDAs, the configuration of the MDAs is automatic. This configuration only includes the default options such as default buffer policies. Commands to manage the MDA remain in the MDA configuration context.

Some card hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two card types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the card occurs when switching between the two provisioned types.

An appropriate alarm is raised if a partial or complete card failure is detected. The alarm is cleared when the error condition ceases.

Options xcm-x20, imm40-10gb-sfp, imm4-100gb-cxp, iom4-e, iom-a, imm-1pac-fp3, imm-2pac-fp3, iom4-e-hs, imm4-100gb-cfp4, iom-e, iom-v, iom4-e-b, iom-sar-hm, xcm2-x20, iom-1, xcm-14s, imm40-10gb-sfp-ptp, iom-ixr-r6, imm36-100g-qsfp28, imm48-sfp+2-qsfp28, iom5-e, xcm-7s, imm48-sfp++6-qsfp28, xcm-1s, xcm-2s, imm24-sfp++8-sfp28+2-qsfp28, iom-sar-hmc, imm14-10g-sfp++4-1g-tx, iom-ixr-r4, imm6-qsfpdd+48-sfp56, imm32-qsfp28+4-qsfpdd, i48-800g-qsfpdd-1x, imm36-qsfpdd, imm4-1g-tx+20-1g-sfp+6-10g-sfp+, iom-ixr-r6d, xcm2-7s, i24-800g-qsfpdd-1, imm36-800g-qsfpdd, xcm2-14s, i48-400g-qsfpdd-1, i80-200g-sfpdd+12-400g-qsfpdd-1, i40-200g-sfpdd+6-800g-qsfpdd-1, i80-200g-sfpdd+12-800g-qsfpdd-1x, xcm-2se, xcm-14s-b, xcm-7s-b

Introduced	16.0.R1
Platforms	All

fail-on-error *boolean*

Synopsis Set operational state of the card to Failed upon error

Context **configure** *card number* **fail-on-error** *boolean*

Tree **fail-on-error**

Description When configured to **true**, this command controls the behavior of the card when any one of a specific set of card level errors is encountered in the system.

When the this command is set to **true**, and any one (or more) of the specific errors is detected, the operational state of the card is set to failed. This failed state persists until the **clear card** command is issued (reset) or the card is removed and reinserted (reseated). If the condition persists after reseating the card, contact Nokia support to investigate more.

Nokia only recommends configuring this command to **true** when the network is designed to be able to route traffic around a failed card (redundant cards, nodes, or other paths exist).

The list of specific errors includes the following:

CHASSIS event ID# 2063 - tmnxEqCardPChipMemoryEvent

CHASSIS event ID# 2076 - tmnxEqCardPChipCamEvent

CHASSIS event ID# 2059 - tmnxEqCardPChipError (for ingress Ethernet only)

CHASSIS event ID# 2098 - tmnxEqCardQChipBufMemoryEvent

CHASSIS event ID# 2099 - tmnxEqCardQChipStatsMemoryEvent

CHASSIS event ID# 2101 - tmnxEqCardQChipIntMemoryEvent

CHASSIS event ID# 2103 - tmnxEqCardChipIfCellEvent

On platforms with integrated CPM and IOM, IMM, or XCM, the node is rebooted if this command is set to **true** and one of the card level errors is encountered. The tmnxEqCardPChipError is only considered as a trigger for this command for ingress FCS errors (not egress FCS errors).

Note: On the detection of the event or error in the system, the reporting of the event (logs) and the fail-on-error behavior of the card are independent. Log event control configuration determines whether the events are reported in logs (or SNMP traps, and so on) and the fail-on-error configuration determines the behavior of the card. This implies that the card can be configured to fail-on-error even if the events are suppressed (some may be suppressed in the system by default). To facilitate post-failure analysis, Nokia recommends reporting the specific events or errors and that **configure log log-events** be enabled when this command is set to **true**.

Default	false
Introduced	16.0.R1

Platforms All

filter-profile *keyword*



WARNING:

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

Synopsis	Filter profile for the card
Context	configure <i>card number filter-profile keyword</i>
Tree	filter-profile
Description	This command controls the resources allocated to ingress and egress IPv4 and IPv6 filters on a per-line card basis on the SR-a platform.
Default	none
Options	none, profile-a
Introduced	19.10.R1
Platforms	7750 SR-a

fp [[fp-number](#)] *number*

Synopsis	Enter the fp list instance
Context	configure <i>card number fp number</i>
Tree	fp
Description	Commands in this context configure forwarding plane (FP) specific options on the card.
Introduced	16.0.R1
Platforms	All

[fp-number] *number*

Synopsis	Forwarding plane within the card
Context	configure <i>card number fp number</i>
Tree	fp
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure card number fp number egress
Tree	egress
Introduced	16.0.R1
Platforms	All

hs-fixed-high-thresh-delta *number*

Synopsis	High threshold delta on the forwarding plane
Context	configure card number fp number egress hs-fixed-high-thresh-delta <i>number</i>
Tree	hs-fixed-high-thresh-delta
Description	<p>This command specifies the egress aggregate shaper high burst limit threshold delta for this HSQ IOM FP.</p> <p>An aggregate rate can be applied to each egress HSQ queue group, HS secondary shaper, and (for subscribers configured with HS SLA expanded mode) primary shaper that manages the maximum burst limit over a specified shaping rate. Each aggregate shaper supports two thresholds that are used in conjunction with the low burst class setting. The system uses the lowest value attainable for each low threshold aggregate burst limit without causing shaper under run conditions.</p> <p>The high burst limit threshold is determined by adding the configured value of this command to the aggregate low burst limit threshold value. An operator must set this configured value to at least two times the maximum frame size to prevent lower threshold class forwarding from also affecting the higher threshold classes when forwarding larger packet sizes. An insufficiently high threshold delta defeats the intended purpose of mapping classes to the higher threshold.</p>
Range	0 to 65536
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-pool-policy *reference*

Synopsis	HS pool policy
Context	configure card number fp number egress hs-pool-policy <i>reference</i>
Tree	hs-pool-policy
Description	This command specifies the HS pool policy for the FP.

An HS pool policy contains the required parameters to create and size root and mid-tier buffer pools on an HSQ IOM, and applies a slope policy to each. A single HS pool policy is supported per port FP.

This command is only applicable to the HSQ IOM (iom4-e-hs) and fails if configured on other card types.

Reference	configure qos hs-pool-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

wred-queue-control

Synopsis	Enter the wred-queue-control context
Context	configure card number fp number egress wred-queue-control
Tree	wred-queue-control
Description	Commands in this context configure the aggregate Weighted Random Early Detection (WRED) queue options for all WRED queues on an egress forwarding plane.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the WRED queue control function
Context	configure card number fp number egress wred-queue-control admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

buffer-allocation *decimal-number*

Synopsis	Buffer allocation for WRED queue buffer pools
Context	configure card number fp number egress wred-queue-control buffer-allocation <i>decimal-number</i>
Tree	buffer-allocation
Description	This command defines the percentage of buffers to set aside for WRED queue buffer pools.

Range	0.01 to 99.99
Default	25.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reserved-cbs *decimal-number*

Synopsis	Buffers for queues operating within CBS thresholds
Context	configure card <i>number</i> fp <i>number</i> egress wred-queue-control reserved-cbs <i>decimal-number</i>
Tree	reserved-cbs
Description	<p>This command specifies the percentage of buffers within the WRED mega-pool to set aside for WRED queues operating within the configured CBS thresholds. The forwarding plane protects against WRED queue buffer starvation by setting aside a portion of the buffers within the WRED mega-pool.</p> <p>This threshold defines when a WRED queue requests buffers from the reserved portion of the WRED mega-pool and when it starts requesting buffers from the shared portion of the mega-pool. With proper oversubscription provisioning, a seldom active queue is not denied a buffer from the mega-pool when the shared portion of the mega-pool is congested.</p>
Range	0.01 to 99.99
Default	25.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slope-policy *reference*

Synopsis	Slope policy for the forwarding plane
Context	configure card <i>number</i> fp <i>number</i> egress wred-queue-control slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fp-resource-policy *reference***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Resource policy to manage resources on the FP
Context	configure <i>card number fp number fp-resource-policy reference</i>
Tree	fp-resource-policy
Description	<p>This command configures an FP resource policy used to manage resources on a forwarding plane that is FP4-based and later.</p> <p>The system creates a default policy that applies to all FP4 and later FPs. If an FP resource policy is removed from an FP, the system automatically applies the default policy to that FP. The system prevents the modification or deletion of the default policy, and the deletion of any user-created policy that is applied to an FP.</p>
Reference	configure qos fp-resource-policy string
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

hi-bw-mcast-src

Synopsis	Enable the hi-bw-mcast-src context
Context	configure <i>card number fp number hi-bw-mcast-src</i>
Tree	hi-bw-mcast-src
Description	<p>Commands in this context configure the attributes to designate the FP as a high-bandwidth IP multicast source, expecting the ingress traffic to include high-bandwidth IP multicast traffic.</p> <p>When configured, the system attempts to allocate a dedicated multicast switch fabric plane (MSFP) to the forwarding plane. When a group is specified, all FPs in the group share the same MSFP.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

alarm *boolean*

Synopsis	Raise an alarm when multiple traffic taps share a plane
Context	configure <i>card number fp number hi-bw-mcast-src alarm boolean</i>

Tree	alarm
Description	<p>When configured to true, the router generates an event if the MDA must share an MSFP with another MDA in a different group. MDAs within the same group that share an MSFP do not generate an event. Additionally, if a failure occurs during normal operation or resources are removed, the system generates an event if it cannot maintain separation of MSFPs for the MDAs.</p> <p>When configured to false, the router does not generate events.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

default-paths-only *boolean*

Synopsis	Allocate the default paths to dedicated MSFPs
Context	configure card number fp number hi-bw-mcast-src default-paths-only <i>boolean</i>
Tree	default-paths-only
Description	<p>When configured to true, the system only attempts to allocate the two default paths (one high priority and one low priority) to dedicated MSFPs.</p> <p>When configured to false, the default path allocation is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

group *number*

Synopsis	Logical MSFP group for the MDA
Context	configure card number fp number hi-bw-mcast-src group <i>number</i>
Tree	group
Description	<p>This command specifies the logical MSFP group for the MDA.</p> <p>If a group is specified, all FPs in the group share the same MSFP.</p>
Range	0 to 32
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

ingress

Synopsis	Enter the ingress context
Context	configure card <i>number</i> fp <i>number</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure card <i>number</i> fp <i>number</i> ingress access
Tree	access
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the queue-group list instance
Context	configure card <i>number</i> fp <i>number</i> ingress access queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Description	Commands in this context create a named queue group template on the ingress forwarding plane of an IOM or IMM.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[[queue-group-name](#)] *reference*

Synopsis	Queue group name
Context	configure card <i>number</i> fp <i>number</i> ingress access queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

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

instance-id *number*

Synopsis Instance ID

Context **configure** *card number fp number ingress access queue-group reference instance-id number*

Tree [queue-group](#)

Range 1 to 65535

Notes This element is part of a list key.

Introduced 16.0.R1

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

accounting-policy *reference*

Synopsis Accounting policy for the FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number accounting-policy reference*

Tree [accounting-policy](#)

Description This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.

Reference **configure** [log accounting-policy number](#)

Introduced 16.0.R1

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

collect-stats *boolean*

Synopsis Collect statistics on FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number collect-stats boolean*

Tree [collect-stats](#)

Description When configured to **true**, the system collects accounting and statistical data for the queue group on the FP.

When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.

If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure <i>card number fp number ingress access queue-group reference instance-id number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-control-policy

Synopsis	Enter the policer-control-policy context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy</i>
Tree	<i>policer-control-policy</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides</i>
Tree	<i>overrides</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum rate override
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Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides max-rate (number keyword)</i>
Tree	max-rate
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p> <p>If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds</i>
Tree	priority-mbs-thresholds
Description	<p>Commands in this context configure the derivative for the shared portion and fair portion for each priority level.</p> <p>The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.</p>
Introduced	16.0.R1

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

min-threshold-separation (*number* | *keyword*)

Synopsis Minimum separation between any two active thresholds

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (number | keyword)*

Tree [min-threshold-separation](#)

Description This command configures the minimum separation between any two active thresholds in the parent policer.

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

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

priority [*level*] *number*

Synopsis Enter the **priority** list instance

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Introduced 16.0.R1

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

[level] *number*

Synopsis Priority level, higher number is stricter

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

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

mbs-contribution (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number mbs-contribution</i> (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy policy-name reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-overrides

Synopsis	Enter the policer-overrides context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides</i>
Tree	policer-overrides
Description	Commands in this context configure specific overrides to one or more policers created on the SAP through SAP ingress QoS policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer [*policer-id*] *reference*

Synopsis	Enter the policer list instance
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>
Description	<p>Commands in this context create, modify, or delete a policer. Policers are created and used in a similar manner to queues. Unlike queues that have dedicated counters, policers allow various stat-mode settings that define the counters to be associated with the policer. Packet byte offset provides a policer with the ability to modify the size of each packet based on a defined number of bytes. All policers must be created within the QoS policies.</p> <p>After a policer is created, it cannot be deleted from the QoS policy unless all forwarding classes mapped to the policer are first moved to other policers or queues.</p> <p>The system allows a policer to be created on a SAP QoS policy regardless of the ability to support policers on objects where the policy is currently applied. The system only scans the current objects for policer support and sufficient resources to create the policer when a forwarding class is first mapped to the policer ID. If the policer cannot be created because one or more instances of the policy do not support policing or have insufficient resources to create the policer, the forwarding class mapping fails.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis	Policer ID
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>
Reference	configure <i>qos queue-group-templates ingress queue-group string policer number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference cbs (number keyword)</i>

Tree	cbs
Description	This command configures the CIR leaky bucket exceed threshold of the policer. If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	configure card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Description	This command configures the PIR leaky bucket violate threshold of the policer. Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold. If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate. The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size adjustment
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Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	packet-byte-offset
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	rate
Description	<p>Commands in this context configure the metering and optional profiling rates of the policer.</p> <p>The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR for the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate cir (number keyword)</i>
Tree	cir
Description	<p>This command overrides the default CIR rate of the policer.</p> <p>When the policer is first created, the profiling rate defaults to 0 kb/s.</p>

When **max** is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.

Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR for the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate pir</i> (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference stat-mode keyword</i>
Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure <i>card number</i> <i>fp number</i> <i>ingress</i> dist-cpu-protection
Tree	dist-cpu-protection
Description	Commands in this context configure the distributed CPU protection forwarding plane settings.
Introduced	21.2.R1
Platforms	All

dynamic-enforcement-policer-pool *number*

Synopsis	Number of policers reserved as enforcement policers use
Context	configure <i>card number</i> <i>fp number</i> <i>ingress</i> dist-cpu-protection dynamic-enforcement-policer-pool <i>number</i>
Tree	dynamic-enforcement-policer-pool
Description	<p>This command reserves a set of policers for use as dynamic enforcement policers for the Distributed CPU Protection (DCP) feature. Policers are allocated from this pool and instantiated as per-object per-protocol dynamic enforcement policers after a local monitor is triggered for an object, such as a SAP or network interface.</p> <p>A change to this configured value automatically clears the high water mark, timestamp, and failed allocation count.</p> <p>If the command is configured to a value below the currently used or allocated number, all dynamic policers are returned to the free pool (and traffic returns to the local monitors).</p>
Range	1000 to 32000
Introduced	21.2.R1
Platforms	All

mcast-path-management

Synopsis	Enter the mcast-path-management context
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Context	configure card <i>number</i> fp <i>number</i> ingress mcast-path-management
Tree	mcast-path-management
Description	Commands in this context configure the IOM ingress multicast path management forwarding plane settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of multicast path management
Context	configure card <i>number</i> fp <i>number</i> ingress mcast-path-management admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bandwidth-policy *reference*

Synopsis	Bandwidth policy for ingress multicast path management
Context	configure card <i>number</i> fp <i>number</i> ingress mcast-path-management bandwidth-policy <i>reference</i>
Tree	bandwidth-policy
Description	<p>This command specifies the bandwidth policy associated with the forwarding plane.</p> <p>The bandwidth policy defines the dynamic rate table and the multicast paths bandwidth and queuing parameters.</p> <p>If a bandwidth policy is not explicitly associated with a forwarding plane, the default bandwidth policy is used with ingress multicast path management.</p>
Reference	configure multicast-management bandwidth-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

network

Synopsis	Enter the network context
Context	configure card <i>number</i> fp <i>number</i> ingress network
Tree	network
Description	Commands in this context configure the IOM ingress network forwarding plane settings.
Introduced	16.0.R1
Platforms	All

pool [[name](#)] *string*

Synopsis	Enter the pool list instance
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>string</i>
Tree	pool
Description	Commands in this context configure the list of forwarding plane ingress network pool settings.
Introduced	19.5.R1
Platforms	All

[name] *string*

Synopsis	Network ingress pool name for the FP
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Amber alarm threshold allowed on oversubscription
Context	configure card <i>number</i> fp <i>number</i> ingress network pool <i>string</i> amber-alarm-threshold <i>number</i>
Tree	amber-alarm-threshold
Description	This command configures the threshold for the amber alarm on oversubscription.

If both amber and red alarm thresholds are configured, the amber alarm threshold must be equal to or less than the red alarm threshold.

Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Red alarm threshold allowed on oversubscription
Context	configure <i>card number fp number ingress network pool string red-alarm-threshold number</i>
Tree	red-alarm-threshold
Description	This command configures the threshold for the red alarm on oversubscription. If both amber and red alarm thresholds are configured, the red alarm threshold must be equal to or exceed the amber alarm threshold.
Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure <i>card number fp number ingress network pool string resv-cbs</i>
Tree	resv-cbs
Description	Commands in this context specify the pool buffer settings. The commands do not set aside buffers within the buffer pool for CBS reservation. The CBS value per queue only determines the point at which enqueueing packets are subject to a RED slope. CBS oversubscription can result in a queue operating within its CBS configuration and still being unable to enqueue a packet due to unavailable buffers.
Introduced	19.5.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
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Context	configure card number fp number ingress network pool string resv-cbs amber-alarm-action
Tree	amber-alarm-action
Description	<p>Commands in this context specify settings for the reserved Committed Burst Size (CBS) and step change when the amber alert threshold is exceeded.</p> <p>The reserved CBS defines the amount of buffer space within the pool that is not considered shared.</p>
Introduced	19.5.R1
Platforms	All

max number

Synopsis	Maximum reserved CBS size of the pool
Context	configure card number fp number ingress network pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command configures the maximum reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the step command must be configured.</p> <p>The value for this command must not be more than the configure card fp ingress network pool resv-cbs cbs command.</p> <p>When the configure card fp ingress network pool resv-cbs cbs command is set to a value of zero (0), adaptive CBS sizing is disabled.</p>
Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS size of the pool
Context	configure card number fp number ingress network pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command configures the step-size percentage for the reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the max command must be configured.</p>

When the **configure card fp ingress network pool resv-cbs cbs** command is set to a value of zero (0), adaptive CBS sizing is disabled.

Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

cbs *number*

Synopsis	Pool size reserved for CBS
Context	configure card number fp number ingress network pool string resv-cbs cbs number
Tree	cbs
Description	This command configures the percentage of pool size reserved for CBS. For network, the default value is computed as the sum of the CBS request by the entities using the pool. For access, the default value is 30%.
Range	0 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

slope-policy *reference*

Synopsis	Slope policy
Context	configure card number fp number ingress network pool string slope-policy reference
Tree	slope-policy
Description	This command specifies the slope policy that defines the high and low priority RED slope parameters and the time average factor.
Reference	configure qos slope-policy string
Introduced	19.5.R1
Platforms	All

queue-group [*queue-group-name*] *reference instance-id number*

Synopsis	Enter the queue-group list instance
Context	configure card number fp number ingress network queue-group reference instance-id number

Tree	queue-group
Description	Commands in this context configure IOM ingress network forwarding plane queue-group settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[queue-group-name] reference

Synopsis	Queue group name
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

instance-id number

Synopsis	Instance ID
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

accounting-policy reference

Synopsis	Accounting policy for the FP ingress queue group
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> accounting-policy <i>reference</i>
Tree	accounting-policy

Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

collect-stats *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Description	<p>When configured to true, the system collects accounting and statistical data for the queue group on the FP.</p> <p>When configured to false, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.</p> <p>If this command is set to true (after it had previously been set to false), the counters written to the billing file include the traffic collected when the command was set to false.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure card <i>number</i> fp <i>number</i> ingress network queue-group <i>reference</i> instance-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-control-policy

Synopsis	Enter the policer-control-policy context
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Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy</i>
Tree	policer-control-policy
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis	Enable the overrides context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides</i>
Tree	overrides
Description	Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy override settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis	Maximum rate override
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides max-rate (number keyword)</i>
Tree	max-rate
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p>

If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis	Enter the priority-mbs-thresholds context
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds
Tree	priority-mbs-thresholds
Description	Commands in this context configure settings to derive the shared portion and fair portion for each priority level. The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-threshold-separation (*number* | *keyword*)

Synopsis	Minimum separation between any two active thresholds
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (<i>number</i> <i>keyword</i>)
Tree	min-threshold-separation
Description	This command configures the minimum separation between any two active thresholds in the parent policer.
Range	0 to 16777216
Units	bytes
Options	auto

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[level](#)] *number*

Synopsis	Enter the priority list instance
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority <i>number</i>
Tree	priority
Description	Commands in this context configure the list of priority MBS threshold priority settings for IOM ingress network forwarding plane queue-group policer control policy overrides.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[level] *number*

Synopsis	Priority level, higher number is stricter
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	configure card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes

Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis	Policer control policy name
Context	configure <i>card number fp number ingress network queue-group reference instance-id number</i> policer-control-policy <i>policy-name reference</i>
Tree	policy-name
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer-overrides

Synopsis	Enter the policer-overrides context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number</i> policer-overrides
Tree	policer-overrides
Description	Commands in this context configure the policer overrides for the IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer [[policer-id](#)] *reference*

Synopsis	Enter the policer list instance
Context	configure <i>card number fp number ingress network queue-group reference instance-id number</i> policer-overrides policer <i>reference</i>
Tree	policer
Description	Commands in this context configure the list of policer override parameters for IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] reference

Synopsis	Policer ID
Context	configure card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference
Tree	policer
Reference	configure qos queue-group-templates ingress queue-group string policer number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (number | keyword)

Synopsis	CBS tolerance allowed by the policer
Context	configure card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference cbs (number keyword)
Tree	cbs
Description	This command configures the CIR leaky bucket exceed threshold of the policer. If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (number | keyword)

Synopsis	Maximum burst tolerance allowed by the policer
Context	configure card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference mbs (number keyword)
Tree	mbs
Description	This command configures the PIR leaky bucket violate threshold of the policer. Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.

If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.

The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size adjustment
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	packet-byte-offset
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate</i>
Tree	rate
Description	Commands in this context configure the metering and optional profiling rates of the policer.

The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	CIR for the policer
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate cir (number keyword)</i>
Tree	cir
Description	This command overrides the default CIR rate of the policer. When the policer is first created, the profiling rate defaults to 0 kb/s. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	PIR for the policer
Context	configure <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference rate pir (number keyword)</i>
Tree	pir
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When max is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Stat mode for the policer
Context	configure card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference stat-mode <i>keyword</i>
Tree	stat-mode
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-policy *reference*

Synopsis	Network queue policy
Context	configure card number fp number ingress network queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue string
Introduced	19.5.R1
Platforms	All

policy-accounting

Synopsis	Enter the policy-accounting context
Context	configure card number fp number ingress policy-accounting
Tree	policy-accounting
Description	Commands in this context configure policy accounting. Use policy accounting to collect statistics about the amount of traffic matching particular routes or to police traffic associated with certain routes as destinations of the traffic.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

classes *number*

Synopsis	Number of accounting classes for the forwarding plane
Context	configure <i>card number fp number ingress policy-accounting classes number</i>
Tree	classes
Description	This command specifies the maximum number of source and destination classes that can be instantiated for accounting purposes on the interfaces of a specific card or FP. When unconfigured, resources are not reserved for source or destination classes.
Range	1000 to 128000
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policers *number*

Synopsis	Number of policer resources for policy accounting
Context	configure <i>card number fp number ingress policy-accounting policers number</i>
Tree	policers
Range	1 to 64000
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-buffer-allocation *decimal-number*

Synopsis	Ingress buffer pool allocation for the forwarding plane
Context	configure <i>card number fp number ingress-buffer-allocation decimal-number</i>
Tree	ingress-buffer-allocation
Description	This command configures an ingress buffer allocation for the FP. Ingress buffer allocation applies to user-accessible buffers (total buffers less those reserved for system use). The ingress buffer allocation determines how much of the user-accessible buffers are available for ingress purposes. The remaining buffers are available for egress purposes.
Range	20.00 to 80.00
Default	50.00

Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

init-extract-prio-mode *keyword*

Synopsis	Initial drop priority mode of extracted traffic
Context	configure <i>card number fp number</i> init-extract-prio-mode <i>keyword</i>
Tree	init-extract-prio-mode
Description	<p>This command specifies the scheme to select the initial drop priority of extracted control plane traffic.</p> <p>The initial drop priority of extracted packets can be either low or high priority. The drop priority can be altered subsequently by mechanisms such as CPU protection.</p> <p>High priority traffic receives preferential treatment in control plane congestion situations over low priority traffic.</p>
Default	uniform
Options	uniform, l3-classify
Introduced	16.0.R1
Platforms	All

stable-pool-sizing *boolean*

Synopsis	Enable stable pool sizing for the forwarding plane
Context	configure <i>card number fp number</i> stable-pool-sizing <i>boolean</i>
Tree	stable-pool-sizing
Description	<p>When configured to true, the router provides a stable buffer pool allocation environment for all default port buffer pools on the forwarding plane. This stable environment is provided at the expense of optimal buffer allocation between the various port buffer pools.</p> <p>When configured to false, the router disables stable pool sizing on the forwarding plane. Existing buffer pools are resized according to normal pool sizing behavior.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level keyword**WARNING:**

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

Synopsis	License level of the card
Context	configure card number level keyword
Tree	level
Description	<p>This command configures the license level of the card.</p> <p>New generations of cards include variants controlled by hardware and software licensing. For these cards, the license level must be provisioned in addition to the card type. A card cannot become operational unless the provisioned license level matches the license level of the card installed into the slot. The set of license levels varies by card type.</p> <p>The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress user queues and egress policers. Changes to the provisioned license level may be blocked if configuration exists that would not be permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for that card.</p>
Options	unrestricted, he, er, cr, he1200g+, er1200g+, cr1200g+, he400g, er400g, cr400g, he400g+, er400g+, cr400g+, he800g+, er800g+, cr800g+, he4800g+, er4800g+, cr4800g+, he4800g, er4800g, cr4800g, he2400g+, er2400g+, cr2400g+, he2400g, er2400g, cr2400g, he9600g, er9600g, cr9600g, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he2800g+, er2800g+, cr2800g+, he6000g+, er6000g+, cr6000g+, he18000g+, er18000g+, cr18000g+, he19200g, er19200g, cr19200g
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

mda [mda-slot] number

Synopsis	Enter the mda list instance
Context	configure card number mda number
Tree	mda
Description	Commands in this context cover attributes for specific MDA and XMA.
Introduced	16.0.R1
Platforms	All

[mda-slot] number

Synopsis	MDA or XMA slot
Context	configure card <i>number</i> mda <i>number</i>
Tree	mda
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure card <i>number</i> mda <i>number</i> access
Tree	access
Description	Commands in this context configure egress and ingress pool policy parameters. Access egress and ingress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure card <i>number</i> mda <i>number</i> access egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure card <i>number</i> mda <i>number</i> access ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	configure <i>card number mda number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

egress-xpl

Synopsis	Enter the egress-xpl context
Context	configure <i>card number mda number egress-xpl</i>
Tree	egress-xpl
Description	Commands in this context specify settings for the fail-on-error feature.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	Threshold value for XPL errors
Context	configure <i>card number mda number egress-xpl threshold number</i>
Tree	threshold
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the window value command, the MDA is placed in the failed state.
Range	1 to 1000000
Default	1000
Units	xpl errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window number

Synopsis	Time interval to measure XPL error frequency
Context	configure <i>card number mda number egress-xpl window number</i>
Tree	<i>window</i>
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Default	60
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event [type] keyword

Synopsis	Enter the event list instance
Context	configure <i>card number mda number event keyword</i>
Tree	<i>event</i>
Description	Commands in this context allow the user to control the action taken when a specific hardware error event is raised against the target MDA. If no event action has been created for a specific event type, the management plane of the router ignores the hardware errors related to that event type.
Introduced	19.7.R1
Platforms	All

[type] keyword

Synopsis	MDA event type being monitored
Context	configure <i>card number mda number event keyword</i>
Tree	<i>event</i>
Description	This command configures the type of event to be acted upon. <ul style="list-style-type: none"> • <i>soft-error</i> — Defines the action to take when soft errors are detected on the MDA. • <i>internal-frame-loss</i> — Provides system detected frame loss in the traffic transiting the MDA. • <i>memory-error</i> — Provides the user options to handle MDA memory error events on MDAs. This feature is supported on FP2- and FP3-based Ethernet MDAs and IMMs.

	<ul style="list-style-type: none"> • data-link-error — Provides the user options to handle datapath link errors on an MDA.
Options	soft-error, internal-frame-loss, memory-error, datapath-link-error
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

action *keyword*

Synopsis	Action when a specific hardware error event is raised
Context	configure <i>card number</i> <i>mda number</i> <i>event keyword</i> <i>action keyword</i>
Tree	<i>action</i>
Description	<p>This command defines the action taken when a specific hardware error event is detected on the target MDA.</p> <p>When no event action is specified for an event type, the hardware errors related to the event type are ignored by the management plane of the router.</p> <p>Actions include the following:</p> <ul style="list-style-type: none"> • log-only — Pass the log event to log management. No other action is taken. • reset-md — Reset the MDA. • fail-md — Set the operational state of the MDA to Failed. This Failed state persists until the clear mda command is issued (reset) or the MDA is removed and reinserted (re-seated).
Options	none, log-only, reset, fail
Introduced	19.7.R1
Platforms	All

fail-on-error *boolean*

Synopsis	Set operational state to Failed if an error is detected
Context	configure <i>card number</i> <i>mda number</i> <i>fail-on-error boolean</i>
Tree	<i>fail-on-error</i>
Description	<p>When configured to true, the fail-on-error feature is enabled on the MDA. When a defined rate of egress or ingress XPL errors occur on an MDA within a specified time interval, the MDA is placed in the Failed state. This can force an APS switchover or traffic to be rerouted.</p> <p>The purpose of this feature is to avoid situations where traffic is forced to use a physical link that suffers from errors but is still technically operational. The feature uses values configured in the configure card mda egress-xpl and configure card mda ingress-xpl contexts.</p>

See "Fail-on-error overview" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Troubleshooting Guide* for more information.

Default	false
Introduced	16.0.R1
Platforms	All

ingress-xpl

Synopsis	Enter the ingress-xpl context
Context	configure <i>card number mda number</i> ingress-xpl
Tree	ingress-xpl
Description	Commands in this context specify settings for ingress XPL error occurrences.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold number

Synopsis	Threshold value for XPL errors
Context	configure <i>card number mda number</i> ingress-xpl threshold number
Tree	threshold
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the window value command, the MDA is placed in the failed state.
Range	1 to 1000000
Default	1000
Units	xpl errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window number

Synopsis	Time interval to measure XPL error frequency
Context	configure <i>card number mda number</i> ingress-xpl window number
Tree	window

Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Default	60
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level keyword



WARNING:

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

Synopsis	MDA card level
Context	configure card number mda number level keyword
Tree	level
Options	unrestricted, he2400g, he1600g, he1200g, er2400g, er1600g, er1200g, cr2400g, cr1600g, cr1200g, he2400g+, er2400g+, cr2400g+, he3600g, er3600g, cr3600g, he3600gdd, er3600gdd, cr3600gdd, he4800g, er4800g, cr4800g, he4800g+, er4800g+, cr4800g+, he600g, er600g, cr600g, he1200g+, er1200g+, cr1200g+, he2400g+4t, er2400g+4t, cr2400g+4t, he9600g, er9600g, cr9600g, he9600g+, er9600g+, cr9600g+, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he12000g+, er12000g+, cr12000g+, he18000g+, er18000g+, cr18000g+
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mda-type keyword



WARNING:

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

Synopsis	MDA type for the slot
Context	configure card number mda number mda-type keyword
Tree	mda-type
Description	This command provisions a specific MDA type to the device configuration for the slot. The MDA can be pre-provisioned and an MDA must be provisioned before connectors or ports can be configured.

A maximum of two MDAs can be provisioned on an IOM or XCM. XMAs are provisioned using MDA commands.

A medium severity alarm is generated if an MDA is inserted that does not match the MDA type configured for the slot. This alarm is cleared when the correct MDA is inserted or the configuration is modified. A high severity alarm is raised when an administratively enabled MDA is removed from the chassis. This alarm is cleared if either the correct MDA type is inserted or the configuration is modified. A low severity alarm is issued if an MDA is removed that is administratively disabled.

An MDA can only be provisioned in a slot if the MDA type is allowed in the MDA slot. An error message is generated when an MDA is provisioned in a slot where it is not allowed.

Some MDA hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two MDA types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the MDA occurs when switching between the two provisioned types.

An alarm is raised if partial or complete MDA failure is detected. The alarm is cleared when the error condition ceases.

New generations of XMAs include variants controlled through hardware and software licensing. For these XMAs, the license level must be provisioned in addition to the MDA type. An XMA cannot become operational unless the provisioned license level matches the license level of the XMA installed into the slot.

The set of license levels varies by MDA type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress queues and egress policers. Changes to the provisioned license level may be blocked if configuration that would not be permitted with the new target license level exists. If the license level is not specified, the level is set to the highest license level for that XMA.

Options

x12-400g-qsfpdd, x6-200g-cfp2-dco, cx20-10g-sfp, cx2-100g-cfp, p10-10g-sfp, p1-100g-cfp, p3-40g-qsfp, p6-10g-sfp, x40-10g-sfp, m40-10g-sfp, x4-100g-cxp, cx6-40g-qsfp, m4-100g-cxp, p20-1gb-sfp, s36-100gb-qsfp28-3.6t, p-isa2-ms, p-isa2-ms-e, isa2-aa, isa2-tunnel, isa2-bb, x4-100g-cfp2, cx72-1g-csfp, maxp1-100gb-cfp, ma4-10gb-sfp+, maxp10-10gb-sfp+, me10-10gb-sfp+, ma2-10gb-sfp+12-1gb-sfp, maxp6-10gb-sfp+1-40gb-qsfp+, ma44-1gb-csfp, ma20-1gb-tx, m20-10g-sfp+, me1-100gb-cfp2, m4-100g-cfp4, p1-100g-tun-b, maxp1-100gb-cfp2, maxp1-100gb-cfp4, isa-ms-v, isa-aa-v, isa-tunnel-v, isa-bb-v, m20-v, me-isa2-ms, me-isa2-ms-e, me40-1gb-csfp, m4-1g-tx+20-1g-sfp+6-10g-sfp+, me2-100gb-cfp4, me6-10gb-sfp+, isa2-video, me2-100gb-qsfp28, i6-10/100eth-tx, x2-100g-tun, i2-sdi, i2-cellular, me12-10/1gb-sfp+, me16-25gb-sfp28+2-100gb-qsfp28, me6-100gb-qsfp28, x6-400g-cfp8, me2-100gb-ms-qsfp28, s18-100gb-qsfp28, x40-10g-sfp-ptp, m40-10g-sfp-ptp, m36-100g-qsfp28, m48-sfp+2-qsfp28, m10-10g-sfp+, m20-1g-csfp, m6-10g-sfp++1-100g-qsfp28, me3-200gb-cfp2-dco, x24-100g-qsfp28, me12-100gb-qsfp28, i1-wlan, s36-400gb-qsfpdd, m24-sfp++8-sfp28+2-qsfp28, s36-100gb-qsfp28, a32-chds1v2, m48-sfp++6-qsfp28, maxp10-10/1gb-msec-sfp+, m4-10g-sfp++1-100g-cfp2, i3-10/100eth-tx, me3-400gb-qsfpdd, m18-25g-sfp28, m14-10g-sfp++4-1g-tx, m6-10g-sfp++4-25g-sfp28, me6-400gb-qsfpdd, me8-10/25gb-sfp28, m10-1g-sfp+2-10g-sfp+, m6-qsfpdd+48-sfp56, m32-qsfp28+4-qsfpdd, m36-qsfpdd, m1-400g-qsfpdd+1-100g-qsfp28,

m5-100g-qsfp28, m48-800g-qsfpdd-1x, m24-800g-qsfpdd-1, ms36-800g-qsfpdd, x2-s36-800g-qsfpdd-18.0t, m48-400g-qsfpdd-1, m80-200g-sfpdd+12-800g-qsfpdd-1x, m40-200g-sfpdd+6-800g-qsfpdd-1, m80-200g-sfpdd+12-400g-qsfpdd-1, m46-10g-sfp+, m2-cfp2, x2-s36-800g-qsfpdd-12.0t, me16-25gb-sfp28+2-100gb-qsfp-b, m10-50g-sfp56

Introduced 16.0.R1

Platforms All

network

Synopsis Enter the **network** context

Context **configure** *card number mda number network*

Tree [network](#)

Description Commands in this context configure egress and ingress pool policy parameters for the network. Network egress pools are only allocated on channelized MDAs.

Introduced 16.0.R1

Platforms All

egress

Synopsis Enter the **egress** context

Context **configure** *card number mda number network egress*

Tree [egress](#)

Introduced 16.0.R1

Platforms All

ingress

Synopsis Enter the **ingress** context

Context **configure** *card number mda number network ingress*

Tree [ingress](#)

Introduced 16.0.R1

Platforms All

power-priority-level *number*

Synopsis Power priority level for the MDA

Context **configure** *card number mda number power-priority-level number*

Tree	power-priority-level
Range	1 to 200
Default	150
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

reset-on-recoverable-error *boolean*

Synopsis	Reset MDA for fatal memory parity error on a Q-chip
Context	configure card <i>number</i> mda <i>number</i> reset-on-recoverable-error <i>boolean</i>
Tree	reset-on-recoverable-error
Description	When configured to true , the MDA resets when a fatal memory parity error is detected on a Q-chip of the MDA, regardless of the setting of the fail-on-error configuration for the MDA. When configured to false , the recovery action is taken instead of resetting the MDA.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

sync-e *keyword*

Synopsis	Synchronous Ethernet capability
Context	configure card <i>number</i> mda <i>number</i> sync-e <i>keyword</i>
Tree	sync-e
Description	This command enables synchronous Ethernet on the MDA. When enabled, any port on the MDA can be used as a source port in the central frequency clock configuration, under the configure system central-frequency-clock context.
Options	true, false
Introduced	16.0.R1
Platforms	All

upgrade [[upgrade-index](#)] *number*

Synopsis	Enter the upgrade list instance
Context	configure card <i>number</i> mda <i>number</i> upgrade <i>number</i>
Tree	upgrade

Description	<p>Commands in this context configure the license level upgrade for the MDA. You can apply multiple upgrades to an MDA. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, remove the largest index first, followed by the next largest, and so on.</p> <p>Some upgrades require a hard reset of the MDA to take effect. In general, this is required when the full duplex bandwidth changes as a result of the upgrade.</p>
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

[upgrade-index] *number*

Synopsis	Order of the upgrade instance
Context	configure <i>card number mda number upgrade number</i>
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

path *keyword*



WARNING:

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

Synopsis	Upgrade path of the MDA for the slot
Context	configure <i>card number mda number upgrade number path keyword</i>
Tree	path
Description	This command configures the upgrade path for the MDA in the slot. The path indicates the starting level and the new level that is applied due to the upgrade.
Options	<p>cr1200g-cr1600g, cr1600g-cr2400g, er1200g-er1600g, er1600g-er2400g, he1200g-he1600g, he1600g-he2400g, cr1200g-er1200g, er1200g-he1200g, cr1600g-er1600g, er1600g-he1600g, cr2400g-er2400g, er2400g-he2400g, any2400g-2400g+, cr3600g-cr4800g, er3600g-er4800g, he3600g-he4800g, cr3600g-er3600g, er3600g-he3600g, cr4800g-er4800g, er4800g-he4800g, any3600g-3600gdd, any4800g-4800g+, cr600g-cr1200g, er600g-er1200g, he600g-he1200g, cr600g-er600g, er600g-he600g, any1200g-1200g+, any2400g-2400g+4t, cr-er9600g, er-he9600g, any9600g-9600g+, cr-er14400g, er-he14400g, any14400g-14400g+, he9600g-he12000g+, er9600g-er12000g+,</p>

	cr9600g-cr12000g+, he14400g-he18000g+, er14400g-er18000g+, cr14400g-cr18000g+, cr-er12000g+, er-he12000g+, cr-er18000g+, er-he18000g+
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

xconnect

Synopsis	Enter the xconnect context
Context	configure <i>card number mda number xconnect</i>
Tree	<i>xconnect</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

mac [*mac-id*] *number*

Synopsis	Enter the mac list instance
Context	configure <i>card number mda number xconnect mac number</i>
Tree	<i>mac</i>
Description	Commands in this context configure the attributes of the MDA loopback (cross-connect) in the MAC chip.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[*mac-id*] *number*

Synopsis	MAC ID for the MDA cross-connect
Context	configure <i>card number mda number xconnect mac number</i>
Tree	<i>mac</i>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure <i>card number mda number xconnect mac number description string</i>
Tree	<i>description</i>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

loopback [*loopback-id*] *number*

Synopsis	Enter the loopback list instance
Context	configure <i>card number mda number xconnect mac number loopback number</i>
Tree	<i>loopback</i>
Description	Commands in this context configure the attributes of the loopback on a MAC chip. The system and services can start using the loopback only when a port is associated with it (for example, port 1/1/m1/1, where m1 represents the MAC ID).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[loopback-id] *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	configure <i>card number mda number xconnect mac number loopback number</i>
Tree	<i>loopback</i>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

bandwidth *number***WARNING:**

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

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
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Context	configure <i>card number mda number xconnect mac number loopback number bandwidth number</i>
Tree	<i>bandwidth</i>
Range	10 25 40 100 400
Default	100
Units	gigabps
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure <i>card number mda number xconnect mac number loopback number description string</i>
Tree	<i>description</i>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

power-save *boolean*

Synopsis	Place card in power-save mode when not in use
Context	configure <i>card number power-save boolean</i>
Tree	<i>power-save</i>
Description	<p>When configured to true, this command enables the power-save mode on the card when it is not in use. The power-save mode allows the card to be installed and configured in a platform for future use, while having minimal impact on the overall power consumption.</p> <p>A card placed in the power-save mode is reset, forced into an idle state, and consumes minimal power. In power save mode, the download of a software image to the card is not allowed. The card must be administratively disabled before it is placed in the power-save mode.</p> <p>Cards in the power save mode do not count in the intelligent power management budget and they also do not pass traffic.</p> <p>When configured to false, this command removes the card from power-save mode.</p>
Default	false
Introduced	19.5.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a8, 7750 SR-2e, 7750 SR-3e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

reset-on-recoverable-error *boolean*

Synopsis Reset card for fatal memory parity error on a Q-chip

Context **configure** *card number* **reset-on-recoverable-error** *boolean*

Tree **reset-on-recoverable-error**

Description When configured to **true**, the card is reset when a fatal memory parity error is detected on a Q-chip of the card, regardless of the setting of the **fail-on-error** configuration for the card.

When configured to **false**, the recovery action is taken instead of resetting the card.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e

upgrade [*upgrade-index*] *number*

Synopsis Enter the **upgrade** list instance

Context **configure** *card number* **upgrade** *number*

Tree **upgrade**

Description Commands in this context assign a license level upgrade to the card, XIOM, or XMA. There can be multiple upgrades applied to a card, XIOM, or XMA. The first upgrade must use index 1, and then next index 2, and so on. Also, when removing upgrades, the largest index must be removed first, and then the next largest removed, and so on.

The path indicates the starting level and the new level that will apply due to the upgrade. For example, "cr1200g-cr1600g" can be applied to an XMA that is currently at the cr1200g level and after application of the upgrade, the operational level of the XMA will be cr1600g.

There must be an upgrade license available for the path specified. Available upgrades can be checked using the **show licensing entitlements** command.

Some upgrades require a hard reset of the card or MDA to take effect. In general, this is required when the Full Duplex bandwidth is being changed.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-1se

[upgrade-index] *number*

Synopsis Order of the upgrade value

Context	configure card number upgrade number
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

path keyword



WARNING:

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

Synopsis	Upgrade path of the target module for the slot
Context	configure card number upgrade number path keyword
Tree	path
Description	This command configures the upgrade path associated with the upgrade instance for the target module in the slot. The path indicates the starting level and the new level that applies during the upgrade.
Options	cr-er, er-he, cr400g-cr1200g+, er400g-er1200g+, he400g-he1200g+, cr-er1200g+, er-he1200g+, cr-er400g+, er-he400g+, cr-er800g+, er-he800g+, cr400g-cr800g+, er400g-er800g+, he400g-he800g+, cr800g-cr1200g+, er800g-er1200g+, he800g-he1200g+, cr-er2400g, er-he2400g, any2400g-2400g+, cr-er4800g, er-he4800g, any4800g-4800g+, cr-er9600g, er-he9600g, cr-er14400g, er-he14400g, he9600g-he14400g, er9600g-er14400g, cr9600g-cr14400g, any14400g-14400g+, any2400g-2800g+, any4800g-6000g+, any14400g-18000g+, he2400g-he2800g+, er2400g-er2800g+, cr2400g-cr2800g+, he4800g-he6000g+, er4800g-er6000g+, cr4800g-cr6000g+, he14400g-he19200g, er14400g-er19200g, cr14400g-cr19200g, cr-er2800g+, er-he2800g+, cr-er6000g+, er-he6000g+, cr-er19200g, er-he19200g
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

virtual-scheduler-adjustment

Synopsis	Enter the virtual-scheduler-adjustment context
Context	configure card number virtual-scheduler-adjustment
Tree	virtual-scheduler-adjustment

Description	Commands in this context configure virtual scheduler options. This is applicable to queues and policiers associated to a scheduler.
Introduced	16.0.R1
Platforms	All

internal-scheduler-weight-mode *keyword*

Synopsis	Internal scheduler weight mode
Context	configure card <i>number</i> virtual-scheduler-adjustment internal-scheduler-weight-mode <i>keyword</i>
Tree	internal-scheduler-weight-mode
Description	This command specifies the internal scheduler (tier 0) weight mode for all ingress queues on a LAG on the card on which it is applied.
Default	auto
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

interval

Synopsis	Enter the interval context
Context	configure card <i>number</i> virtual-scheduler-adjustment interval
Tree	interval
Introduced	16.0.R1
Platforms	All

rate-calculation-minimum

Synopsis	Enter the rate-calculation-minimum context
Context	configure card <i>number</i> virtual-scheduler-adjustment interval rate-calculation-minimum
Tree	rate-calculation-minimum
Description	Commands in this context override the default minimum time that must elapse before a policer or queue's offered rate can be recalculated. A minimum time between offered rate calculations is enforced to both prevent inaccurate estimation of the offered rate and excessive input to the virtual scheduler process.

To smooth out rapidly fluctuating offered rates, the system averages the measured offered rate with a window of previously measured offered traffic statistics and knowledge of the time between the samples.

Introduced 16.0.R1

Platforms All

fast-queue *decimal-number*

Synopsis Minimum rate calculation time for fast queues

Context **configure** *card number* [virtual-scheduler-adjustment interval rate-calculation-minimum fast-queue decimal-number](#)

Tree [fast-queue](#)

Range 0.01 to 1000.00

Default 100.00

Units percent

Introduced 16.0.R1

Platforms All

slow-queue *decimal-number*

Synopsis Minimum rate calculation time for slow queues

Context **configure** *card number* [virtual-scheduler-adjustment interval rate-calculation-minimum slow-queue decimal-number](#)

Tree [slow-queue](#)

Range 0.01 to 1000.00

Default 100.00

Units percent

Introduced 16.0.R1

Platforms All

scheduler-run-minimum *decimal-number*

Synopsis Minimum time of the scheduler run

Context **configure** *card number* [virtual-scheduler-adjustment interval scheduler-run-minimum decimal-number](#)

Tree [scheduler-run-minimum](#)

Description	This command overrides the default minimum time that must elapse before a virtual scheduler can redistribute bandwidth based on changes to the offered rates of member policers or queues. A minimum run interval is enforced to manage the number of batched queue changes before reacting to the changed rates. Because the periodic function of determining policer or queue offered rates is performed sequentially, the interval allows the policer and queue rates to be determined before the bandwidth distribution to the policers and queues.
Range	0.01 to 1000.00
Default	100.00
Units	percent
Introduced	16.0.R1
Platforms	All

task-scheduling *decimal-number*

Synopsis	Task scheduling interval
Context	configure <i>card number</i> virtual-scheduler-adjustment interval task-scheduling <i>decimal-number</i>
Tree	task-scheduling
Description	This command overrides the system default time interval for scheduling the hierarchical virtual scheduler task. By default, the system wakes the virtual scheduler task every 50 ms which is equivalent to five 10 ms timer ticks.
Range	0.01 to 1000.00
Default	100.00
Units	percent
Introduced	16.0.R1
Platforms	All

slow-queue-threshold-rate *number*

Synopsis	Slow queue threshold rate
Context	configure <i>card number</i> virtual-scheduler-adjustment slow-queue-threshold-rate <i>number</i>
Tree	slow-queue-threshold-rate
Description	This command overrides the system default threshold rate used to place policers and queues in the slow queue category. Slow rate policers and queues use a different minimum rate calculation interval time than fast rate queues.

The fast rate threshold is derived by multiplying the adjusted slow rate threshold by a factor of 1.5.

Configuring a value of zero (0) forces all policers and queues to be treated as fast rate queues.

Range	0 to 1000000
Default	1000
Units	kilobps
Introduced	16.0.R1
Platforms	All

xiom [*xiom-slot*] *string*

Synopsis	Enter the xiom list instance
Context	configure card number xiom string
Tree	xiom
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[xiom-slot] *string*

Synopsis	XIOM slot ID
Context	configure card number xiom string
Tree	xiom
String Length	2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the XIOM
Context	configure card number xiom string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.2.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fail-on-error *boolean*

Synopsis Set operational state of the card to failed on error

Context **configure** *card number xiom string fail-on-error boolean*

Tree *fail-on-error*

Description When configured to **true**, the operational state of the card is set to failed when at least one of a specific set of card-level errors is detected. The failed state persists until the operator reseats the card or resets it using the **clear** command.

Default false

Introduced 20.2.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

level *keyword*



WARNING:

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

Synopsis License level of the XIOM

Context **configure** *card number xiom string level keyword*

Tree *level*

Description This command provisions the license level of the XIOM, which controls aspects related to connector provisioning and consumption of hardware egress queues and policers.

An XIOM only becomes operational if the provisioned license level matches the license level of the card installed into the slot.

The set of license levels varies by XIOM type. Changes to the provisioned license level may be blocked if a configuration exists that is not permitted with the new target license level.

If the license level is not specified, the level is set to the highest license level for the XIOM.

Options unrestricted, he800g+, er800g+, cr800g+, he1500g+, er1500g+, cr1500g+, he1600g+, er1600g+, cr1600g+, he2400g+, er2400g+, cr2400g+, he3000g+, er3000g+, cr3000g+, he2400g, er2400g, cr2400g, he4800g, er4800g, cr4800g, he6000g+, er6000g+, cr6000g+

Introduced 20.2.R1

Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mda [*mda-slot*] *number*

Synopsis	Enter the mda list instance
Context	configure <i>card number xiom string mda number</i>
Tree	<i>mda</i>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mda-slot] *number*

Synopsis	MDA slot number
Context	configure <i>card number xiom string mda number</i>
Tree	<i>mda</i>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	configure <i>card number xiom string mda number admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mda-type *keyword***WARNING:**

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

Synopsis	MDA-s type provisioned for the XIOM slot
Context	configure <i>card number xiom string mda number mda-type keyword</i>

Tree	mda-type
Description	<p>This command provisions the MDA-s type for the XIOM slot.</p> <p>The MDA-s type can be preprovisioned, which means that the MDA-s does not have to be installed in the chassis.</p> <p>You can preprovision the MDA type before you install the MDA in the chassis. An MDA-s can only be provisioned in a slot that is vacant. No other MDA-s can be provisioned (configured) for that particular slot. An error message or log event is generated if the wrong MDA type is provisioned or inserted.</p>
Options	ms6-200gb-cfp2-dco, ms3-200gb-cfp2-dco, ms16-100gb-sfpdd+4-100gb-qsfp28, ms18-100gb-qsfp28, ms4-400gb-qsfpdd+4-100gb-qsfp28, ms24-10/100gb-sfpdd, ms2-400gb-qsfpdd+2-100gb-qsfp28, ms8-100gb-sfpdd+2-100gb-qsfp28, ms16-sdd+4-qsfp28-b, ms8-sdd+2-qsfp28-b
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

power-priority-level *number*

Synopsis	Power priority level for the XIOM MDA-s
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> power-priority-level <i>number</i>
Tree	power-priority-level
Description	<p>This command configures the power-priority level for the XIOM MDA-s.</p> <p>Consider the following suggestions when configuring the power-priority level:</p> <ul style="list-style-type: none"> • The lowest number has the highest priority. • Use the priority numbers from 1 to 100 for modules that are essential for system operation. • Use the priority numbers from 101 to 200 for non-essential modules.
Range	1 to 200
Default	150
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

sync-e *keyword*

Synopsis	Synchronous Ethernet capability
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> sync-e <i>keyword</i>
Tree	sync-e
Options	true, false

Introduced 20.2.R1
 Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

xconnect

Synopsis Enter the **xconnect** context
 Context **configure** *card number xiom string mda number xconnect*
 Tree *xconnect*
 Introduced 21.5.R1
 Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mac [*mac-id*] *number*

Synopsis Enter the **mac** list instance
 Context **configure** *card number xiom string mda number xconnect mac number*
 Tree *mac*
 Introduced 21.5.R1
 Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[*mac-id*] *number*

Synopsis MAC ID for the MDA cross-connect
 Context **configure** *card number xiom string mda number xconnect mac number*
 Tree *mac*
 Range 1 to 12
 Notes This element is part of a list key.
 Introduced 21.5.R1
 Platforms 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description
 Context **configure** *card number xiom string mda number xconnect mac number description string*
 Tree *description*

String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

loopback [**loopback-id**] *number*

Synopsis	Enter the loopback list instance
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i>
Tree	loopback
Description	Commands in this context configure a MAC loopback on a MAC chip. The system and services only start using the loopback when a port is associated with it. For example, port 1/1/m1/1, where m1 represents the MAC ID.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[loopback-id] *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i>
Tree	loopback
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

bandwidth *number*



WARNING:

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

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	configure card <i>number</i> xiom <i>string</i> mda <i>number</i> xconnect mac <i>number</i> loopback <i>number</i> bandwidth <i>number</i>
Tree	bandwidth

Range	10 25 40 100 400
Default	100
Units	gigabps
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure <i>card number xiom string mda number xconnect mac number loopback number description string</i>
Tree	description
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reset-on-recoverable-error *boolean*

Synopsis	Reset XIOM for fatal memory parity error on a Q-chip
Context	configure <i>card number xiom string reset-on-recoverable-error boolean</i>
Tree	reset-on-recoverable-error
Description	When configured to true , the XIOM is reset when a fatal memory parity error is detected on a Q-chip of the XIOM, regardless of the setting of the fail-on-error configuration for the XIOM. When configured to false , the recovery action is taken instead of resetting the XIOM.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

upgrade [[upgrade-index](#)] *number*

Synopsis	Enter the upgrade list instance
Context	configure <i>card number xiom string upgrade number</i>
Tree	upgrade
Description	Commands in this context assign a license level upgrade to the XIOM. Multiple upgrades can be applied to an XIOM. The first upgrade must use index 1, then index 2,

and so on. When removing upgrades, the largest index must be removed first, followed by the next largest, and so on.

Some upgrades require a hard reset of the XIOM to take effect. In general, this is required when the Full Duplex bandwidth is changed as a result of the upgrade.

Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[upgrade-index] *number*

Synopsis	Order of the upgrade value
Context	configure card <i>number</i> xiom <i>string</i> upgrade <i>number</i>
Tree	upgrade
Range	1 to 6
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

path *keyword*



WARNING:

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

Synopsis	Upgrade name
Context	configure card <i>number</i> xiom <i>string</i> upgrade <i>number</i> path <i>keyword</i>
Tree	path
Description	This command specifies the upgrade name. An upgrade license must be available for the specified path. Available upgrades can be checked using the show licensing entitlements command.
Options	cr800g-cr1500g+, er800g-er1500g+, he800g-he1500g+, cr1600g-cr2400g+, er1600g-er2400g+, he1600g-he2400g+, cr2400g-cr3000g+, er2400g-er3000g+, he2400g-he3000g+, cr-er800g+, er-he800g+, cr-er1500g+, er-he1500g+, cr-er1600g+, er-he1600g+, cr-er2400g+, er-he2400g+, cr-er3000g+, er-he3000g+, cr4800g-cr6000g+, er4800g-er6000g+, he4800g-he6000g+, cr-er2400g, er-he2400g, cr-er4800g, er-he4800g, cr-er6000g+, er-he6000g+
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

xiom-type *keyword***WARNING:**

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

Synopsis	XIOM type
Context	configure card <i>number</i> xiom <i>string</i> xiom-type <i>keyword</i>
Tree	xiom-type
Description	<p>This command associates the XIOM type with the slot.</p> <p>The XIOM type can be preprovisioned, which means that the XIOM does not have to be installed in the chassis.</p> <p>An XIOM must be provisioned before an MDA-s, a connector, or a port can be configured. An XIOM can only be provisioned in a slot that is vacant. After an XIOM is provisioned in the slot, no other XIOM can be provisioned (configured) for the slot.</p> <p>An XIOM can only be provisioned in a slot if the XIOM type is allowed in the slot. An error message is generated if an attempt is made to provision an XIOM type that is not allowed.</p> <p>If an XIOM is inserted that does not match the configured XIOM type for the slot, then a log event and a facility alarm are raised. The alarm is cleared when the correct XIOM type is installed or the configuration is modified.</p> <p>A log event and a facility alarm are raised if an administratively enabled XIOM is removed from the chassis. The alarm is cleared when the correct XIOM type is installed or the configuration is modified. A log event is issued when an XIOM is removed that is administratively disabled.</p> <p>XIOMs are controlled by hardware and software licensing. In addition to the XIOM type, the license level must be provisioned using the level command.</p>
Options	iom-s-3.0t, iom-s-1.5t
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

3.10 cflowd commands

```

configure
- cflowd
  - active-flow-timeout number
  - admin-state keyword
  - analyze-gre-payload boolean
  - analyze-l2tp-traffic boolean
  - analyze-v4overv6-traffic boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - cache-size number
  - collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
    - admin-state keyword
    - aggregation
      - as-matrix boolean
      - destination-prefix boolean
      - protocol-port boolean
      - raw boolean
      - source-destination-prefix boolean
      - source-prefix boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - autonomous-system-type keyword
    - description string
    - export-filter
      - family
        - ipv4 boolean
        - ipv6 boolean
        - l2-ip boolean
        - mcast-ipv4 boolean
        - mcast-ipv6 boolean
        - mpls boolean
      - interface-list
        - router reference interface-name reference
        - service
          - ies-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
          - ies-interface service-name reference interface-name reference
          - vprn-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
          - vprn-interface service-name reference interface-name reference
          - vprn-network-interface service-name reference network-interface-
name reference
        - router string
        - router-instance string
        - template-set keyword
        - version number
    - enhanced-distribution boolean
    - export-mode keyword
    - inactive-flow-timeout number
    - inband-collector-export-only boolean
    - overflow number
    - sample-profile number
      - apply-groups reference
      - apply-groups-exclude reference
      - metering-process keyword
      - sample-rate number
    - template-retransmit number
    - use-vrtr-if-index boolean

```

3.10.1 cflowd command descriptions

cflowd

Synopsis	Enable the cflowd context
Context	configure cflowd
Tree	cflowd
Introduced	16.0.R1
Platforms	All

active-flow-timeout *number*

Synopsis	Maximum time before an active flow is exported
Context	configure cflowd active-flow-timeout <i>number</i>
Tree	active-flow-timeout
Description	<p>This command configures the maximum time before an active flow is aged out of the active cache. If an individual flow is active for the configured time, the flow is exported and a new flow is created on the next packet sampled for the flow.</p> <p>This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.</p>
Range	30 to 36000
Default	1800
Units	seconds
Introduced	20.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of cflowd
Context	configure cflowd admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

analyze-gre-payload *boolean*

Synopsis	Perform cflowd analysis on the inner IP packet
Context	configure cflowd analyze-gre-payload <i>boolean</i>
Tree	analyze-gre-payload
Default	false
Introduced	16.0.R1
Platforms	All

analyze-l2tp-traffic *boolean*

Synopsis	Analyze the inner IP header of an L2TP packet
Context	configure cflowd analyze-l2tp-traffic <i>boolean</i>
Tree	analyze-l2tp-traffic
Description	<p>When configured to true, cflowd looks for and analyzes the inner IP header of an L2TPv2 frame.</p> <p>L2TPv2 traffic is identified by either the source or destination UDP port numbering that is set to 1701.</p> <p>When configured to false, the analysis is not performed.</p>
Default	false
Introduced	19.10.R1
Platforms	All

analyze-v4overv6-traffic *boolean*

Synopsis	Analyze the inner IPv4 packet within an IPv6 packet
Context	configure cflowd analyze-v4overv6-traffic <i>boolean</i>
Tree	analyze-v4overv6-traffic
Description	<p>When configured to true, cflowd looks for and analyzes the inner IPv4 header of IPv4overIPv6 frames that include MAP-E as well as DSLite and SAM traffic.</p> <p>When configured to false, the analysis is not performed.</p>
Default	false
Introduced	19.10.R1
Platforms	All

cache-size *number*

Synopsis	Maximum number of active flows in the flow cache table
Context	configure cflowd cache-size <i>number</i>
Tree	cache-size
Range	1000 to 2000000
Units	flows
Introduced	16.0.R1
Platforms	All

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

Synopsis	Enter the collector list instance
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	collector
Max. Instances	8
Introduced	16.0.R1
Platforms	All

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

Synopsis	IP address of the remote cflowd collector host
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	collector
Description	This command specifies the IP address of the remote cflowd collector host to receive the exported cflowd data.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number of the remote cflowd collector host
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	collector

Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the cflowd collector
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

aggregation

Synopsis	Enter the aggregation context
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation
Tree	aggregation
Introduced	16.0.R1
Platforms	All

as-matrix *boolean*

Synopsis	Base aggregation data based on AS information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation as-matrix <i>boolean</i>
Tree	as-matrix
Default	false
Introduced	16.0.R1
Platforms	All

destination-prefix *boolean*

Synopsis	Aggregate data based on destination prefix information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation destination-prefix <i>boolean</i>
Tree	destination-prefix
Default	false
Introduced	16.0.R1
Platforms	All

protocol-port *boolean*

Synopsis	Aggregate flows based on the IP protocol and ports
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation protocol-port <i>boolean</i>
Tree	protocol-port
Default	false
Introduced	16.0.R1
Platforms	All

raw *boolean*

Synopsis	Export flow data without aggregation
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation raw <i>boolean</i>
Tree	raw
Default	false
Introduced	16.0.R1
Platforms	All

source-destination-prefix *boolean*

Synopsis	Aggregate data based on prefix information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation source-destination-prefix <i>boolean</i>
Tree	source-destination-prefix
Default	false

Introduced	16.0.R1
Platforms	All

source-prefix *boolean*

Synopsis	Aggregate flows based on the source prefix information
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number aggregation source-prefix <i>boolean</i>
Tree	source-prefix
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system-type *keyword*

Synopsis	Basis of the AS information included in flow data
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number autonomous-system-type <i>keyword</i>
Tree	autonomous-system-type
Default	origin
Options	origin, peer
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

export-filter

Synopsis	Enter the export-filter context
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter
Tree	export-filter
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter family
Tree	family
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Filter IPv4 flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter family ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Filter IPv6 flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter family ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-ip *boolean*

Synopsis	Filter L2 IP flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family l2-ip boolean
Tree	l2-ip
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Filter multicast IPv4 data from going to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family mcast-ipv4 boolean
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Filter multicast IPv6 data from going to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family mcast-ipv6 boolean
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mpls *boolean*

Synopsis	Filter MPLS flow data from being sent to the collector
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter family mpls boolean
Tree	mpls

Default	false
Introduced	16.0.R1
Platforms	All

interface-list

Synopsis	Enter the interface-list context
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list
Tree	interface-list
Introduced	16.0.R4
Platforms	All

router [[router-name](#)] *reference* [interface-name](#) *reference*

Synopsis	Add a list entry for router
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list router <i>reference</i> interface-name <i>reference</i>
Tree	router
Introduced	16.0.R4
Platforms	All

[router-name] *reference*

Synopsis	Administrative router name
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list router <i>reference</i> interface-name <i>reference</i>
Tree	router
Reference	configure router <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name *reference*

Synopsis	Name for the router to the service interface or SAP
----------	---

Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list router <i>reference</i> interface-name <i>reference</i>
Tree	router
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

service

Synopsis	Enter the service context
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service
Tree	service
Introduced	16.0.R4
Platforms	All

ies-group-interface **service-name** *reference* **subscriber-interface-name** *reference* **group-interface-name** *reference*

Synopsis	Add a list entry for ies-group-interface
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name *reference*

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Reference	configure service ies <i>string</i>
Notes	This element is part of a list key.

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

subscriber-interface-name *reference*

Synopsis	Subscriber interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-group-interface service-name <i>reference</i> subscriber-interface-name <i>reference</i> group-interface-name <i>reference</i>
Tree	ies-group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ies-interface **service-name** *reference* **interface-name** *reference*

Synopsis	Add a list entry for ies-interface
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service ies-interface service-name <i>reference</i> interface-name <i>reference</i>
Tree	ies-interface
Introduced	16.0.R4
Platforms	All

service-name reference

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service ies-interface service-name reference interface-name reference
Tree	ies-interface
Reference	configure service ies string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name reference

Synopsis	IP interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service ies-interface service-name reference interface-name reference
Tree	ies-interface
Reference	configure service ies string interface string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference

Synopsis	Add a list entry for vprn-group-interface
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference
Tree	vprn-group-interface
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-name reference

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference
Tree	vprn-group-interface
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-name reference

Synopsis	Subscriber interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference
Tree	vprn-group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name reference

Synopsis	Group interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-group-interface service-name reference subscriber-interface-name reference group-interface-name reference
Tree	vprn-group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vprn-interface [service-name reference](#) [interface-name reference](#)

Synopsis	Add a list entry for vprn-interface
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list service vprn-interface service-name reference interface-name reference
Tree	vprn-interface
Introduced	16.0.R4
Platforms	All

service-name reference

Synopsis	Administrative service name
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list service vprn-interface service-name reference interface-name reference
Tree	vprn-interface
Reference	configure service vprn string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

interface-name reference

Synopsis	IP interface name
Context	configure cflowd collector (ipv4-address-no-zone ipv6-address-no-zone) port number export-filter interface-list service vprn-interface service-name reference interface-name reference
Tree	vprn-interface
Reference	configure service vprn string interface string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

vprn-network-interface [service-name reference](#) [network-interface-name reference](#)

Synopsis	Add a list entry for vprn-network-interface
----------	--

Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-network-interface service-name reference network-interface-name reference
Tree	vprn-network-interface
Introduced	16.0.R4
Platforms	All

service-name *reference*

Synopsis	Administrative service name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-network-interface service-name reference network-interface-name reference
Tree	vprn-network-interface
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

network-interface-name *reference*

Synopsis	Network interface name
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number export-filter interface-list service vprn-network-interface service-name reference network-interface-name reference
Tree	vprn-network-interface
Description	This command specifies the network interface name. Interface names must be unique within the group of defined IP interfaces for the configure router interface and configure service ies interface commands. An interface name cannot be in the form of an IP address. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes and must start with a letter.
Reference	configure service vprn <i>string network-interface string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

router [**router-instance**] *string*

Synopsis	Add a list entry for router
Context	configure cflovd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter router <i>string</i>
Tree	router
Introduced	16.0.R1
Platforms	All

[router-instance] *string*

Synopsis	Router instance name
Context	configure cflovd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number export-filter router <i>string</i>
Tree	router
Description	This command specifies the router instance name. Only "Base" is supported.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-instance *string*

Synopsis	Router or service name
Context	configure cflovd collector (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number router-instance <i>string</i>
Tree	router-instance
Description	This command specifies the routing instance used to route traffic to the associated collector IP address. The "Base" routing instance is the fallback if no route is found. No fallback mechanism is supported for "Base" and "VPRN".
Default	management
Introduced	16.0.R1
Platforms	All

template-set *keyword*

Synopsis	Templates sent to the collector
----------	---------------------------------

Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number template-set keyword
Tree	template-set
Description	This command specifies the set of templates sent to the collector when using cflowd Version 9 or Version 10.
Options	not-applicable, basic, mpls-ip, l2-ip, mpls-transport, compact, fastpath
Introduced	16.0.R1
Platforms	All

version number



WARNING:

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

Synopsis	Flow data collector version
Context	configure cflowd collector (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) port number version number
Tree	version
Range	5 8 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

enhanced-distribution boolean

Synopsis	Include ingress port ID in hashing algorithm for cflowd
Context	configure cflowd enhanced-distribution boolean
Tree	enhanced-distribution
Default	false
Introduced	16.0.R1
Platforms	7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

export-mode keyword

Synopsis	Export mode for flow data
Context	configure cflowd export-mode keyword

Tree	export-mode
Default	automatic
Options	automatic, manual
Introduced	16.0.R1
Platforms	All

inactive-flow-timeout *number*

Synopsis	Time without matching packet before flow is inactive
Context	configure cflowd inactive-flow-timeout <i>number</i>
Tree	inactive-flow-timeout
Description	This command configures the time interval that must elapse without a packet matching a flow before the flow is considered inactive. This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.
Range	10 to 600
Default	15
Units	seconds
Introduced	20.2.R1
Platforms	All

inband-collector-export-only *boolean*

Synopsis	Export the traffic to all collectors only via in-band interfaces
Context	configure cflowd inband-collector-export-only <i>boolean</i>
Tree	inband-collector-export-only
Default	false
Introduced	16.0.R1
Platforms	All

overflow *number*

Synopsis	Percentage of entries to remove from Cflowd cache when the maximum number of entries is exceeded
Context	configure cflowd overflow <i>number</i>
Tree	overflow

Range	1 to 50
Default	1
Units	percent
Introduced	16.0.R1
Platforms	All

sample-profile *[profile-id] number*

Synopsis	Enter the sample-profile list instance
Context	configure <i>cflowd sample-profile number</i>
Tree	sample-profile
Max. Instances	5
Introduced	19.5.R1
Platforms	All

[profile-id] number

Synopsis	The unique specifier of this sample-profile
Context	configure <i>cflowd sample-profile number</i>
Tree	sample-profile
Range	1 to 5
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

metering-process *keyword*

Synopsis	Metering process for samples taken
Context	configure <i>cflowd sample-profile number metering-process keyword</i>
Tree	metering-process
Description	This command specifies the type of metering process to use for the samples taken from the associated interfaces.
Default	standard
Options	standard, fp-accelerated

Introduced	21.10.R1
Platforms	7750 SR-7s, 7750 SR-14s, 7950 XRS-20e

sample-rate *number*

Synopsis	Cflowd sampling rate for sample profile ID
Context	configure cflowd sample-profile <i>number</i> sample-rate <i>number</i>
Tree	sample-rate
Description	This command defines the cflowd sampling rate for the sample profile ID. The sample rate indicates that the associated interface samples 1 in N packets for cflowd analysis. You can only associate one rate profile below 1:256 with a specific IOM, IMM, or XMA.
Range	1 to 60000
Default	1000
Introduced	19.5.R1
Platforms	All

template-retransmit *number*

Synopsis	Time to resend template information
Context	configure cflowd template-retransmit <i>number</i>
Tree	template-retransmit
Range	10 to 600
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

use-vrtr-if-index *boolean*

Synopsis	Export flow data using virtual router interface indexes
Context	configure cflowd use-vrtr-if-index <i>boolean</i>
Tree	use-vrtr-if-index
Default	false
Introduced	16.0.R1

Platforms All

3.11 chassis commands

```
configure
- chassis keyword chassis-number number
- apply-groups reference
- apply-groups-exclude reference
- monitor-filter-door boolean
- peq number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - input-power-mode number
  - peq-type keyword
- power-connection-module number
  - apply-groups reference
  - apply-groups-exclude reference
  - pcm-type keyword
- power-shelf number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - power-module number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - power-module-type keyword
  - power-shelf-type keyword
- power-supply number
  - apply-groups reference
  - apply-groups-exclude reference
  - power-supply-type keyword
```

3.11.1 chassis command descriptions

chassis [**chassis-class**] *keyword chassis-number number*

Synopsis	Enter the chassis list instance
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Introduced	16.0.R1
Platforms	All

[chassis-class] *keyword*

Synopsis	Functional use of the physical chassis
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Options	router
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chassis-number *number*

Synopsis	Unique index to identify this physical chassis
Context	configure chassis <i>keyword chassis-number number</i>
Tree	chassis
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

monitor-filter-door *boolean*

Synopsis	Allow filter door monitoring
Context	configure chassis <i>keyword chassis-number number monitor-filter-door boolean</i>

Tree	monitor-filter-door
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s

peq [[peq-slot](#)] *number*

Synopsis	Enter the peq list instance
Context	configure chassis <i>keyword chassis-number number</i> peq number
Tree	peq
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

[peq-slot] *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	configure chassis <i>keyword chassis-number number</i> peq number
Tree	peq
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PEQ
Context	configure chassis <i>keyword chassis-number number</i> peq number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

input-power-mode *number*

Synopsis	Input power mode of the PEQ
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> <i>peq</i> <i>number</i> input-power-mode <i>number</i>
Tree	input-power-mode
Range	60 80
Units	amperes
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

peq-type *keyword***WARNING:**

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

Synopsis	APEQ type
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> <i>peq</i> <i>number</i> peq-type <i>keyword</i>
Tree	peq-type
Options	apeq-dc-2000, apeq-dc-2200-2800, apeq-ac-3000, apeq-hvdc-3000, apeq-dc-4275, ixr-ac-hvdc-3000, ixr-dc-3000, apeq-ac-4400
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

power-connection-module [*pcm-slot*] *number*

Synopsis	Enter the power-connection-module list instance
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> power-connection-module <i>number</i>
Tree	power-connection-module
Introduced	16.0.R1
Platforms	7950 XRS-20e

[pcm-slot] *number*

Synopsis	Unique identifier index for a power control module in the chassis
Context	configure <i>chassis</i> <i>keyword</i> <i>chassis-number</i> <i>number</i> power-connection-module <i>number</i>

Tree	power-connection-module
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7950 XRS-20e

pcm-type *keyword*



WARNING:

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

Synopsis	PCM type
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-connection-module <i>number</i> pcm-type <i>keyword</i>
Tree	pcm-type
Options	dual, quad
Introduced	16.0.R1
Platforms	7950 XRS-20e

power-shelf [[power-shelf-id](#)] *number*

Synopsis	Enter the power-shelf list instance
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i>
Tree	power-shelf
Introduced	16.0.R1
Platforms	7750 SR-s

[power-shelf-id] *number*

Synopsis	Unique identifier index for a power shelf in chassis
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i>
Tree	power-shelf
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-s

admin-state *keyword*

Synopsis Administrative state of the power shelf

Context **configure chassis** *keyword chassis-number number power-shelf number admin-state keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR-s

description *string*

Synopsis Text description

Context **configure chassis** *keyword chassis-number number power-shelf number description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7750 SR-s

power-module [[power-module-id](#)] *number*

Synopsis Enter the **power-module** list instance

Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*

Tree [power-module](#)

Introduced 16.0.R1

Platforms 7750 SR-s

[power-module-id] *number*

Synopsis Unique identifier for a power module in chassis

Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*

Tree	power-module
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the power module
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i> power-module <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR-s

power-module-type *keyword*



WARNING:

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

Synopsis	Power module type
Context	configure chassis <i>keyword</i> chassis-number <i>number</i> power-shelf <i>number</i> power-module <i>number</i> power-module-type <i>keyword</i>
Tree	power-module-type
Options	ps-b-ac/hv-6000, ps-a-dc-4400, ps-a-dc-6000, ixr-ac-hvdc-3000, ixr-dc-3000
Introduced	16.0.R1
Platforms	7750 SR-s

power-shelf-type *keyword*



WARNING:

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

Synopsis	Power shelf type
Context	configure chassis <i>keyword chassis-number number power-shelf number power-shelf-type keyword</i>
Tree	power-shelf-type
Options	ps-a10-shelf-dc, ps-b10-shelf-ac/hv, ps-a4-shelf-dc, ps-b3-shelf-ac/hv
Introduced	16.0.R1
Platforms	7750 SR-s

power-supply [[power-supply-id](#)] *number*

Synopsis	Enter the power-supply list instance
Context	configure chassis <i>keyword chassis-number number power-supply number</i>
Tree	power-supply
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[power-supply-id] *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	configure chassis <i>keyword chassis-number number power-supply number</i>
Tree	power-supply
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

power-supply-type *keyword*

Synopsis	Power supply type
Context	configure chassis <i>keyword chassis-number number power-supply number power-supply-type keyword</i>
Tree	power-supply-type
Default	auto
Options	none, dc-single, ac-single, ac-multiple, auto, dc-multiple
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12

3.12 connection-profile commands

```
configure
- connection-profile
- apply-groups reference
- apply-groups-exclude reference
- vlan number
- apply-groups reference
- apply-groups-exclude reference
- description string
- qtag-range number
- apply-groups reference
- apply-groups-exclude reference
- end number
```

3.12.1 connection-profile command descriptions

connection-profile

Synopsis	Enter the connection-profile context
Context	configure connection-profile
Tree	connection-profile
Introduced	16.0.R1
Platforms	All

vlan [[connection-profile-id](#)] *number*

Synopsis	Enter the vlan list instance
Context	configure connection-profile vlan <i>number</i>
Tree	vlan
Introduced	16.0.R7
Platforms	All

[[connection-profile-id](#)] *number*

Synopsis	Identifier of this connection profile
Context	configure connection-profile vlan <i>number</i>
Tree	vlan
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	All

description *string*

Synopsis	Text description
Context	configure connection-profile vlan <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R7

Platforms All

qtag-range [*start*] *number*

Synopsis Enter the **qtag-range** list instance
 Context **configure connection-profile vlan** *number* **qtag-range** *number*
 Tree **qtag-range**
 Introduced 16.0.R7
 Platforms All

[start] *number*

Synopsis Lower bound of VLAN range for connection profile
 Context **configure connection-profile vlan** *number* **qtag-range** *number*
 Tree **qtag-range**
 Range 1 to 4094
 Notes This element is part of a list key.
 Introduced 16.0.R7
 Platforms All

end *number*



WARNING:

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

Synopsis Upper bound of VLAN range for connection profile
 Context **configure connection-profile vlan** *number* **qtag-range** *number* **end** *number*
 Tree **end**
 Range 1 to 4094
 Introduced 16.0.R7
 Platforms All

3.13 debug commands

```

debug
- aaa
- diameter
  - application
    - failures boolean
    - policy string
      - failures boolean
      - messages boolean
    - node string
      - failures boolean
      - peer number
        - failures boolean
        - messages boolean
      - relayed-messages boolean
- call-trace
- ipoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
- pppoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
    - user-name string
- wlan-gw
  - ue string
    - mac string
    - profile string
- lag string
  - bfd boolean
  - config boolean
  - iom-updates boolean
  - lacp-packets boolean
  - multi-chassis boolean
  - multi-chassis-packets boolean
  - port string
    - bfd boolean
    - config boolean
    - lacp-packets boolean
    - multi-chassis boolean
    - port-states boolean
    - redundancy boolean
    - selection-logic boolean
    - state-machine boolean
    - timers boolean
  - port-states boolean
  - redundancy boolean
  - selection-logic boolean
  - state-machine boolean

```

debug lag timers

```

- timers boolean
- nat
- l2-aware
- subscriber string
- upnp
- subscriber string
- events boolean
- packets
- detail boolean
- large-scale
- dual-stack-lite
- subscriber inside-router string b4-address string
- nat44
- subscriber inside-router string ip-address string
- nat64
- subscriber inside-router string ipv6-prefix string
- nat-import
- route (ipv4-unicast-address | keyword) inside-router string
- pcp
- router string
- server string
- packets
- detail boolean
- direction keyword
- router string
- dhcp
- all-packets
- detail-level keyword
- mode keyword
- interface string
- detail-level keyword
- mode keyword
- mac string
- detail-level keyword
- mode keyword
- sap string
- detail-level keyword
- mode keyword
- igmp
- group-interface
- all-group-interfaces
- forwarding-service string
- group-interface-name string
- host
- group-interface
- forwarding-service string
- group-interface-name string
- ip-address string
- interface
- all-interfaces
- interface-name string
- mcs
- all-interfaces
- interface-name string
- miscellaneous boolean
- packet
- all-origins
- dropped boolean
- egress boolean
- group-interface-name string
- host-ip-address string
- ingress boolean
- interface-ip-address string
- interface-name string

```

debug router igmp packet type

```

- type keyword
- ip
- icmp
- all-packets
- interface string
- icmp6
- all-packets
- interface string
- interface-events
- all-events
- interface string
- neighbor
- all-events
- address-family keyword
- interface string
- address-family keyword
- packet
- all-packets
- address-family keyword
- headers boolean
- protocol-id number
- interface string
- address-family keyword
- headers boolean
- protocol-id number
- route-table
- all
- filter
- ipv4
- prefix string
- longest-prefix-match boolean
- ipv6
- prefix string
- longest-prefix-match boolean
- tunnel-table
- all
- filter
- id
- sdp-id number
- tunnel-id number
- ipv4
- prefix string
- longest-prefix-match boolean
- tunnel-type (keyword | keyword)
- ipv6
- prefix string
- longest-prefix-match boolean
- tunnel-type (keyword | keyword)
- ldp
- interface string
- ipv4
- event
- messages
- packet
- hello
- detail boolean
- ipv6
- event
- messages
- packet
- hello
- detail boolean
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
- event

```

debug router ldp peer event bindings

```

    - bindings
    - messages
  - packet
    - hello
      - detail boolean
    - init
      - detail boolean
    - keepalive
    - label
      - detail boolean
- mld
  - group-interface
    - all-group-interfaces
    - forwarding-service string
    - group-interface-name string
  - host
    - group-interface
      - forwarding-service string
      - group-interface-name string
    - ip-address string
  - interface
    - all-interfaces
    - interface-name string
  - mcs
    - all-interfaces
    - interface-name string
  - miscellaneous boolean
  - packet
    - all-origins
    - dropped boolean
    - egress boolean
    - group-interface-name string
    - host-ip-address string
    - ingress boolean
    - interface-ip-address string
    - interface-name string
    - type keyword
- msdp
  - packet
    - all-packet-types
    - packet-types
      - keep-alive
        - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - sa-request
        - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - sa-response
        - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-active
        - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - pim
    - group-address string
  - rtm
    - rp-address string
  - sa-db
    - group-address string
    - rp-address string
    - source-address string
- mtrace
  - miscellaneous
  - packet
    - all-packet-types
    - packet-types
      - query boolean
      - request boolean

```


debug router mtrace packet packet-types response

```

- response boolean
- mtrace2
- miscellaneous
- packet
  - all-packet-types
  - packet-types
    - query boolean
    - request boolean
    - response boolean
- pim
  - events
    - adjacency
    - all
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - assert
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - auto-rp
    - bgp
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - bier-inband
      - detail boolean
    - bsr
      - detail boolean
    - data
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - db
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - dynmlpd
      - detail boolean
    - extranet
      - detail boolean
    - graft
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - interface
      - interface-name string
    - jp
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - mofrr
    - mrrib
      - detail boolean
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - msg
    - mvpn-rtcache
      - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - red
      - detail boolean
    - register
      - detail boolean

```

debug router pim events register group-address

```

- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- rpfv
- detail boolean
- rtm
- detail boolean
- s-pmsi
- detail boolean
- vpn-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- tunnel-interface
- ldp-p2mp-id number
- rsvp-p2mp string
- sender-address string
- packet
- all-origins
- all-packet-types
- egress boolean
- ingress boolean
- interface-name string
- ipv4 boolean
- ipv6 boolean
- packet-types
- assert
- all-origins
- interface-name string
- auto-rp-announcement
- all-origins
- interface-name string
- auto-rp-mapping
- all-origins
- interface-name string
- bsr
- all-origins
- interface-name string
- crp
- all-origins
- interface-name string
- graft
- all-origins
- interface-name string
- graft-ack
- all-origins
- interface-name string
- hello
- all-origins
- interface-name string
- jp
- all-origins
- interface-name string
- mdt-tlv
- all-origins
- interface-name string
- register
- all-origins
- interface-name string
- register-stop
- all-origins
- interface-name string
- radius
- proxy string
- all-packet-types
- client-address (ipv4-address-no-zone | ipv6-address-no-zone)
- detail-level keyword
- direction keyword

```

debug router radius proxy dropped-only

```

- dropped-only boolean
- packet-types
  - access-accept boolean
  - access-challenge boolean
  - access-reject boolean
  - access-request boolean
  - accounting-request boolean
  - accounting-response boolean
  - other boolean
- servers
  - attribute string
  - extended-type number
  - transaction boolean
  - type number
  - value
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - hex string
    - integer number
    - prefix (ipv4-prefix | ipv6-prefix)
    - string string
  - vendor-specific
    - encoding
      - length-size number
      - type-size number
    - vendor (number | keyword)
    - vendor-type number
  - detail-level keyword
  - packet-types
    - accounting boolean
    - authentication boolean
    - coa boolean
  - server-address (ipv4-address-no-zone | ipv6-address-no-zone)
- vrp
  - events
    - all-events
    - interface string
      - all-vrids
      - ipv4
        - vrid number
      - ipv6
        - vrid number
    - packet
      - all-packets
      - interface string
        - all-vrids
        - ipv4
          - vrid number
        - ipv6
          - vrid number
  - wpp
    - packets
      - detail-level keyword
    - portal string
      - packets
        - detail-level keyword
- service
  - ies string
    - ppp
      - circuit-id string
      - events
        - all
        - dhcp-client
          - terminate-only boolean
      - l2tp

```

debug service ies ppp events l2tp terminate-only

```

- terminate-only boolean
- local-address-assignment
- terminate-only boolean
- ppp
- terminate-only boolean
- mac string
- packets
- all
- detail-level keyword
- dhcp-client boolean
- discovery
- all
- padi boolean
- pado boolean
- padr boolean
- pads boolean
- padt boolean
- mode keyword
- ppp-session
- all
- chap boolean
- ipcp boolean
- ipv6cp boolean
- lcp boolean
- pap boolean
- remote-id string
- sap string
- user-name string
- vpls string
- igmp-snooping
- packet
- detail keyword
- dropped boolean
- egress boolean
- evpn-mpls boolean
- evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
- ingress boolean
- mac string
- sap string
- sdp-bind string
- mld-snooping
- packet
- detail keyword
- dropped boolean
- egress boolean
- evpn-mpls boolean
- evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
- ingress boolean
- mac string
- sap string
- sdp-bind string
- pim-snooping
- events
- adjacency
- all
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- db
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- jp
- detail boolean

```

debug service vpls pim-snooping events jp group-address

```

- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- mcs
- detail boolean
- port
- detail boolean
- evpn-mpls
- sap-id string
- sdp-bind-id string
- vni number
- vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- red
- detail boolean
- packet
- all-origins
- all-packet-types
- packet-types
- hello boolean
- jp boolean
- port
- evpn-mpls
- sap-id string
- sdp-bind-id string
- vni number
- vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- ppp
- circuit-id string
- events
- all
- dhcp-client
- terminate-only boolean
- l2tp
- terminate-only boolean
- local-address-assignment
- terminate-only boolean
- ppp
- terminate-only boolean
- mac string
- packets
- all
- detail-level keyword
- dhcp-client boolean
- discovery
- all
- padi boolean
- pado boolean
- padr boolean
- pads boolean
- padt boolean
- mode keyword
- ppp-session
- all
- chap boolean
- ipcp boolean
- ipv6cp boolean
- lcp boolean
- pap boolean
- remote-id string
- sap string
- user-name string
- vprn string
- ppp
- circuit-id string
- events

```

debug service vprn ppp events all

```

- all
- dhcp-client
  - terminate-only boolean
- l2tp
  - terminate-only boolean
- local-address-assignment
  - terminate-only boolean
- ppp
  - terminate-only boolean
- mac string
- packets
  - all
  - detail-level keyword
  - dhcp-client boolean
  - discovery
    - all
    - padi boolean
    - pado boolean
    - padr boolean
    - pads boolean
    - padt boolean
  - mode keyword
  - ppp-session
    - all
    - chap boolean
    - ipcp boolean
    - ipv6cp boolean
    - lcp boolean
    - pap boolean
  - remote-id string
  - sap string
  - user-name string
- subscriber-mgmt
  - gtp
    - events boolean
    - imsi string
    - packets
      - detail-level keyword
      - mode keyword
    - peer (ipv4-address-no-zone | ipv6-address-no-zone) router string
    - udp-port number
- system
  - grpc
    - client
      - all
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - type keyword
  - grpc-tunnel
    - tunnel
      - all
      - name string
  - http-connections
    - client-ip-prefix (ipv4-prefix | ipv6-prefix | keyword)
- management-interface
  - netconf keyword
  - remote-management
    - manager
      - all
      - manager-name string
    - service boolean
- wlan-gw
  - group number
  - learn-ap-mac
  - tunnel-remote-address (ipv4-address-no-zone | ipv6-address-no-zone)

```

debug wlan-gw group statistic

- **statistic** *keyword name string*
- **capture-packet** *boolean*
- **ue**
 - **bridge-domain** *number*
 - **mac-address** *string*
 - **protocols**
 - **arp** *boolean*
 - **dhcp4** *boolean*
 - **dhcp6** *boolean*
 - **icmp4** *boolean*
 - **icmp6** *boolean*
 - **radius** *boolean*

3.13.1 debug command descriptions

debug

Synopsis	Configure application or protocol tracing
Context	debug
Tree	debug
Description	Commands in this context enable detailed debugging information for various protocols and router functions.
Introduced	21.5.R1
Platforms	All

aaa

Synopsis	Enter the aaa context
Context	debug aaa
Tree	aaa
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter

Synopsis	Enter the diameter context
Context	debug aaa diameter
Tree	diameter
Description	Commands in this context configure Diameter Base parameters.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

application

Synopsis	Enter the application context
Context	debug aaa diameter application
Tree	application

Description	Commands in this context configure debugging for Diameter session-aware application messages and application message processing failures, for example, in the case of an unknown Diameter session ID.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis	Debug Diameter application failures
Context	debug aaa diameter application failures <i>boolean</i>
Tree	failures
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy [[name](#)] *string*

Synopsis	Enter the policy list instance
Context	debug aaa diameter application policy <i>string</i>
Tree	policy
Max. Instances	32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Diameter application policy name
Context	debug aaa diameter application policy <i>string</i>
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis	Debug Diameter application failures
Context	<code>debug aaa diameter application policy string failures boolean</code>
Tree	<code>failures</code>
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

messages *boolean*

Synopsis	Debug Diameter application messages
Context	<code>debug aaa diameter application policy string messages boolean</code>
Tree	<code>messages</code>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node [*origin-host*] *string*

Synopsis	Enter the node list instance
Context	<code>debug aaa diameter node string</code>
Tree	<code>node</code>
Max. Instances	32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[origin-host] *string*

Synopsis	Origin host of the Diameter node
Context	<code>debug aaa diameter node string</code>
Tree	<code>node</code>
String Length	1 to 80
Notes	This element is part of a list key.
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis Debug Diameter node failures

Context `debug aaa diameter node string failures boolean`

Tree `failures`

Description When configured to **true**, the system debugs Diameter node-level failures that occur before the peer is determined. For example, when no route for a message is found in the realm routing table.

Default true

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [*index*] *number*

Synopsis Enter the **peer** list instance

Context `debug aaa diameter node string peer number`

Tree `peer`

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[index] *number*

Synopsis Index of the peer in the Diameter node

Context `debug aaa diameter node string peer number`

Tree `peer`

Range 1 to 5

Notes This element is part of a list key.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failures *boolean*

Synopsis Debug Diameter peer failures

Context `debug aaa diameter node string peer number failures boolean`

Tree	failures
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

messages *boolean*

Synopsis	Debug Diameter peer messages
Context	debug aaa diameter node <i>string</i> peer number messages <i>boolean</i>
Tree	messages
Description	When configured to true , the system debugs peer-level messages that are required to bring up, maintain, and tear down a peering connection, for example, Capabilities Exchange and Device Watchdog messages.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relayed-messages *boolean*

Synopsis	Debug relayed Diameter messages
Context	debug aaa diameter node <i>string</i> relayed-messages <i>boolean</i>
Tree	relayed-messages
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

call-trace

Synopsis	Enter the call-trace context
Context	debug call-trace
Tree	call-trace
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe

Synopsis	Enter the ipoe context
Context	debug call-trace ipoe
Tree	ipoe
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace [name] string

Synopsis	Enter the trace list instance
Context	debug call-trace ipoe trace string
Tree	trace
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Unique trace name
Context	debug call-trace ipoe trace string
Tree	trace
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id string

**WARNING:**

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

Synopsis	Circuit ID of the sessions to trace
Context	debug call-trace ipoe trace string circuit-id string
Tree	circuit-id

Description	This command configures the circuit ID of the sessions to trace. The circuit ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: circuit-id or remote-id .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

**WARNING:**

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

Synopsis	MAC address of the sessions to trace
Context	debug call-trace ipoe trace string mac string
Tree	mac
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-jobs number

**WARNING:**

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

Synopsis	Maximum number of trace jobs
Context	debug call-trace ipoe trace string max-jobs number
Tree	max-jobs
Range	1 to 50
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile *string*

**WARNING:**

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

Synopsis	Call trace profile applied for the trace
Context	<code>debug call-trace ipoe trace string profile string</code>
Tree	<code>profile</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *string*

**WARNING:**

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

Synopsis	Remote ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string remote-id string</code>
Tree	<code>remote-id</code>
Description	This command configures the remote ID of the sessions to trace. The remote ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: circuit-id or remote-id .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap *string*

**WARNING:**

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

Synopsis	SAP ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string sap string</code>

Tree	sap
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-existing-sessions *boolean*



WARNING:

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

Synopsis	Enable call trace for existing sessions
Context	debug call-trace ipoe trace <i>string</i> trace-existing-sessions <i>boolean</i>
Tree	trace-existing-sessions
Description	When configured to true , the system traces existing sessions. When configured to false , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis	Enter the pppoe context
Context	debug call-trace pppoe
Tree	pppoe
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace [[name](#)] *string*

Synopsis	Enter the trace list instance
Context	debug call-trace pppoe trace <i>string</i>
Tree	trace
Max. Instances	50
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Unique trace name
 Context [debug call-trace pppoe trace string](#)
 Tree [trace](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 22.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *string*



WARNING:

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

Synopsis Circuit ID of the sessions to trace
 Context [debug call-trace pppoe trace string circuit-id string](#)
 Tree [circuit-id](#)
 String Length 1 to 255
 Introduced 22.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*



WARNING:

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

Synopsis MAC address of the sessions to trace
 Context [debug call-trace pppoe trace string mac string](#)
 Tree [mac](#)
 String Length 1 to 17
 Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-jobs *number*



WARNING:

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

Synopsis Maximum number of trace jobs

Context [debug call-trace pppoe trace](#) *string max-jobs number*

Tree [max-jobs](#)

Range 1 to 50

Default 1

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile *string*



WARNING:

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

Synopsis Call trace profile applied for the trace

Context [debug call-trace pppoe trace](#) *string profile string*

Tree [profile](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *string*



WARNING:

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

Synopsis Remote ID of the sessions to trace

Context	<code>debug call-trace pppoe trace string remote-id string</code>
Tree	<code>remote-id</code>
String Length	1 to 255
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap string



WARNING:

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

Synopsis	SAP ID of the sessions to trace
Context	<code>debug call-trace pppoe trace string sap string</code>
Tree	<code>sap</code>
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trace-existing-sessions boolean



WARNING:

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

Synopsis	Enable call trace for existing sessions
Context	<code>debug call-trace pppoe trace string trace-existing-sessions boolean</code>
Tree	<code>trace-existing-sessions</code>
Description	When configured to true , the system traces existing sessions. When configured to false , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name *string***WARNING:**

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

Synopsis	PPPoE username of the sessions to trace
Context	debug call-trace pppoe trace <i>string</i> user-name <i>string</i>
Tree	user-name
String Length	1 to 253
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	debug call-trace wlan-gw
Tree	wlan-gw
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ue [*name*] *string*

Synopsis	Enter the ue list instance
Context	debug call-trace wlan-gw ue <i>string</i>
Tree	ue
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis	Unique trace name
Context	debug call-trace wlan-gw ue <i>string</i>
Tree	ue
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string



WARNING:

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

Synopsis	MAC address of the sessions to trace
Context	debug call-trace wlan-gw ue string mac string
Tree	mac
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profile string



WARNING:

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

Synopsis	Call trace profile applied for the trace
Context	debug call-trace wlan-gw ue string profile string
Tree	profile
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag [[lag-name](#)] string

Synopsis	Enter the lag list instance
Context	debug lag string
Tree	lag

Description	Commands in this context configure debugging for Link Aggregation Group (LAG).
Introduced	22.7.R1
Platforms	All

[lag-name] string

Synopsis	LAG name
Context	debug lag string
Tree	lag
Description	<p>This command specifies the LAG name.</p> <p>In model-driven interfaces, the LAG name is used for configuration references and show commands. A service provider or administrator can use the defined LAG name to identify and manage LAGs within the SR OS platforms.</p> <p>The LAG name must always start with "lag-".</p>
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

bfd boolean

Synopsis	Enable debugging for BFD
Context	debug lag string bfd boolean
Tree	bfd
Default	false
Introduced	22.7.R1
Platforms	All

config boolean

Synopsis	Enable debugging for configuration changes
Context	debug lag string config boolean
Tree	config
Default	false
Introduced	22.7.R1

Platforms All

iom-updates *boolean*

Synopsis Enable debugging for IOM updates
Context [debug lag string iom-updates boolean](#)
Tree [iom-updates](#)
Default false
Introduced 22.7.R1
Platforms All

lACP-packets *boolean*

Synopsis Enable debugging for LACP packets
Context [debug lag string lACP-packets boolean](#)
Tree [lACP-packets](#)
Default false
Introduced 22.7.R1
Platforms All

multi-chassis *boolean*

Synopsis Enable debugging for multi-chassis LAG
Context [debug lag string multi-chassis boolean](#)
Tree [multi-chassis](#)
Default false
Introduced 22.7.R1
Platforms All

multi-chassis-packets *boolean*

Synopsis Enable debugging for multi-chassis packets
Context [debug lag string multi-chassis-packets boolean](#)
Tree [multi-chassis-packets](#)
Default false

Introduced 22.7.R1
 Platforms All

port [*port-id*] *string*

Synopsis Enter the **port** list instance
 Context [debug lag string port string](#)
 Tree [port](#)
 Introduced 22.7.R1
 Platforms All

[port-id] *string*

Synopsis Unique identifier for the port in the LAG
 Context [debug lag string port string](#)
 Tree [port](#)
 Notes This element is part of a list key.
 Introduced 22.7.R1
 Platforms All

bfd *boolean*

Synopsis Enable debugging for BFD
 Context [debug lag string port string bfd boolean](#)
 Tree [bfd](#)
 Default false
 Introduced 22.7.R1
 Platforms All

config *boolean*

Synopsis Enable debugging for configuration changes
 Context [debug lag string port string config boolean](#)
 Tree [config](#)
 Default false

Introduced 22.7.R1
Platforms All

lACP-packets *boolean*

Synopsis Enable debugging for LACP packets
Context [debug lag](#) *string port string lACP-packets boolean*
Tree [lACP-packets](#)
Default false
Introduced 22.7.R1
Platforms All

multi-chassis *boolean*

Synopsis Enable debugging for multi-chassis LAG
Context [debug lag](#) *string port string multi-chassis boolean*
Tree [multi-chassis](#)
Default false
Introduced 22.7.R1
Platforms All

port-states *boolean*

Synopsis Enable debugging for port-state changes
Context [debug lag](#) *string port string port-states boolean*
Tree [port-states](#)
Default false
Introduced 22.7.R1
Platforms All

redundancy *boolean*

Synopsis Enable debugging for redundancy
Context [debug lag](#) *string port string redundancy boolean*
Tree [redundancy](#)

Default	false
Introduced	22.7.R1
Platforms	All

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
Context	debug lag <i>string</i> port <i>string</i> selection-logic <i>boolean</i>
Tree	selection-logic
Default	false
Introduced	22.7.R1
Platforms	All

state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag <i>string</i> port <i>string</i> state-machine <i>boolean</i>
Tree	state-machine
Default	false
Introduced	22.7.R1
Platforms	All

timers *boolean*

Synopsis	Enable debugging for timers
Context	debug lag <i>string</i> port <i>string</i> timers <i>boolean</i>
Tree	timers
Default	false
Introduced	22.7.R1
Platforms	All

port-states *boolean*

Synopsis	Enable debugging for port-state changes
Context	debug lag <i>string</i> port-states <i>boolean</i>

Tree	port-states
Default	false
Introduced	22.7.R1
Platforms	All

redundancy *boolean*

Synopsis	Enable debugging for redundancy
Context	debug lag string redundancy <i>boolean</i>
Tree	redundancy
Default	false
Introduced	22.7.R1
Platforms	All

selection-logic *boolean*

Synopsis	Enable debugging for selection logic
Context	debug lag string selection-logic <i>boolean</i>
Tree	selection-logic
Default	false
Introduced	22.7.R1
Platforms	All

state-machine *boolean*

Synopsis	Enable debugging for state-machine changes
Context	debug lag string state-machine <i>boolean</i>
Tree	state-machine
Default	false
Introduced	22.7.R1
Platforms	All

timers *boolean*

Synopsis	Enable debugging for timers
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Context	<code>debug lag string timers boolean</code>
Tree	<code>timers</code>
Default	false
Introduced	22.7.R1
Platforms	All

nat

Synopsis	Enter the nat context
Context	<code>debug nat</code>
Tree	<code>nat</code>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis	Enter the l2-aware context
Context	<code>debug nat l2-aware</code>
Tree	<code>l2-aware</code>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [`subscriber-id`] *string*

Synopsis	Add a list entry for subscriber
Context	<code>debug nat l2-aware subscriber string</code>
Tree	<code>subscriber</code>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[`subscriber-id`] *string*

Synopsis	L2-aware subscriber ID
Context	<code>debug nat l2-aware subscriber string</code>

Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp

Synopsis	Enter the upnp context
Context	debug nat l2-aware upnp
Tree	upnp
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [[subscriber-id](#)] *string*

Synopsis	Enter the subscriber list instance
Context	debug nat l2-aware upnp subscriber string
Tree	subscriber
Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis	L2-aware subscriber ID
Context	debug nat l2-aware upnp subscriber string
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

events *boolean*

Synopsis	Enable UPnP event debugging
Context	debug nat I2-aware upnp subscriber <i>string events boolean</i>
Tree	events
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the packets context
Context	debug nat I2-aware upnp subscriber <i>string packets</i>
Tree	packets
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail *boolean*

Synopsis	Include IP, UDP, and TCP headers in UPnP packet debug
Context	debug nat I2-aware upnp subscriber <i>string packets detail boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
Context	debug nat large-scale
Tree	large-scale
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis	Enter the dual-stack-lite context
Context	debug nat large-scale dual-stack-lite
Tree	dual-stack-lite
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [inside-router string b4-address string](#)

Synopsis	Add a list entry for subscriber
Context	debug nat large-scale dual-stack-lite subscriber inside-router string b4-address string
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router [string](#)

Synopsis	Inside router instance name
Context	debug nat large-scale dual-stack-lite subscriber inside-router string b4-address string
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

b4-address [string](#)

Synopsis	IPv6 B4 address of the DS-Lite subscriber
Context	debug nat large-scale dual-stack-lite subscriber inside-router string b4-address string
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the nat44 context
Context	debug nat large-scale nat44
Tree	nat44
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [inside-router string ip-address string](#)

Synopsis	Add a list entry for subscriber
Context	debug nat large-scale nat44 subscriber inside-router string ip-address string
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router [string](#)

Synopsis	Inside router instance name
Context	debug nat large-scale nat44 subscriber inside-router string ip-address string
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address [string](#)

Synopsis	Inside IPv4 address of the NAT44 subscriber
Context	debug nat large-scale nat44 subscriber inside-router string ip-address string
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64

Synopsis	Enter the nat64 context
Context	debug nat large-scale nat64
Tree	nat64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber [inside-router string ipv6-prefix string](#)

Synopsis	Add a list entry for subscriber
Context	debug nat large-scale nat64 subscriber inside-router string ipv6-prefix string
Tree	subscriber
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router string

Synopsis	Inside router instance name
Context	debug nat large-scale nat64 subscriber inside-router string ipv6-prefix string
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix string

Synopsis	NAT64 IPv6 prefix of the subscriber
Context	debug nat large-scale nat64 subscriber inside-router string ipv6-prefix string
Tree	subscriber
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import

Synopsis	Enter the nat-import context
Context	debug nat nat-import
Tree	nat-import
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route [ip-address] (ipv4-unicast-address | keyword) inside-router string

Synopsis	Add a list entry for route
Context	debug nat nat-import route (ipv4-unicast-address keyword) inside-router string
Tree	route
Max. Instances	32
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-address] (ipv4-unicast-address | keyword)

Synopsis	IPv4 address of imported route, or any
Context	debug nat nat-import route (ipv4-unicast-address keyword) inside-router string
Tree	route
Options	any
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router string

Synopsis	Router name or VPRN service name, or any
Context	debug nat nat-import route (ipv4-unicast-address keyword) inside-router string
Tree	route
Notes	This element is part of a list key.
Introduced	22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pcp

Synopsis Enter the **pcp** context
 Context [debug nat pcp](#)
 Tree [pcp](#)
 Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router [[router-instance](#)] *string*

Synopsis Enter the **router** list instance
 Context [debug nat pcp router string](#)
 Tree [router](#)
 Max. Instances 8
 Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[router-instance\]](#) *string*

Synopsis Inside router instance name
 Context [debug nat pcp router string](#)
 Tree [router](#)
 Notes This element is part of a list key.
 Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [[name](#)] *string*

Synopsis Enter the **server** list instance
 Context [debug nat pcp router string server string](#)
 Tree [server](#)
 Max. Instances 8

Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis PCP server name
 Context [debug nat pcp router](#) *string server string*
 Tree [server](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis Enter the **packets** context
 Context [debug nat pcp router](#) *string server string packets*
 Tree [packets](#)
 Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail *boolean*

Synopsis Enable the detailed PCP packet debug output
 Context [debug nat pcp router](#) *string server string packets detail boolean*
 Tree [detail](#)
 Default false
 Introduced 22.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis Direction of the PCP packet debugging
 Context [debug nat pcp router](#) *string server string packets direction keyword*
 Tree [direction](#)

Default	ingress
Options	ingress, egress, both
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router [*router-instance*] *string*

Synopsis	Enter the router list instance
Context	debug router <i>string</i>
Tree	router
Introduced	22.5.R1
Platforms	All

[router-instance] *string*

Synopsis	Router name or VPRN service name
Context	debug router <i>string</i>
Tree	router
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

dhcp

Synopsis	Enter the dhcp context
Context	debug router <i>string</i> dhcp
Tree	dhcp
Description	<p>Commands in this context enable DHCP debug for all packets in the specified routing instance or VPRN service, or for specific packets matching the specific MAC addresses, SAP identifiers, or interface names.</p> <p>When a DHCP packet matches a specified filter and is conforming the configured debug mode for that filter, the packet debug is available in the specified detail level. DHCP debug filter criteria are applied in the following order:</p> <ol style="list-style-type: none"> 1. MAC address 2. SAP identifier 3. interface names 4. all packets

Up to 8 MAC address filters, 8 SAP identifier filters, 4 interface name filters, and 4 all-packet filters can be specified simultaneously across all routing instances and VPRN services.

Introduced 22.10.R1

Platforms All

all-packets

Synopsis Enable the **all-packets** context

Context [debug router string dhcp all-packets](#)

Tree [all-packets](#)

Introduced 22.10.R1

Platforms All

detail-level *keyword*

Synopsis Detail level of the DHCP debug output

Context [debug router string dhcp all-packets detail-level keyword](#)

Tree [detail-level](#)

Default high

Options high, medium, low

Introduced 22.10.R1

Platforms All

mode *keyword*

Synopsis DHCP packets present in the debug output

Context [debug router string dhcp all-packets mode keyword](#)

Tree [mode](#)

Default egress-ingress-and-dropped

Options egress-ingress-and-dropped, dropped-only, ingress-and-dropped

Introduced 22.10.R1

Platforms All

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

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> dhcp interface <i>string</i>
Tree	interface
Introduced	22.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router <i>string</i> dhcp interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp interface <i>string</i> detail-level <i>keyword</i>
Tree	detail-level
Default	high
Options	high, medium, low
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
Context	debug router <i>string</i> dhcp interface <i>string</i> mode <i>keyword</i>
Tree	mode
Default	egress-ingress-and-dropped
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced	22.10.R1

Platforms All

mac [[address](#)] *string*

Synopsis Enter the **mac** list instance
 Context [debug router string dhcp mac string](#)
 Tree [mac](#)
 Introduced 22.10.R1
 Platforms All

[address] *string*

Synopsis MAC address matching the client hardware address field
 Context [debug router string dhcp mac string](#)
 Tree [mac](#)
 Notes This element is part of a list key.
 Introduced 22.10.R1
 Platforms All

detail-level *keyword*

Synopsis Detail level of the DHCP debug output
 Context [debug router string dhcp mac string detail-level keyword](#)
 Tree [detail-level](#)
 Default high
 Options high, medium, low
 Introduced 22.10.R1
 Platforms All

mode *keyword*

Synopsis DHCP packets present in the debug output
 Context [debug router string dhcp mac string mode keyword](#)
 Tree [mode](#)
 Default egress-ingress-and-dropped

Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced	22.10.R1
Platforms	All

sap [*sap-id*] *string*

Synopsis	Enter the sap list instance
Context	debug router <i>string</i> dhcp sap <i>string</i>
Tree	sap
Introduced	22.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	debug router <i>string</i> dhcp sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the DHCP debug output
Context	debug router <i>string</i> dhcp sap <i>string</i> detail-level <i>keyword</i>
Tree	detail-level
Default	high
Options	high, medium, low
Introduced	22.10.R1
Platforms	All

mode *keyword*

Synopsis	DHCP packets present in the debug output
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Context	<code>debug router string dhcp sap string mode keyword</code>
Tree	<code>mode</code>
Default	egress-ingress-and-dropped
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Introduced	22.10.R1
Platforms	All

igmp

Synopsis	Enter the igmp context
Context	<code>debug router string igmp</code>
Tree	<code>igmp</code>
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enable the group-interface context
Context	<code>debug router string igmp group-interface</code>
Tree	<code>group-interface</code>
Introduced	22.10.R1
Platforms	All

all-group-interfaces

Synopsis	Trace all interfaces
Context	<code>debug router string igmp group-interface all-group-interfaces</code>
Tree	<code>all-group-interfaces</code>
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	<code>debug router <i>string</i> igmp group-interface forwarding-service <i>string</i></code>
Tree	<code>forwarding-service</code>
String Length	1 to 64
Default	<code>../router-instance</code>
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	<code>debug router <i>string</i> igmp group-interface group-interface-name <i>string</i></code>
Tree	<code>group-interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

host

Synopsis	Enable the host context
Context	<code>debug router <i>string</i> igmp host</code>
Tree	<code>host</code>
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enter the group-interface context
Context	<code>debug router <i>string</i> igmp host group-interface</code>
Tree	<code>group-interface</code>

Introduced 22.10.R1
Platforms All

forwarding-service *string*

Synopsis ID of the forwarding service to trace
Context [debug router](#) *string* [igmp host group-interface forwarding-service](#) *string*
Tree [forwarding-service](#)
String Length 1 to 64
Default [../router-instance](#)
Introduced 22.10.R1
Platforms All

group-interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [igmp host group-interface group-interface-name](#) *string*
Tree [group-interface-name](#)
String Length 1 to 32
Introduced 22.10.R1
Platforms All

ip-address *string*

Synopsis IP address of the host to trace
Context [debug router](#) *string* [igmp host ip-address](#) *string*
Tree [ip-address](#)
Introduced 22.10.R1
Platforms All

interface

Synopsis Enable the **interface** context
Context [debug router](#) *string* [igmp interface](#)
Tree [interface](#)

Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> igmp interface all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> igmp interface interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the mcs context
Context	debug router <i>string</i> igmp mcs
Tree	mcs
Description	Commands in this context enable debugging for IGMP multicast servers.
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
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Context	debug router string igmp mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router string igmp mcs interface-name string
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

miscellaneous *boolean*

Synopsis	Enable tracing of miscellaneous events
Context	debug router string igmp miscellaneous boolean
Tree	miscellaneous
Default	false
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router string igmp packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Trace all origins
Context	<code>debug router string igmp packet all-origins</code>
Tree	<code>all-origins</code>
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	<code>debug router string igmp packet dropped boolean</code>
Tree	<code>dropped</code>
Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<code>debug router string igmp packet egress boolean</code>
Tree	<code>egress</code>
Default	true
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	<code>debug router string igmp packet group-interface-name string</code>
Tree	<code>group-interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .

Introduced 22.10.R1
Platforms All

host-ip-address *string*

Synopsis Address of the host to trace
Context [debug router](#) *string* [igmp packet](#) [host-ip-address](#) *string*
Tree [host-ip-address](#)
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R2
Platforms All

ingress *boolean*

Synopsis Enable tracing for received packets
Context [debug router](#) *string* [igmp packet](#) [ingress](#) *boolean*
Tree [ingress](#)
Default true
Introduced 22.10.R1
Platforms All

interface-ip-address *string*

Synopsis Source address of the packet to trace
Context [debug router](#) *string* [igmp packet](#) [interface-ip-address](#) *string*
Tree [interface-ip-address](#)
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R2
Platforms All

interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [igmp packet](#) [interface-name](#) *string*

Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R1
Platforms	All

type *keyword*

Synopsis	Packet type to trace
Context	debug router <i>string</i> igmp packet type <i>keyword</i>
Tree	type
Default	all
Options	all, query, v1-report, v2-report, v2-leave, v3-report
Introduced	22.10.R1
Platforms	All

ip

Synopsis	Enter the ip context
Context	debug router <i>string</i> ip
Tree	ip
Introduced	23.3.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	debug router <i>string</i> ip icmp
Tree	icmp
Introduced	23.3.R1
Platforms	All

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string ip icmp all-packets</i>
Tree	all-packets
Introduced	23.3.R1
Platforms	All

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

Synopsis	Add a list entry for interface
Context	debug router <i>string ip icmp interface string</i>
Tree	interface
Introduced	23.3.R1
Platforms	All

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

Synopsis	Interface name
Context	debug router <i>string ip icmp interface string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

icmp6

Synopsis	Enter the icmp6 context
Context	debug router <i>string ip icmp6</i>
Tree	icmp6
Introduced	23.3.R1
Platforms	All

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string ip icmp6 all-packets</i>
Tree	all-packets
Introduced	23.3.R1
Platforms	All

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

Synopsis	Add a list entry for interface
Context	debug router <i>string ip icmp6 interface string</i>
Tree	interface
Introduced	23.3.R1
Platforms	All

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

Synopsis	Interface name
Context	debug router <i>string ip icmp6 interface string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

interface-events

Synopsis	Enter the interface-events context
Context	debug router <i>string ip interface-events</i>
Tree	interface-events
Introduced	23.3.R1
Platforms	All

all-events

Synopsis	Enable the all-events context
Context	debug router <i>string</i> ip interface-events all-events
Tree	all-events
Introduced	23.3.R1
Platforms	All

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

Synopsis	Add a list entry for interface
Context	debug router <i>string</i> ip interface-events interface <i>string</i>
Tree	interface
Introduced	23.3.R1
Platforms	All

[\[interface-name\]](#) *string*

Synopsis	Interface name
Context	debug router <i>string</i> ip interface-events interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
Context	debug router <i>string</i> ip neighbor
Tree	neighbor
Introduced	23.3.R1
Platforms	All

all-events

Synopsis	Enable the all-events context
Context	debug router <i>string</i> ip neighbor all-events
Tree	all-events
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip neighbor all-events address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

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

Synopsis	Enter the interface list instance
Context	debug router <i>string</i> ip neighbor interface <i>string</i>
Tree	interface
Introduced	23.3.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router <i>string</i> ip neighbor interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip neighbor interface <i>string</i> address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the packet context
Context	debug router <i>string</i> ip packet
Tree	packet
Introduced	23.3.R1
Platforms	All

all-packets

Synopsis	Enable the all-packets context
Context	debug router <i>string</i> ip packet all-packets
Tree	all-packets
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router <i>string</i> ip packet all-packets address-family <i>keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

headers *boolean*

Synopsis	Display information associated with packet header only
Context	debug router <i>string ip packet all-packets headers boolean</i>
Tree	headers
Default	false
Introduced	23.3.R1
Platforms	All

protocol-id *number*

Synopsis	IP protocol ID to trace
Context	debug router <i>string ip packet all-packets protocol-id number</i>
Tree	protocol-id
Range	0 to 255
Introduced	23.3.R1
Platforms	All

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

Synopsis	Enter the interface list instance
Context	debug router <i>string ip packet interface string</i>
Tree	interface
Introduced	23.3.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router <i>string ip packet interface string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

address-family *keyword*

Synopsis	Debug the specified address family
Context	debug router <i>string ip packet interface string address-family keyword</i>
Tree	address-family
Options	ipv4, ipv6
Introduced	23.3.R1
Platforms	All

headers *boolean*

Synopsis	Display information associated with packet header only
Context	debug router <i>string ip packet interface string headers boolean</i>
Tree	headers
Default	false
Introduced	23.3.R1
Platforms	All

protocol-id *number*

Synopsis	IP protocol ID to trace
Context	debug router <i>string ip packet interface string protocol-id number</i>
Tree	protocol-id
Range	0 to 255
Introduced	23.3.R1
Platforms	All

route-table

Synopsis	Enable the route-table context
Context	debug router <i>string ip route-table</i>
Tree	route-table
Introduced	23.3.R1
Platforms	All

all

Synopsis	Allow trace for all route updates
Context	debug router string ip route-table all
Tree	all
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	23.3.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	debug router string ip route-table filter
Tree	filter
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	debug router string ip route-table filter ipv4
Tree	ipv4
Introduced	23.3.R1
Platforms	All

prefix [[prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	debug router string ip route-table filter ipv4 prefix string
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

[prefix] string

Synopsis	IPv4 prefix
Context	debug router string ip route-table filter ipv4 prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match boolean

Synopsis	Allow match for greatest prefix values
Context	debug router string ip route-table filter ipv4 prefix string longest-prefix-match boolean
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	debug router string ip route-table filter ipv6
Tree	ipv6
Introduced	23.3.R1
Platforms	All

prefix [prefix] string

Synopsis	Enter the prefix list instance
Context	debug router string ip route-table filter ipv6 prefix string
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

[prefix] *string*

Synopsis	IPv6 prefix
Context	debug router <i>string</i> ip route-table filter ipv6 prefix <i>string</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	debug router <i>string</i> ip route-table filter ipv6 prefix <i>string</i> longest-prefix-match <i>boolean</i>
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-table

Synopsis	Enable the tunnel-table context
Context	debug router <i>string</i> ip tunnel-table
Tree	tunnel-table
Introduced	23.3.R1
Platforms	All

all

Synopsis	Allow trace for all tunnel updates
Context	debug router <i>string</i> ip tunnel-table all
Tree	all
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	23.3.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	debug router string ip tunnel-table filter
Tree	filter
Notes	The following elements are part of a mandatory choice: all or filter .
Introduced	23.3.R1
Platforms	All

id

Synopsis	Enter the id context
Context	debug router string ip tunnel-table filter id
Tree	id
Introduced	23.3.R1
Platforms	All

sdp-id *number*

Synopsis	SDP ID for tracing
Context	debug router string ip tunnel-table filter id sdp-id number
Tree	sdp-id
Range	1 to 32767
Notes	The following elements are part of a choice: sdp-id or tunnel-id .
Introduced	23.3.R1
Platforms	All

tunnel-id *number*

Synopsis	Tunnel ID for tracing
Context	debug router string ip tunnel-table filter id tunnel-id number
Tree	tunnel-id
Max. Range	0 to 4294967295
Notes	The following elements are part of a choice: sdp-id or tunnel-id .
Introduced	23.3.R1

Platforms All

ipv4

Synopsis Enter the **ipv4** context
 Context [debug router string ip tunnel-table filter ipv4](#)
 Tree [ipv4](#)
 Introduced 23.3.R1
 Platforms All

prefix [[prefix](#)] *string*

Synopsis Enter the **prefix** list instance
 Context [debug router string ip tunnel-table filter ipv4 prefix string](#)
 Tree [prefix](#)
 Max. Instances 1
 Introduced 23.3.R1
 Platforms All

[[prefix](#)] *string*

Synopsis IPv4 prefix
 Context [debug router string ip tunnel-table filter ipv4 prefix string](#)
 Tree [prefix](#)
 Notes This element is part of a list key.
 Introduced 23.3.R1
 Platforms All

longest-prefix-match *boolean*

Synopsis Allow match for greatest prefix values
 Context [debug router string ip tunnel-table filter ipv4 prefix string longest-prefix-match boolean](#)
 Tree [longest-prefix-match](#)
 Default false

Introduced	23.3.R1
Platforms	All

tunnel-type (*keyword* | *keyword*)

Synopsis	Tunnel type
Context	debug router <i>string</i> ip tunnel-table filter ipv4 prefix <i>string</i> tunnel-type (<i>keyword</i> <i>keyword</i>)
Tree	tunnel-type
Default	all
Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy
Introduced	23.3.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	debug router <i>string</i> ip tunnel-table filter ipv6
Tree	ipv6
Introduced	23.3.R1
Platforms	All

prefix [[prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	debug router <i>string</i> ip tunnel-table filter ipv6 prefix <i>string</i>
Tree	prefix
Max. Instances	1
Introduced	23.3.R1
Platforms	All

[prefix] *string*

Synopsis	IPv6 prefix
Context	debug router <i>string</i> ip tunnel-table filter ipv6 prefix <i>string</i>

Tree	prefix
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	debug router <i>string ip tunnel-table filter ipv6 prefix</i> string longest-prefix-match <i>boolean</i>
Tree	longest-prefix-match
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-type (*keyword | keyword*)

Synopsis	Tunnel type
Context	debug router <i>string ip tunnel-table filter ipv6 prefix</i> string tunnel-type (<i>keyword keyword</i>)
Tree	tunnel-type
Default	all
Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy
Introduced	23.3.R1
Platforms	All

ldp

Synopsis	Enter the ldp context
Context	debug router <i>string ldp</i>
Tree	ldp
Introduced	23.3.R1
Platforms	All

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

Synopsis	Enter the interface list instance
Context	debug router string ldp interface string
Tree	interface
Introduced	23.3.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router string ldp interface string
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enable the ipv4 context
Context	debug router string ldp interface string ipv4
Tree	ipv4
Introduced	23.3.R1
Platforms	All

event

Synopsis	Enter the event context
Context	debug router string ldp interface string ipv4 event
Tree	event
Introduced	23.3.R1
Platforms	All

messages

Synopsis	Enable the messages context
Context	debug router string ldp interface string ipv4 event messages
Tree	messages
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the packet context
Context	debug router string ldp interface string ipv4 packet
Tree	packet
Introduced	23.3.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	debug router string ldp interface string ipv4 packet hello
Tree	hello
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router string ldp interface string ipv4 packet hello detail boolean
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
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Context	<code>debug router string ldp interface string ipv6</code>
Tree	<code>ipv6</code>
Introduced	23.3.R1
Platforms	All

event

Synopsis	Enter the event context
Context	<code>debug router string ldp interface string ipv6 event</code>
Tree	<code>event</code>
Introduced	23.3.R1
Platforms	All

messages

Synopsis	Enable the messages context
Context	<code>debug router string ldp interface string ipv6 event messages</code>
Tree	<code>messages</code>
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the packet context
Context	<code>debug router string ldp interface string ipv6 packet</code>
Tree	<code>packet</code>
Introduced	23.3.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	<code>debug router string ldp interface string ipv6 packet hello</code>
Tree	<code>hello</code>
Introduced	23.3.R1

Platforms All

detail *boolean*

Synopsis Display detailed information
 Context [debug router string ldp interface string ipv6 packet hello detail boolean](#)
 Tree [detail](#)
 Default false
 Introduced 23.3.R1
 Platforms All

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

Synopsis Enter the **peer** list instance
 Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
 Tree [peer](#)
 Introduced 23.3.R1
 Platforms All

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

Synopsis Peer IP address
 Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
 Tree [peer](#)
 Notes This element is part of a list key.
 Introduced 23.3.R1
 Platforms All

event

Synopsis Enter the **event** context
 Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\) event](#)
 Tree [event](#)
 Introduced 23.3.R1
 Platforms All

bindings

Synopsis	Enable the bindings context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) event bindings
Tree	bindings
Introduced	23.3.R1
Platforms	All

messages

Synopsis	Enable the messages context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) event messages
Tree	messages
Introduced	23.3.R1
Platforms	All

packet

Synopsis	Enter the packet context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet
Tree	packet
Introduced	23.3.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet hello
Tree	hello
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet hello detail <i>boolean</i>
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

init

Synopsis	Enable the init context
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet init
Tree	init
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet init detail <i>boolean</i>
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	debug router <i>string</i> ldp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) packet keepalive
Tree	keepalive
Introduced	23.3.R1
Platforms	All

label

Synopsis	Enable the label context
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet label
Tree	label
Introduced	23.3.R1
Platforms	All

detail *boolean*

Synopsis	Display detailed information
Context	debug router string ldp peer (ipv4-address-no-zone ipv6-address-no-zone) packet label detail boolean
Tree	detail
Default	false
Introduced	23.3.R1
Platforms	All

mld

Synopsis	Enter the mld context
Context	debug router string mld
Tree	mld
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enable the group-interface context
Context	debug router string mld group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

all-group-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> mld group-interface all-group-interfaces
Tree	all-group-interfaces
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router <i>string</i> mld group-interface forwarding-service <i>string</i>
Tree	forwarding-service
String Length	1 to 64
Default	.././router-instance
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld group-interface group-interface-name <i>string</i>
Tree	group-interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-group-interfaces or (forwarding-service and group-interface-name).
Introduced	22.10.R1
Platforms	All

host

Synopsis	Enable the host context
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Context	debug router <i>string</i> mld host
Tree	host
Introduced	22.10.R1
Platforms	All

group-interface

Synopsis	Enter the group-interface context
Context	debug router <i>string</i> mld host group-interface
Tree	group-interface
Introduced	22.10.R1
Platforms	All

forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	debug router <i>string</i> mld host group-interface forwarding-service <i>string</i>
Tree	forwarding-service
String Length	1 to 64
Default	<code>../router-instance</code>
Introduced	22.10.R1
Platforms	All

group-interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld host group-interface group-interface-name <i>string</i>
Tree	group-interface-name
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the host to trace
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Context	<code>debug router string mld host ip-address string</code>
Tree	<code>ip-address</code>
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the interface context
Context	<code>debug router string mld interface</code>
Tree	<code>interface</code>
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	<code>debug router string mld interface all-interfaces</code>
Tree	<code>all-interfaces</code>
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	<code>debug router string mld interface interface-name string</code>
Tree	<code>interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the mcs context
Context	debug router <i>string</i> mld mcs
Tree	mcs
Introduced	22.10.R1
Platforms	All

all-interfaces

Synopsis	Trace all interfaces
Context	debug router <i>string</i> mld mcs all-interfaces
Tree	all-interfaces
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> mld mcs interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: all-interfaces or interface-name .
Introduced	22.10.R1
Platforms	All

miscellaneous *boolean*

Synopsis	Enable the tracing of miscellaneous events
Context	debug router <i>string</i> mld miscellaneous <i>boolean</i>
Tree	miscellaneous
Default	false
Introduced	22.10.R1

Platforms All

packet

Synopsis Enable the **packet** context

Context [debug router string mld packet](#)

Tree [packet](#)

Introduced 22.10.R1

Platforms All

all-origins

Synopsis Allow trace for all origins

Context [debug router string mld packet all-origins](#)

Tree [all-origins](#)

Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.

Introduced 22.10.R1

Platforms All

dropped *boolean*

Synopsis Enable tracing for dropped packets

Context [debug router string mld packet dropped boolean](#)

Tree [dropped](#)

Default true

Introduced 22.10.R1

Platforms All

egress *boolean*

Synopsis Enable tracing for transmitted packets

Context [debug router string mld packet egress boolean](#)

Tree [egress](#)

Default true

Introduced 22.10.R1
Platforms All

group-interface-name *string*

Synopsis Interface name
Context [debug router](#) *string* [mld packet](#) [group-interface-name](#) *string*
Tree [group-interface-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R1
Platforms All

host-ip-address *string*

Synopsis Address of the host to trace
Context [debug router](#) *string* [mld packet](#) [host-ip-address](#) *string*
Tree [host-ip-address](#)
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.
Introduced 22.10.R2
Platforms All

ingress *boolean*

Synopsis Enable tracing for received packets
Context [debug router](#) *string* [mld packet](#) [ingress](#) *boolean*
Tree [ingress](#)
Default true
Introduced 22.10.R1
Platforms All

interface-ip-address *string*

Synopsis Source address of the packet to trace

Context	<code>debug router string mld packet interface-ip-address string</code>
Tree	<code>interface-ip-address</code>
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R2
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	<code>debug router string mld packet interface-name string</code>
Tree	<code>interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins , group-interface-name , host-ip-address , interface-ip-address , or interface-name .
Introduced	22.10.R1
Platforms	All

type *keyword*

Synopsis	Packet type
Context	<code>debug router string mld packet type keyword</code>
Tree	<code>type</code>
Default	all
Options	all, query, v1-report, v2-report
Introduced	22.10.R1
Platforms	All

msdp

Synopsis	Enter the msdp context
Context	<code>debug router string msdp</code>
Tree	<code>msdp</code>
Description	Commands in this context configure debugging for the Multicast Source Discovery Protocol (MSDP).
Introduced	22.10.R1

Platforms All

packet

Synopsis Enable the **packet** context

Context [debug router string msdp packet](#)

Tree [packet](#)

Introduced 22.10.R1

Platforms All

all-packet-types

Synopsis Enable MSDP debugging for all packets

Context [debug router string msdp packet all-packet-types](#)

Tree [all-packet-types](#)

Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.

Introduced 22.10.R1

Platforms All

packet-types

Synopsis Enter the **packet-types** context

Context [debug router string msdp packet packet-types](#)

Tree [packet-types](#)

Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.

Introduced 22.10.R1

Platforms All

keep-alive

Synopsis Enable the **keep-alive** context

Context [debug router string msdp packet packet-types keep-alive](#)

Tree [keep-alive](#)

Introduced 22.10.R1

Platforms All

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types keep-alive peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

sa-request

Synopsis	Enable the sa-request context
Context	debug router string msdp packet packet-types sa-request
Tree	sa-request
Introduced	22.10.R1
Platforms	All

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types sa-request peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

sa-response

Synopsis	Enable the sa-response context
Context	debug router string msdp packet packet-types sa-response
Tree	sa-response
Introduced	22.10.R1
Platforms	All

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types sa-response peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

source-active

Synopsis	Enable the source-active context
Context	debug router string msdp packet packet-types source-active
Tree	source-active
Introduced	22.10.R1
Platforms	All

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

Synopsis	Peer address used to trace packets
Context	debug router string msdp packet packet-types source-active peer-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer-address
Introduced	22.10.R1
Platforms	All

pim

Synopsis	Enable the pim context
Context	debug router string msdp pim
Tree	pim
Description	Commands in this context enable MSDP PIM debugging.
Introduced	22.10.R1
Platforms	All

group-address *string*

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> msdp pim group-address <i>string</i>
Tree	group-address
Introduced	22.10.R1
Platforms	All

rtm

Synopsis	Enable the rtm context
Context	debug router <i>string</i> msdp rtm
Tree	rtm
Description	Commands in this context enable MSDP route table manager (RTM) debugging.
Introduced	22.10.R1
Platforms	All

rp-address *string*

Synopsis	IP multicast RP address used to trace events
Context	debug router <i>string</i> msdp rtm rp-address <i>string</i>
Tree	rp-address
Introduced	22.10.R1
Platforms	All

sa-db

Synopsis	Enable the sa-db context
Context	debug router <i>string</i> msdp sa-db
Tree	sa-db
Description	Commands in this context enable MSDP source-active database debugging.
Introduced	22.10.R1
Platforms	All

group-address *string*

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> msdp sa-db group-address <i>string</i>
Tree	group-address
Introduced	22.10.R1
Platforms	All

rp-address *string*

Synopsis	IP multicast RP address used to trace events
Context	debug router <i>string</i> msdp sa-db rp-address <i>string</i>
Tree	rp-address
Introduced	22.10.R1
Platforms	All

source-address *string*

Synopsis	Source address used to trace events
Context	debug router <i>string</i> msdp sa-db source-address <i>string</i>
Tree	source-address
Introduced	22.10.R1
Platforms	All

mtrace

Synopsis	Enter the mtrace context
Context	debug router <i>string</i> mtrace
Tree	mtrace
Introduced	22.10.R1
Platforms	All

miscellaneous

Synopsis	Enable the miscellaneous context
Context	debug router <i>string</i> mtrace miscellaneous

Tree	miscellaneous
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router string mtrace packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router string mtrace packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug router string mtrace packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

query *boolean*

Synopsis	Debug query packets
Context	debug router string mtrace packet packet-types query boolean
Tree	query

Default	false
Introduced	22.10.R1
Platforms	All

request *boolean*

Synopsis	Debug request packets
Context	debug router <i>string</i> mtrace packet packet-types request <i>boolean</i>
Tree	request
Default	false
Introduced	22.10.R1
Platforms	All

response *boolean*

Synopsis	Debug response packets
Context	debug router <i>string</i> mtrace packet packet-types response <i>boolean</i>
Tree	response
Default	false
Introduced	22.10.R1
Platforms	All

mtrace2

Synopsis	Enter the mtrace2 context
Context	debug router <i>string</i> mtrace2
Tree	mtrace2
Introduced	22.10.R1
Platforms	All

miscellaneous

Synopsis	Enable the miscellaneous context
Context	debug router <i>string</i> mtrace2 miscellaneous
Tree	miscellaneous

Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> mtrace2 packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable debugging for all packets
Context	debug router <i>string</i> mtrace2 packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> mtrace2 packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

query *boolean*

Synopsis	Debug query packets
Context	debug router <i>string</i> mtrace2 packet packet-types query <i>boolean</i>
Tree	query
Default	false

Introduced	22.10.R1
Platforms	All

request *boolean*

Synopsis	Debug request packets
Context	debug router <i>string</i> mtrace2 packet packet-types request <i>boolean</i>
Tree	request
Default	false
Introduced	22.10.R1
Platforms	All

response *boolean*

Synopsis	Debug response packets
Context	debug router <i>string</i> mtrace2 packet packet-types response <i>boolean</i>
Tree	response
Default	false
Introduced	22.10.R1
Platforms	All

pim

Synopsis	Enter the pim context
Context	debug router <i>string</i> pim
Tree	pim
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enable the events context
Context	debug router <i>string</i> pim events
Tree	events
Introduced	22.10.R1

Platforms All

adjacency

Synopsis Enable the **adjacency** context

Context [debug router string pim events adjacency](#)

Tree [adjacency](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynml dp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcach e**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

all

Synopsis Enable the **all** context

Context [debug router string pim events all](#)

Tree [all](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynml dp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcach e**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

detail *boolean*

Synopsis Enable detail tracing

Context [debug router string pim events all detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

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

Synopsis IP multicast group address used to trace events

Context	<code>debug router string pim events all group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	<code>debug router string pim events all source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

assert

Synopsis	Enable the assert context
Context	<code>debug router string pim events assert</code>
Tree	<code>assert</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events assert detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events assert group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	<code>debug router string pim events assert source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

auto-rp

Synopsis	Enable the auto-rp context
Context	<code>debug router string pim events auto-rp</code>
Tree	<code>auto-rp</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

bgp

Synopsis	Enable the bgp context
Context	<code>debug router string pim events bgp</code>
Tree	<code>bgp</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1

Platforms All

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

Synopsis IP multicast group address used to trace events

Context [debug router string pim events bgp group-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [group-address](#)

Introduced 22.10.R1

Platforms All

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

Synopsis BGP peer address used to trace events

Context [debug router string pim events bgp peer-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-address](#)

Introduced 22.10.R1

Platforms All

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

Synopsis Source address used to trace events

Context [debug router string pim events bgp source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 22.10.R1

Platforms All

bier-inband

Synopsis Enable the **bier-inband** context

Context [debug router string pim events bier-inband](#)

Tree [bier-inband](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced	22.10.R1
Platforms	All

detail boolean

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events bier-inband detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

bsr

Synopsis	Enable the bsr context
Context	debug router <i>string</i> pim events bsr
Tree	bsr
Description	Commands in this context enable debugging for the PIM bootstrap mechanism.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail boolean

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events bsr detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

data

Synopsis	Enable the data context
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Context	debug router string pim events data
Tree	data
Description	Commands in this context enable PIM data exception debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events data detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events data group-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	debug router string pim events data source-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	source-address
Introduced	22.10.R1
Platforms	All

db

Synopsis	Enable the db context
Context	debug router string pim events db
Tree	db
Description	Commands in this context enable PIM database debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmlp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events db detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events db group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	debug router string pim events db source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address

Introduced	22.10.R1
Platforms	All

dynmldp

Synopsis	Enable the dynmldp context
Context	debug router <i>string</i> pim events dynmldp
Tree	dynmldp
Description	Commands in this context enable dynamic MLDP debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events dynmldp detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

extranet

Synopsis	Enable the extranet context
Context	debug router <i>string</i> pim events extranet
Tree	extranet
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events extranet detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

graft

Synopsis	Enable the graft context
Context	debug router <i>string</i> pim events graft
Tree	graft
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcach , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events graft detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events graft group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	<code>debug router string pim events graft source-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

interface

Synopsis	Enable the interface context
Context	<code>debug router string pim events interface</code>
Tree	<code>interface</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	<code>debug router string pim events interface interface-name string</code>
Tree	<code>interface-name</code>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the jp context
Context	<code>debug router string pim events jp</code>
Tree	<code>jp</code>
Description	Commands in this context enable debugging for PIM join and prune mechanisms.

Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router <i>string</i> pim events jp detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	debug router <i>string</i> pim events jp group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	debug router <i>string</i> pim events jp source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	22.10.R1
Platforms	All

mofrr

Synopsis	Enable the mofrr context
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Context	<code>debug router string pim events mofrr</code>
Tree	<code>mofrr</code>
Description	Commands in this context enable debugging for PIM Multicast-only Fast Reroute (MoFRR).
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynml dp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

mrrib

Synopsis	Enable the mrrib context
Context	<code>debug router string pim events mrrib</code>
Tree	<code>mrrib</code>
Description	Commands in this context enable Multicast Routing Information Base (MRIB) debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynml dp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events mrrib detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events mrrib group-address (ipv4-address-no-zone ipv6-address-no-zone)</code>

Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	debug router string pim events mrrib source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	22.10.R1
Platforms	All

msg

Synopsis	Enable the msg context
Context	debug router string pim events msg
Tree	msg
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

mvpn-rtcache

Synopsis	Enable the mvpn-rtcache context
Context	debug router string pim events mvpn-rtcache
Tree	mvpn-rtcache
Description	Commands in this context enable debugging for the PIM MVPN route cache.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

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

Synopsis	Group address used to trace events
Context	<code>debug router string pim events mvpn-rtcache group-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>group-address</code>
Introduced	22.10.R1
Platforms	All

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

Synopsis	Peer address used to trace events
Context	<code>debug router string pim events mvpn-rtcache peer-address</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>peer-address</code>
Introduced	22.10.R1
Platforms	All

red

Synopsis	Enable the red context
Context	<code>debug router string pim events red</code>
Tree	<code>red</code>
Description	Commands in this context enable debugging for PIM redundancy messages to the standby CPM.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events red detail boolean</code>
Tree	<code>detail</code>
Default	false

Introduced	22.10.R1
Platforms	All

register

Synopsis	Enable the register context
Context	debug router string pim events register
Tree	register
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmlp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug router string pim events register detail boolean
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	debug router string pim events register group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
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Context	<code>debug router string pim events register source-address</code> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

rpfv

Synopsis	Enable the rpfv context
Context	<code>debug router string pim events rpfv</code>
Tree	<code>rpfv</code>
Description	Commands in this context enable PIM RPF vector debugging.
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router string pim events rpfv detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

rtm

Synopsis	Enable the rtm context
Context	<code>debug router string pim events rtm</code>
Tree	<code>rtm</code>
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmldp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1

Platforms All

detail *boolean*

Synopsis Enable detail tracing
 Context [debug router string pim events rtm detail boolean](#)
 Tree [detail](#)
 Default false
 Introduced 22.10.R1
 Platforms All

s-pmsi

Synopsis Enable the **s-pmsi** context
 Context [debug router string pim events s-pmsi](#)
 Tree [s-pmsi](#)
 Description Commands in this context enable debugging for the PIM selective provider multicast service interface.
 Notes The following elements are part of a choice: (**adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynmldp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcache, red, register, rpfv, rtm, s-pmsi, and tunnel-interface**) or **all**.
 Introduced 22.10.R1
 Platforms All

detail *boolean*

Synopsis Enable detail tracing
 Context [debug router string pim events s-pmsi detail boolean](#)
 Tree [detail](#)
 Default false
 Introduced 22.10.R1
 Platforms All

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

Synopsis VPN source address used to trace events

Context	debug router string pim events s-pmsi vpn-source-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	vpn-source-address
Introduced	22.10.R1
Platforms	All

tunnel-interface

Synopsis	Enable the tunnel-interface context
Context	debug router string pim events tunnel-interface
Tree	tunnel-interface
Notes	The following elements are part of a choice: (adjacency , assert , auto-rp , bgp , bier-inband , bsr , data , db , dynmlp , extranet , graft , interface , jp , mofrr , mrrib , msg , mvpn-rtcache , red , register , rpfv , rtm , s-pmsi , and tunnel-interface) or all .
Introduced	22.10.R1
Platforms	All

ldp-p2mp-id *number*

Synopsis	LDP P2MP ID
Context	debug router string pim events tunnel-interface ldp-p2mp-id number
Tree	ldp-p2mp-id
Range	1 to 8192
Introduced	22.10.R1
Platforms	All

rsvp-p2mp *string*

Synopsis	RSVP P2MP LSP name
Context	debug router string pim events tunnel-interface rsvp-p2mp string
Tree	rsvp-p2mp
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

sender-address *string*

Synopsis	IP address of the sender
Context	debug router <i>string</i> pim events tunnel-interface sender-address <i>string</i>
Tree	sender-address
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug router <i>string</i> pim packet
Tree	packet
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

all-packet-types

Synopsis	Enable PIM debugging for all packets
Context	debug router <i>string</i> pim packet all-packet-types
Tree	all-packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug router <i>string</i> pim packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug router <i>string</i> pim packet ingress <i>boolean</i>
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable tracing for PIM IPv4 packets
Context	debug router <i>string</i> pim packet ipv4 <i>boolean</i>
Tree	ipv4
Default	true
Introduced	22.10.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable tracing for PIM IPv6 packets
Context	debug router <i>string</i> pim packet ipv6 <i>boolean</i>
Tree	ipv6
Default	true
Introduced	22.10.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> pim packet packet-types
Tree	packet-types
Notes	The following elements are part of a choice: all-packet-types or packet-types .
Introduced	22.10.R1
Platforms	All

assert

Synopsis	Enable the assert context
Context	debug router <i>string</i> pim packet packet-types assert
Tree	assert
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types assert all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types assert interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

auto-rp-announcement

Synopsis	Enable the auto-rp-announcement context
Context	debug router <i>string</i> pim packet packet-types auto-rp-announcement
Tree	auto-rp-announcement
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types auto-rp-announcement all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types auto-rp-announcement interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .

Introduced	22.10.R1
Platforms	All

auto-rp-mapping

Synopsis	Enable the auto-rp-mapping context
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping
Tree	auto-rp-mapping
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types auto-rp-mapping interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

bsr

Synopsis	Enable the bsr context
Context	debug router <i>string</i> pim packet packet-types bsr
Tree	bsr

Introduced 22.10.R1
 Platforms All

all-origins

Synopsis Enable trace for all origins
 Context [debug router string pim packet packet-types bsr all-origins](#)
 Tree [all-origins](#)
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.
 Introduced 22.10.R1
 Platforms All

interface-name *string*

Synopsis Interface name
 Context [debug router string pim packet packet-types bsr interface-name string](#)
 Tree [interface-name](#)
 String Length 1 to 32
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.
 Introduced 22.10.R1
 Platforms All

crp

Synopsis Enable the **crp** context
 Context [debug router string pim packet packet-types crp](#)
 Tree [crp](#)
 Introduced 22.10.R1
 Platforms All

all-origins

Synopsis Enable trace for all origins
 Context [debug router string pim packet packet-types crp all-origins](#)
 Tree [all-origins](#)

Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types crp interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

graft

Synopsis	Enable the graft context
Context	debug router <i>string</i> pim packet packet-types graft
Tree	graft
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types graft all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types graft interface-name <i>string</i>

Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

graft-ack

Synopsis	Enable the graft-ack context
Context	debug router <i>string</i> pim packet packet-types graft-ack
Tree	graft-ack
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types graft-ack all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types graft-ack interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	debug router string pim packet packet-types hello
Tree	hello
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router string pim packet packet-types hello all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router string pim packet packet-types hello interface-name string
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

jp

Synopsis	Enable the jp context
Context	debug router string pim packet packet-types jp
Tree	jp
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types jp all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types jp interface-name string
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

mdt-tlv

Synopsis	Enable the mdt-tlv context
Context	debug router <i>string</i> pim packet packet-types mdt-tlv
Tree	mdt-tlv
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types mdt-tlv all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types mdt-tlv interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

register

Synopsis	Enable the register context
Context	debug router <i>string</i> pim packet packet-types register
Tree	register
Introduced	22.10.R1
Platforms	All

all-origins

Synopsis	Enable trace for all origins
Context	debug router <i>string</i> pim packet packet-types register all-origins
Tree	all-origins
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1
Platforms	All

interface-name *string*

Synopsis	Interface name
Context	debug router <i>string</i> pim packet packet-types register interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	The following elements are part of a choice: all-origins or interface-name .
Introduced	22.10.R1

Platforms All

register-stop

Synopsis Enable the **register-stop** context

Context [debug router string pim packet packet-types register-stop](#)

Tree [register-stop](#)

Introduced 22.10.R1

Platforms All

all-origins

Synopsis Enable trace for all origins

Context [debug router string pim packet packet-types register-stop all-origins](#)

Tree [all-origins](#)

Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 22.10.R1

Platforms All

interface-name *string*

Synopsis Interface name

Context [debug router string pim packet packet-types register-stop interface-name string](#)

Tree [interface-name](#)

String Length 1 to 32

Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 22.10.R1

Platforms All

radius

Synopsis Enter the **radius** context

Context [debug router string radius](#)

Tree [radius](#)

Introduced 22.5.R1

Platforms All

proxy [[name](#)] *string*

Synopsis Enter the **proxy** list instance

Context [debug router string radius proxy string](#)

Tree [proxy](#)

Max. Instances 8

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS proxy server name

Context [debug router string radius proxy string](#)

Tree [proxy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packet-types

Synopsis Enable RADIUS proxy debugging for all packets

Context [debug router string radius proxy string all-packet-types](#)

Tree [all-packet-types](#)

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

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-address [[address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Add a list entry for **client-address**

Context	<code>debug router string radius proxy string client-address (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>client-address</code>
Max. Instances	10
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the RADIUS client
Context	<code>debug router string radius proxy string client-address (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>client-address</code>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the RADIUS proxy debug output
Context	<code>debug router string radius proxy string detail-level keyword</code>
Tree	<code>detail-level</code>
Default	low
Options	low, high
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Direction of the RADIUS proxy packet debugging
Context	<code>debug router string radius proxy string direction keyword</code>
Tree	<code>direction</code>
Default	both
Options	ingress, egress, both
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dropped-only *boolean*

Synopsis Show dropped packets only
Context [debug router](#) *string* [radius proxy](#) *string* **dropped-only** *boolean*
Tree [dropped-only](#)
Default false
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-types

Synopsis Enter the **packet-types** context
Context [debug router](#) *string* [radius proxy](#) *string* **packet-types**
Tree [packet-types](#)
Notes The following elements are part of a mandatory choice: **all-packet-types** or **packet-types**.
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-accept *boolean*

Synopsis Debug Access-Accept packets
Context [debug router](#) *string* [radius proxy](#) *string* **access-accept** *boolean*
Tree [access-accept](#)
Default false
Introduced 22.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-challenge *boolean*

Synopsis Debug Access-Challenge packets
Context [debug router](#) *string* [radius proxy](#) *string* **access-challenge** *boolean*
Tree [access-challenge](#)

Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-reject *boolean*

Synopsis	Debug Access-Reject packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types access-reject <i>boolean</i>
Tree	access-reject
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-request *boolean*

Synopsis	Debug Access-Request packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types access-request <i>boolean</i>
Tree	access-request
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-request *boolean*

Synopsis	Debug Accounting-Request packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types accounting-request <i>boolean</i>
Tree	accounting-request
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-response *boolean*

Synopsis	Debug Accounting-Response packets
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types accounting-response <i>boolean</i>

Tree	accounting-response
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

other *boolean*

Synopsis	Debug other packet types
Context	debug router <i>string</i> radius proxy <i>string</i> packet-types <i>other</i> <i>boolean</i>
Tree	other
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

servers

Synopsis	Enable the servers context
Context	debug router <i>string</i> radius <i>servers</i>
Tree	servers
Introduced	22.5.R1
Platforms	All

attribute [*name*] *string*

Synopsis	Enter the attribute list instance
Context	debug router <i>string</i> radius <i>servers</i> attribute <i>string</i>
Tree	attribute
Max. Instances	10
Introduced	22.5.R1
Platforms	All

[*name*] *string*

Synopsis	Attribute filter name
Context	debug router <i>string</i> radius <i>servers</i> attribute <i>string</i>

Tree	attribute
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

extended-type *number*

Synopsis	RADIUS attribute extended type
Context	debug router <i>string</i> radius servers attribute <i>string</i> extended-type <i>number</i>
Tree	extended-type
Range	1 to 255
Introduced	22.5.R1
Platforms	All

transaction *boolean*

Synopsis	Debug request and response transaction
Context	debug router <i>string</i> radius servers attribute <i>string</i> transaction <i>boolean</i>
Tree	transaction
Default	false
Introduced	22.5.R1
Platforms	All

type *number*

Synopsis	RADIUS attribute type
Context	debug router <i>string</i> radius servers attribute <i>string</i> type <i>number</i>
Tree	type
Range	1 to 255
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	All

value

Synopsis	Enter the value context
Context	debug router string radius servers attribute string value
Tree	value
Introduced	22.5.R1
Platforms	All

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

Synopsis	Attribute value specified as an IP address
Context	debug router string radius servers attribute string value address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	22.5.R1
Platforms	All

hex string

Synopsis	Attribute value specified as a hexadecimal string
Context	debug router string radius servers attribute string value hex string
Tree	hex
String Length	1 to 253
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	22.5.R1
Platforms	All

integer number

Synopsis	Attribute value specified as an integer
Context	debug router string radius servers attribute string value integer number
Tree	integer
Max. Range	0 to 4294967295
Notes	The following elements are part of a choice: address , hex , integer , prefix , or string .
Introduced	22.5.R1

Platforms All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Attribute value specified as an IP prefix

Context [debug router string radius servers attribute string value prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.

Introduced 22.5.R1

Platforms All

string *string*

Synopsis Attribute value specified as a string

Context [debug router string radius servers attribute string value string string](#)

Tree [string](#)

String Length 1 to 253

Notes The following elements are part of a choice: **address**, **hex**, **integer**, **prefix**, or **string**.

Introduced 22.5.R1

Platforms All

vendor-specific

Synopsis Enter the **vendor-specific** context

Context [debug router string radius servers attribute string vendor-specific](#)

Tree [vendor-specific](#)

Introduced 22.5.R1

Platforms All

encoding

Synopsis Enter the **encoding** context

Context [debug router string radius servers attribute string vendor-specific encoding](#)

Tree [encoding](#)

Introduced 22.5.R1

Platforms All

length-size *number*

Synopsis Size of the vendor-length field

Context [debug router](#) *string* [radius servers attribute](#) *string* vendor-specific encoding [length-size](#) *number*

Tree [length-size](#)

Range 0 to 2

Default 1

Introduced 22.5.R1

Platforms All

type-size *number*

Synopsis Size of the vendor-type field

Context [debug router](#) *string* [radius servers attribute](#) *string* vendor-specific encoding [type-size](#) *number*

Tree [type-size](#)

Range 1 to 4

Default 1

Introduced 22.5.R1

Platforms All

vendor (*number* | *keyword*)

Synopsis RADIUS vendor ID

Context [debug router](#) *string* [radius servers attribute](#) *string* vendor-specific [vendor](#) (*number* | *keyword*)

Tree [vendor](#)

Range 1 to 16777215

Options nokia

Introduced 22.5.R1

Platforms All

vendor-type *number*

Synopsis	RADIUS vendor specific type
Context	debug router <i>string</i> radius servers attribute <i>string</i> vendor-specific vendor-type <i>number</i>
Tree	vendor-type
Max. Range	0 to 4294967295
Introduced	22.5.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the RADIUS debug output
Context	debug router <i>string</i> radius servers detail-level <i>keyword</i>
Tree	detail-level
Default	medium
Options	low, medium, high
Introduced	22.5.R1
Platforms	All

packet-types

Synopsis	Enter the packet-types context
Context	debug router <i>string</i> radius servers packet-types
Tree	packet-types
Introduced	22.7.R1
Platforms	All

accounting *boolean*

Synopsis	Debug accounting packets
Context	debug router <i>string</i> radius servers packet-types accounting <i>boolean</i>
Tree	accounting
Default	true
Introduced	22.7.R1
Platforms	All

authentication *boolean*

Synopsis	Debug authentication packets
Context	debug router <i>string</i> radius servers packet-types authentication <i>boolean</i>
Tree	authentication
Default	true
Introduced	22.7.R1
Platforms	All

coa *boolean*

Synopsis	Debug CoA and DM packets
Context	debug router <i>string</i> radius servers packet-types coa <i>boolean</i>
Tree	coa
Default	true
Introduced	22.7.R1
Platforms	All

server-address [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for server-address
Context	debug router <i>string</i> radius servers server-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server-address
Max. Instances	10
Introduced	22.5.R1
Platforms	All

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

Synopsis	IP address of the RADIUS server
Context	debug router <i>string</i> radius servers server-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	server-address
Notes	This element is part of a list key.

Introduced	22.5.R1
Platforms	All

vrrp

Synopsis	Enter the vrrp context
Context	debug router string vrrp
Tree	vrrp
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enter the events context
Context	debug router string vrrp events
Tree	events
Description	Commands in this context enable debugging for VRRP events and state changes.
Introduced	22.10.R1
Platforms	All

all-events

Synopsis	Enable the all-events context
Context	debug router string vrrp events all-events
Tree	all-events
Introduced	22.10.R1
Platforms	All

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

Synopsis	Enter the interface list instance
Context	debug router string vrrp events interface string
Tree	interface
Introduced	22.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Interface name
Context	debug router string vrrp events interface string
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

all-vrids

Synopsis	Enable the all-vrids context
Context	debug router string vrrp events interface string all-vrids
Tree	all-vrids
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	debug router string vrrp events interface string ipv4
Tree	ipv4
Introduced	22.10.R1
Platforms	All

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router string vrrp events interface string ipv4 vrid number
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[virtual-router-id] number

Synopsis	Virtual router ID to debug
Context	debug router string vrrp events interface string ipv4 vrid number
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	debug router string vrrp events interface string ipv6
Tree	ipv6
Introduced	22.10.R1
Platforms	All

vrid [virtual-router-id] number

Synopsis	Add a list entry for vrid
Context	debug router string vrrp events interface string ipv6 vrid number
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[virtual-router-id] number

Synopsis	Virtual router ID to debug
Context	debug router string vrrp events interface string ipv6 vrid number
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enter the packet context
Context	debug router string vrrp packet
Tree	packet
Description	Commands in this context enable debugging for VRRP packet exchanges.
Introduced	22.10.R1
Platforms	All

all-packets

Synopsis	Enable the all-packets context
Context	debug router string vrrp packet all-packets
Tree	all-packets
Introduced	22.10.R1
Platforms	All

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

Synopsis	Enter the interface list instance
Context	debug router string vrrp packet interface string
Tree	interface
Introduced	22.10.R1
Platforms	All

[\[interface-name\]](#) *string*

Synopsis	Interface name
Context	debug router string vrrp packet interface string
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	All

all-vrids

Synopsis	Enable the all-vrids context
Context	debug router <i>string</i> vrrp packet interface <i>string</i> all-vrids
Tree	all-vrids
Introduced	23.3.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv4
Tree	ipv4
Introduced	22.10.R1
Platforms	All

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv4 vrid <i>number</i>
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual router ID to debug
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv4 vrid <i>number</i>
Tree	vrid
Range	1 to 255

Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv6
Tree	ipv6
Introduced	22.10.R1
Platforms	All

vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for vrid
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv6 vrid <i>number</i>
Tree	vrid
Max. Instances	4
Introduced	22.10.R1
Platforms	All

[\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	debug router <i>string</i> vrrp packet interface <i>string</i> ipv6 vrid <i>number</i>
Tree	vrid
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

wpp

Synopsis	Enter the wpp context
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Context	<code>debug router string wpp</code>
Tree	<code>wpp</code>
Introduced	22.7.R1
Platforms	All

packets

Synopsis	Enable the packets context
Context	<code>debug router string wpp packets</code>
Tree	<code>packets</code>
Introduced	22.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	<code>debug router string wpp packets detail-level keyword</code>
Tree	<code>detail-level</code>
Default	low
Options	low, high
Introduced	22.7.R1
Platforms	All

portal [*name*] *string*

Synopsis	Enter the portal list instance
Context	<code>debug router string wpp portal string</code>
Tree	<code>portal</code>
Introduced	22.7.R1
Platforms	All

[*name*] *string*

Synopsis	WPP portal name
Context	<code>debug router string wpp portal string</code>

Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

packets

Synopsis	Enter the packets context
Context	debug router <i>string</i> wpp portal <i>string</i> packets
Tree	packets
Introduced	22.7.R1
Platforms	All

detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	debug router <i>string</i> wpp portal <i>string</i> packets detail-level <i>keyword</i>
Tree	detail-level
Default	low
Options	low, high
Introduced	22.7.R1
Platforms	All

service

Synopsis	Enter the service context
Context	debug service
Tree	service
Introduced	22.10.R1
Platforms	All

ies [[service-name](#)] *string*

Synopsis	Enter the ies list instance
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Context	<code>debug service ies string</code>
Tree	<code>ies</code>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[service-name] string

Synopsis	Administrative service name
Context	<code>debug service ies string</code>
Tree	<code>ies</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enter the ppp context
Context	<code>debug service ies string ppp</code>
Tree	<code>ppp</code>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id [id] string

Synopsis	Add a list entry for circuit-id
Context	<code>debug service ies string ppp circuit-id string</code>
Tree	<code>circuit-id</code>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	debug service ies string ppp circuit-id string
Tree	circuit-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events

Synopsis	Enable the events context
Context	debug service ies string ppp events
Tree	events
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all events
Context	debug service ies string ppp events all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enable the dhcp-client context
Context	debug service ies string ppp events dhcp-client
Tree	dhcp-client
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis Debug events for ungraceful terminated sessions only
 Context [debug service ies string ppp events dhcp-client terminate-only boolean](#)
 Tree [terminate-only](#)
 Default false
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis Enable the **l2tp** context
 Context [debug service ies string ppp events l2tp](#)
 Tree [l2tp](#)
 Description Commands in this context configure debugging events for L2TP sessions.
 Notes The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis Debug events for ungraceful terminated sessions only
 Context [debug service ies string ppp events l2tp terminate-only boolean](#)
 Tree [terminate-only](#)
 Default false
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis Enable the **local-address-assignment** context
 Context [debug service ies string ppp events local-address-assignment](#)

Tree	local-address-assignment
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service ies string ppp events local-address-assignment terminate-only boolean
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enable the ppp context
Context	debug service ies string ppp events ppp
Tree	ppp
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service ies string ppp events ppp terminate-only boolean
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac [[address](#)] *string*

Synopsis	Add a list entry for mac
Context	debug service ies string ppp mac string
Tree	mac
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *string*

Synopsis	MAC address of the PPPoE session to debug
Context	debug service ies string ppp mac string
Tree	mac
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the packets context
Context	debug service ies string ppp packets
Tree	packets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all packets
Context	debug service ies string ppp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	debug service ies <i>string</i> ppp packets detail-level <i>keyword</i>
Tree	detail-level
Default	high
Options	low, medium, high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug service ies <i>string</i> ppp packets dhcp-client <i>boolean</i>
Tree	dhcp-client
Default	false
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discovery

Synopsis	Enter the discovery context
Context	debug service ies <i>string</i> ppp packets discovery
Tree	discovery
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all discovery packets
Context	debug service ies <i>string</i> ppp packets discovery all

Tree	all
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	debug service ies string ppp packets discovery padi <i>boolean</i>
Tree	padi
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	debug service ies string ppp packets discovery pado <i>boolean</i>
Tree	pado
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padr *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	debug service ies string ppp packets discovery padr <i>boolean</i>
Tree	padr
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pads *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	debug service ies <i>string</i> ppp packets discovery pads <i>boolean</i>
Tree	pads
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padt *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	debug service ies <i>string</i> ppp packets discovery padt <i>boolean</i>
Tree	padt
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	PPP packets present in the debug output
Context	debug service ies <i>string</i> ppp packets mode <i>keyword</i>
Tree	mode
Default	dropped-only
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-session

Synopsis	Enter the ppp-session context
Context	debug service ies <i>string</i> ppp packets ppp-session
Tree	ppp-session

Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug service ies string ppp packets ppp-session all
Tree	all
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug service ies string ppp packets ppp-session chap boolean
Tree	chap
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug service ies string ppp packets ppp-session ipcp boolean
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug service ies <i>string</i> ppp packets ppp-session ipv6cp <i>boolean</i>
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug service ies <i>string</i> ppp packets ppp-session lcp <i>boolean</i>
Tree	lcp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug service ies <i>string</i> ppp packets ppp-session pap <i>boolean</i>
Tree	pap
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id [*id*] *string*

Synopsis	Add a list entry for remote-id
Context	debug service ies <i>string</i> ppp remote-id <i>string</i>
Tree	remote-id

Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] string

Synopsis	Remote ID of the PPPoE session to debug
Context	debug service ies string ppp remote-id string
Tree	remote-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [sap-id] string

Synopsis	Add a list entry for sap
Context	debug service ies string ppp sap string
Tree	sap
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] string

Synopsis	SAP ID of the PPPoE session to debug
Context	debug service ies string ppp sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name [*name*] *string*

Synopsis	Add a list entry for user-name
Context	debug service ies <i>string</i> ppp user-name <i>string</i>
Tree	user-name
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Username of the PPPoE session to debug
Context	debug service ies <i>string</i> ppp user-name <i>string</i>
Tree	user-name
Description	This command configures the username of the PPPoE session to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vpls [*service-name*] *string*

Synopsis	Enter the vpls list instance
Context	debug service vpls <i>string</i>
Tree	vpls
Introduced	22.10.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	debug service vpls <i>string</i>
Tree	vpls
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

igmp-snooping

Synopsis	Enter the igmp-snooping context
Context	debug service vpls string igmp-snooping
Tree	igmp-snooping
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug service vpls string igmp-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

detail *keyword*

Synopsis	Detail level of the debug output
Context	debug service vpls string igmp-snooping packet detail keyword
Tree	detail
Default	medium
Options	low, medium, high
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug service vpls string igmp-snooping packet dropped boolean
Tree	dropped

Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls <i>string</i> igmp-snooping packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

evpn-mpls *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	debug service vpls <i>string</i> igmp-snooping packet evpn-mpls <i>boolean</i>
Tree	evpn-mpls
Default	false
Introduced	22.10.R1
Platforms	All

evpn-vxlan [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *vni number*

Synopsis	Add a list entry for evpn-vxlan
Context	debug service vpls <i>string</i> igmp-snooping packet evpn-vxlan (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) <i>vni number</i>
Tree	evpn-vxlan
Max. Instances	8
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP address of the VXLAN Tunnel Endpoint
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Context	debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number
Tree	evpn-vxlan
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

vni number

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls string igmp-snooping packet evpn-vxlan (ipv4-address-no-zone ipv6-address-no-zone) vni number
Tree	evpn-vxlan
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ingress boolean

Synopsis	Enable tracing for received packets
Context	debug service vpls string igmp-snooping packet ingress boolean
Tree	ingress
Default	true
Introduced	22.10.R1
Platforms	All

mac [mac-address] string

Synopsis	Add a list entry for mac
Context	debug service vpls string igmp-snooping packet mac string
Tree	mac
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[mac-address] *string*

Synopsis	MAC address
Context	debug service vpls <i>string</i> igmp-snooping packet mac <i>string</i>
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Add a list entry for sap
Context	debug service vpls <i>string</i> igmp-snooping packet sap <i>string</i>
Tree	sap
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	debug service vpls <i>string</i> igmp-snooping packet sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sdp-bind [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls <i>string</i> igmp-snooping packet sdp-bind <i>string</i>
Tree	sdp-bind

Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP bind ID
Context	debug service vpls <i>string</i> igmp-snooping packet sdp-bind <i>string</i>
Tree	sdp-bind
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

mld-snooping

Synopsis	Enter the mld-snooping context
Context	debug service vpls <i>string</i> mld-snooping
Tree	mld-snooping
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	debug service vpls <i>string</i> mld-snooping packet
Tree	packet
Introduced	22.10.R1
Platforms	All

detail *keyword*

Synopsis	Detail level of the debug output
Context	debug service vpls <i>string</i> mld-snooping packet detail <i>keyword</i>

Tree	detail
Default	medium
Options	low, medium, high
Introduced	22.10.R1
Platforms	All

dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	debug service vpls <i>string</i> mld-snooping packet dropped <i>boolean</i>
Tree	dropped
Default	true
Introduced	22.10.R1
Platforms	All

egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	debug service vpls <i>string</i> mld-snooping packet egress <i>boolean</i>
Tree	egress
Default	true
Introduced	22.10.R1
Platforms	All

evpn-mpls *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	debug service vpls <i>string</i> mld-snooping packet evpn-mpls <i>boolean</i>
Tree	evpn-mpls
Default	false
Introduced	22.10.R1
Platforms	All

evpn-vxlan [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Synopsis	Add a list entry for evpn-vxlan
Context	debug service vpls <i>string</i> mld-snooping packet evpn-vxlan (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) vni number
Tree	evpn-vxlan
Max. Instances	8
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP address of the VXLAN Tunnel Endpoint
Context	debug service vpls <i>string</i> mld-snooping packet evpn-vxlan (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) vni number
Tree	evpn-vxlan
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

vni number

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	debug service vpls <i>string</i> mld-snooping packet evpn-vxlan (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) vni number
Tree	evpn-vxlan
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

ingress *boolean*

Synopsis	Enable tracing for received packets
Context	debug service vpls <i>string</i> mld-snooping packet ingress <i>boolean</i>
Tree	ingress

Default	true
Introduced	22.10.R1
Platforms	All

mac [[mac-address](#)] *string*

Synopsis	Add a list entry for mac
Context	debug service vpls string mld-snooping packet mac string
Tree	mac
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[mac-address] *string*

Synopsis	MAC address
Context	debug service vpls string mld-snooping packet mac string
Tree	mac
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sap [[sap-id](#)] *string*

Synopsis	Add a list entry for sap
Context	debug service vpls string mld-snooping packet sap string
Tree	sap
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
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Context	debug service vpls string mld-snooping packet sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

sdp-bind [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for sdp-bind
Context	debug service vpls string mld-snooping packet sdp-bind string
Tree	sdp-bind
Max. Instances	8
Introduced	22.10.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP bind ID
Context	debug service vpls string mld-snooping packet sdp-bind string
Tree	sdp-bind
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

pim-snooping

Synopsis	Enter the pim-snooping context
Context	debug service vpls string pim-snooping
Tree	pim-snooping
Introduced	22.10.R1
Platforms	All

events

Synopsis	Enable the events context
Context	debug service vpls string pim-snooping events
Tree	events
Introduced	22.10.R1
Platforms	All

adjacency

Synopsis	Enable the adjacency context
Context	debug service vpls string pim-snooping events adjacency
Tree	adjacency
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

all

Synopsis	Enable the all context
Context	debug service vpls string pim-snooping events all
Tree	all
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls string pim-snooping events all detail boolean
Tree	detail
Default	false
Introduced	22.10.R1

Platforms All

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

Synopsis IP multicast group address used to trace events

Context [debug service vpls string pim-snooping events all group-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [group-address](#)

Introduced 22.10.R1

Platforms All

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

Synopsis Source address used to trace events

Context [debug service vpls string pim-snooping events all source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [source-address](#)

Introduced 22.10.R1

Platforms All

db

Synopsis Enable the **db** context

Context [debug service vpls string pim-snooping events db](#)

Tree [db](#)

Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.

Introduced 22.10.R1

Platforms All

detail *boolean*

Synopsis Enable detail tracing

Context [debug service vpls string pim-snooping events db detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1
 Platforms All

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

Synopsis IP multicast group address used to trace events
 Context [debug service vpls string pim-snooping events db group-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [group-address](#)
 Introduced 22.10.R1
 Platforms All

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

Synopsis Source address used to trace events
 Context [debug service vpls string pim-snooping events db source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [source-address](#)
 Introduced 22.10.R1
 Platforms All

jp

Synopsis Enable the **jp** context
 Context [debug service vpls string pim-snooping events jp](#)
 Tree [jp](#)
 Description Commands in this context enable debugging for PIM join and prune mechanisms.
 Notes The following elements are part of a choice: (**adjacency**, **db**, **jp**, **mcs**, **port**, and **red**) or **all**.
 Introduced 22.10.R1
 Platforms All

detail *boolean*

Synopsis Enable detail tracing
 Context [debug service vpls string pim-snooping events jp detail boolean](#)

Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP multicast group address used to trace events
Context	debug service vpls <i>string</i> pim-snooping events jp group-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	group-address
Introduced	22.10.R1
Platforms	All

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

Synopsis	Source address used to trace events
Context	debug service vpls <i>string</i> pim-snooping events jp source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	22.10.R1
Platforms	All

mcs

Synopsis	Enable the mcs context
Context	debug service vpls <i>string</i> pim-snooping events mcs
Tree	mcs
Description	Commands in this context enable debugging for PIM snooping multi-chassis synchronization.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls <i>string</i> pim-snooping events mcs detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

port

Synopsis	Enable the port context
Context	debug service vpls <i>string</i> pim-snooping events port
Tree	port
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	debug service vpls <i>string</i> pim-snooping events port detail <i>boolean</i>
Tree	detail
Default	false
Introduced	22.10.R1
Platforms	All

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls <i>string</i> pim-snooping events port evpn-mpls
Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1

Platforms All

sap-id *string*

Synopsis SAP ID

Context [debug service vpls](#) *string* [pim-snooping events port sap-id](#) *string*

Tree [sap-id](#)

String Length 1 to 45

Notes The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).

Introduced 22.10.R1

Platforms All

sdp-bind-id *string*

Synopsis SDP bind ID

Context [debug service vpls](#) *string* [pim-snooping events port sdp-bind-id](#) *string*

Tree [sdp-bind-id](#)

String Length 3 to 16

Notes The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).

Introduced 22.10.R1

Platforms All

vni *number*

Synopsis VXLAN Network Identifier of the VXLAN binding

Context [debug service vpls](#) *string* [pim-snooping events port vni](#) *number*

Tree [vni](#)

Range 1 to 16777215

Notes The following elements are part of a mandatory choice: **evpn-mpls**, **sap-id**, **sdp-bind-id**, or (**vni** and **vtep**).

Introduced 22.10.R1

Platforms All

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

Synopsis	IP address of the tunnel endpoint
Context	<code>debug service vpls string pim-snooping events port vtep</code> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<code>vtep</code>
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

red

Synopsis	Enable the red context
Context	<code>debug service vpls string pim-snooping events red</code>
Tree	<code>red</code>
Description	Commands in this context enable debugging for PIM messages sent to the standby CPM.
Notes	The following elements are part of a choice: (adjacency , db , jp , mcs , port , and red) or all .
Introduced	22.10.R1
Platforms	All

detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug service vpls string pim-snooping events red detail boolean</code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

packet

Synopsis	Enable the packet context
Context	<code>debug service vpls string pim-snooping packet</code>
Tree	<code>packet</code>

Introduced 22.10.R1
Platforms All

all-origins

Synopsis Allow tracing on all ports
Context [debug service vpls string pim-snooping packet all-origins](#)
Tree [all-origins](#)
Notes The following elements are part of a choice: **all-origins** or **port**.
Introduced 22.10.R1
Platforms All

all-packet-types

Synopsis Enable PIM debugging for all packets
Context [debug service vpls string pim-snooping packet all-packet-types](#)
Tree [all-packet-types](#)
Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced 22.10.R1
Platforms All

packet-types

Synopsis Enter the **packet-types** context
Context [debug service vpls string pim-snooping packet packet-types](#)
Tree [packet-types](#)
Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.
Introduced 22.10.R1
Platforms All

hello *boolean*

Synopsis Debug Hello packets
Context [debug service vpls string pim-snooping packet packet-types hello boolean](#)
Tree [hello](#)

Default	false
Introduced	22.10.R1
Platforms	All

jp boolean

Synopsis	Debug join and prune packets
Context	debug service vpls <i>string</i> pim-snooping packet packet-types jp boolean
Tree	jp
Default	false
Introduced	22.10.R1
Platforms	All

port

Synopsis	Enable the port context
Context	debug service vpls <i>string</i> pim-snooping packet port
Tree	port
Notes	The following elements are part of a choice: all-origins or port .
Introduced	22.10.R1
Platforms	All

evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	debug service vpls <i>string</i> pim-snooping packet port evpn-mpls
Tree	evpn-mpls
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

sap-id string

Synopsis	SAP ID
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Context	<code>debug service vpls string pim-snooping packet port sap-id string</code>
Tree	<code>sap-id</code>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

sdp-bind-id *string*

Synopsis	SDP bind ID
Context	<code>debug service vpls string pim-snooping packet port sdp-bind-id string</code>
Tree	<code>sdp-bind-id</code>
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<code>debug service vpls string pim-snooping packet port vni number</code>
Tree	<code>vni</code>
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

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

Synopsis	IP address of the tunnel endpoint
Context	<code>debug service vpls string pim-snooping packet port vtep (ipv4-address-no-zone ipv6-address-no-zone)</code>
Tree	<code>vtep</code>

Notes	The following elements are part of a mandatory choice: evpn-mpls , sap-id , sdp-bind-id , or (vni and vtep).
Introduced	22.10.R1
Platforms	All

ppp

Synopsis	Enter the ppp context
Context	debug service vpls string ppp
Tree	ppp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id [[id](#)] *string*

Synopsis	Add a list entry for circuit-id
Context	debug service vpls string ppp circuit-id string
Tree	circuit-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[id](#)] *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	debug service vpls string ppp circuit-id string
Tree	circuit-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events

Synopsis	Enable the events context
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Context	debug service vpls string ppp events
Tree	events
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all events
Context	debug service vpls string ppp events all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enable the dhcp-client context
Context	debug service vpls string ppp events dhcp-client
Tree	dhcp-client
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls string ppp events dhcp-client terminate-only boolean
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enable the l2tp context
Context	debug service vpls string ppp events l2tp
Tree	l2tp
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls string ppp events l2tp terminate-only boolean
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enable the local-address-assignment context
Context	debug service vpls string ppp events local-address-assignment
Tree	local-address-assignment
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls string ppp events local-address-assignment terminate-only boolean
Tree	terminate-only
Default	false

Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enable the ppp context
Context	debug service vpls string ppp events ppp
Tree	ppp
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vpls string ppp events ppp terminate-only boolean
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac [[address](#)] *string*

Synopsis	Add a list entry for mac
Context	debug service vpls string ppp mac string
Tree	mac
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	MAC address of the PPPoE session to debug
Context	debug service vpls string ppp mac string

Tree	mac
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis	Enable the packets context
Context	debug service vpls <i>string</i> ppp packets
Tree	packets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all packets
Context	debug service vpls <i>string</i> ppp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	debug service vpls <i>string</i> ppp packets detail-level <i>keyword</i>
Tree	detail-level
Default	high
Options	low, medium, high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug service vpls <i>string</i> ppp packets dhcp-client <i>boolean</i>
Tree	dhcp-client
Default	false
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discovery

Synopsis	Enter the discovery context
Context	debug service vpls <i>string</i> ppp packets discovery
Tree	discovery
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all discovery packets
Context	debug service vpls <i>string</i> ppp packets discovery all
Tree	all
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	debug service vpls <i>string</i> ppp packets discovery padi <i>boolean</i>
Tree	padi
Default	false

Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	debug service vpls <i>string</i> ppp packets discovery pado <i>boolean</i>
Tree	pado
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padr *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	debug service vpls <i>string</i> ppp packets discovery padr <i>boolean</i>
Tree	padr
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pads *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	debug service vpls <i>string</i> ppp packets discovery pads <i>boolean</i>
Tree	pads
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padt *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	debug service vpls <i>string</i> ppp packets discovery padt <i>boolean</i>
Tree	padt
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis	PPP packets present in the debug output
Context	debug service vpls <i>string</i> ppp packets mode <i>keyword</i>
Tree	mode
Default	dropped-only
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-session

Synopsis	Enter the ppp-session context
Context	debug service vpls <i>string</i> ppp packets ppp-session
Tree	ppp-session
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug service vpls <i>string</i> ppp packets ppp-session all
Tree	all
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).

Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug service vpls <i>string</i> ppp packets ppp-session chap <i>boolean</i>
Tree	chap
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug service vpls <i>string</i> ppp packets ppp-session ipcp <i>boolean</i>
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug service vpls <i>string</i> ppp packets ppp-session ipv6cp <i>boolean</i>
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp boolean

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug service vpls string ppp packets ppp-session lcp boolean
Tree	lcp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap boolean

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug service vpls string ppp packets ppp-session pap boolean
Tree	pap
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id [id] string

Synopsis	Add a list entry for remote-id
Context	debug service vpls string ppp remote-id string
Tree	remote-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] string

Synopsis	Remote ID of the PPPoE session to debug
Context	debug service vpls string ppp remote-id string
Tree	remote-id
String Length	1 to 255

Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis	Add a list entry for sap
Context	debug service vpls <i>string</i> ppp sap <i>string</i>
Tree	sap
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis	SAP ID of the PPPoE session to debug
Context	debug service vpls <i>string</i> ppp sap <i>string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for user-name
Context	debug service vpls <i>string</i> ppp user-name <i>string</i>
Tree	user-name
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Username of the PPPoE session to debug
Context	<code>debug service vpls string ppp user-name string</code>
Tree	<code>user-name</code>
Description	This command configures the username of the PPPoE session to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vprn [service-name] string

Synopsis	Enter the vprn list instance
Context	<code>debug service vprn string</code>
Tree	<code>vprn</code>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[service-name] string

Synopsis	Administrative service name
Context	<code>debug service vprn string</code>
Tree	<code>vprn</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enter the ppp context
Context	<code>debug service vprn string ppp</code>
Tree	<code>ppp</code>

Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id [*id*] *string*

Synopsis Add a list entry for **circuit-id**
 Context [debug service vprn](#) *string* [ppp circuit-id](#) *string*
 Tree [circuit-id](#)
 Max. Instances 8
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *string*

Synopsis Circuit ID of the PPPoE session to debug
 Context [debug service vprn](#) *string* [ppp circuit-id](#) *string*
 Tree [circuit-id](#)
 String Length 1 to 255
 Notes This element is part of a list key.
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

events

Synopsis Enable the **events** context
 Context [debug service vprn](#) *string* [ppp events](#)
 Tree [events](#)
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis Enable PPP debugging for all events
 Context [debug service vprn](#) *string* [ppp events all](#)

Tree	all
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client

Synopsis	Enable the dhcp-client context
Context	debug service vprn string ppp events dhcp-client
Tree	dhcp-client
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn string ppp events dhcp-client terminate-only boolean
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tp

Synopsis	Enable the l2tp context
Context	debug service vprn string ppp events l2tp
Tree	l2tp
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn <i>string</i> ppp events l2tp terminate-only <i>boolean</i>
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis	Enable the local-address-assignment context
Context	debug service vprn <i>string</i> ppp events local-address-assignment
Tree	local-address-assignment
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	debug service vprn <i>string</i> ppp events local-address-assignment terminate-only <i>boolean</i>
Tree	terminate-only
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp

Synopsis	Enable the ppp context
Context	debug service vprn <i>string</i> ppp events ppp
Tree	ppp
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , l2tp , local-address-assignment , and ppp).

Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

terminate-only *boolean*

Synopsis Debug events for ungraceful terminated sessions only
 Context [debug service vprn](#) *string* [ppp events ppp terminate-only](#) *boolean*
 Tree [terminate-only](#)
 Default false
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac [[address](#)] *string*

Synopsis Add a list entry for **mac**
 Context [debug service vprn](#) *string* [ppp mac](#) *string*
 Tree [mac](#)
 Max. Instances 8
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *string*

Synopsis MAC address of the PPPoE session to debug
 Context [debug service vprn](#) *string* [ppp mac](#) *string*
 Tree [mac](#)
 Notes This element is part of a list key.
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis Enable the **packets** context
 Context [debug service vprn](#) *string* [ppp packets](#)

Tree	packets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all packets
Context	debug service vprn <i>string</i> ppp packets all
Tree	all
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	debug service vprn <i>string</i> ppp packets detail-level <i>keyword</i>
Tree	detail-level
Default	high
Options	low, medium, high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	debug service vprn <i>string</i> ppp packets dhcp-client <i>boolean</i>
Tree	dhcp-client
Default	false
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

discovery

Synopsis	Enter the discovery context
Context	debug service vprn string ppp packets discovery
Tree	discovery
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all discovery packets
Context	debug service vprn string ppp packets discovery all
Tree	all
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padi *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	debug service vprn string ppp packets discovery padi boolean
Tree	padi
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	debug service vprn string ppp packets discovery pado boolean
Tree	pado
Default	false
Notes	The following elements are part of a choice: all or (padi , pado , padr , pads , and padt).

Introduced 23.3.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padr *boolean*

Synopsis Enable PPP debugging for PADR discovery packets
Context [debug service vprn](#) *string* [ppp packets discovery padr](#) *boolean*
Tree [padr](#)
Default false
Notes The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced 23.3.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pads *boolean*

Synopsis Enable PPP debugging for PADS discovery packets
Context [debug service vprn](#) *string* [ppp packets discovery pads](#) *boolean*
Tree [pads](#)
Default false
Notes The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced 23.3.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

padt *boolean*

Synopsis Enable PPP debugging for PADT discovery packets
Context [debug service vprn](#) *string* [ppp packets discovery padt](#) *boolean*
Tree [padt](#)
Default false
Notes The following elements are part of a choice: **all** or (**padi**, **pado**, **padr**, **pads**, and **padt**).
Introduced 23.3.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mode keyword

Synopsis	PPP packets present in the debug output
Context	debug service vprn string ppp packets mode keyword
Tree	mode
Default	dropped-only
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-session

Synopsis	Enter the ppp-session context
Context	debug service vprn string ppp packets ppp-session
Tree	ppp-session
Notes	The following elements are part of a mandatory choice: all or (dhcp-client , discovery , and ppp-session).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all

Synopsis	Enable PPP debugging for all PPP session packets
Context	debug service vprn string ppp packets ppp-session all
Tree	all
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

chap boolean

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	debug service vprn string ppp packets ppp-session chap boolean
Tree	chap
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).

Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	debug service vprn <i>string</i> ppp packets ppp-session ipcp <i>boolean</i>
Tree	ipcp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6cp *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	debug service vprn <i>string</i> ppp packets ppp-session ipv6cp <i>boolean</i>
Tree	ipv6cp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lcp *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	debug service vprn <i>string</i> ppp packets ppp-session lcp <i>boolean</i>
Tree	lcp
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	debug service vprn <i>string</i> ppp packets ppp-session pap <i>boolean</i>
Tree	pap
Default	false
Notes	The following elements are part of a choice: all or (chap , ipcp , ipv6cp , lcp , and pap).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id [*id*] *string*

Synopsis	Add a list entry for remote-id
Context	debug service vprn <i>string</i> ppp remote-id <i>string</i>
Tree	remote-id
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *string*

Synopsis	Remote ID of the PPPoE session to debug
Context	debug service vprn <i>string</i> ppp remote-id <i>string</i>
Tree	remote-id
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [*sap-id*] *string*

Synopsis	Add a list entry for sap
Context	debug service vprn <i>string</i> ppp sap <i>string</i>
Tree	sap

Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] string

Synopsis	SAP ID of the PPPoE session to debug
Context	debug service vprn string ppp sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name [name] string

Synopsis	Add a list entry for user-name
Context	debug service vprn string ppp user-name string
Tree	user-name
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis	Username of the PPPoE session to debug
Context	debug service vprn string ppp user-name string
Tree	user-name
Description	This command configures the username of the PPPoE session to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-mgmt

Synopsis Enter the **subscriber-mgmt** context

Context [debug subscriber-mgmt](#)

Tree [subscriber-mgmt](#)

Introduced 22.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp

Synopsis Enter the **gtp** context

Context [debug subscriber-mgmt gtp](#)

Tree [gtp](#)

Description This command enables the context to configure box-wide GTP parameters and profiles.

Introduced 22.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

events *boolean*

Synopsis Enable GTP event debugging

Context [debug subscriber-mgmt gtp events boolean](#)

Tree [events](#)

Default false

Introduced 22.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi [*imsi-instance*] *string*

Synopsis Add a list entry for **imsi**

Context [debug subscriber-mgmt gtp imsi string](#)

Tree [imsi](#)

Max. Instances 8

Introduced 22.7.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[imsi-instance] *string*

Synopsis IMSI of GTP sessions to debug
Context [debug subscriber-mgmt gtp imsi string](#)
Tree [imsi](#)
String Length 0 to 15
Notes This element is part of a list key.
Introduced 22.7.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets

Synopsis Enable the **packets** context
Context [debug subscriber-mgmt gtp packets](#)
Tree [packets](#)
Introduced 22.7.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

detail-level *keyword*

Synopsis Detail level of the GTP packet debug output
Context [debug subscriber-mgmt gtp packets detail-level keyword](#)
Tree [detail-level](#)
Default low
Options high, low
Introduced 22.7.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword*

Synopsis GTP packets to include in the debug output
Context [debug subscriber-mgmt gtp packets mode keyword](#)

Tree	mode
Default	dropped
Options	all, dropped
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **router string**

Synopsis	Enter the peer list instance
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string
Tree	peer
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Remote IP address of the GTP peer
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string
Tree	peer
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router string

Synopsis	Router instance where GTP peer packets are expected
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string
Tree	peer
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp-port *number*

Synopsis	UDP source (Rx packets) / destination (Tx packets) port
Context	debug subscriber-mgmt gtp peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) router string <i>udp-port number</i>
Tree	udp-port
Description	This command configures the UDP source port of received packets or the UDP destination port of transmitted packets.
Range	0 1 to 65535
Default	2123
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

system

Synopsis	Enter the system context
Context	debug system
Tree	system
Introduced	21.5.R1
Platforms	All

grpc

Synopsis	Enter the grpc context
Context	debug system grpc
Tree	grpc
Introduced	21.5.R1
Platforms	All

client

Synopsis	Enter the client context
Context	debug system grpc client
Tree	client
Introduced	21.5.R1

Platforms All

all

Synopsis Enable debugging for all clients

Context [debug system grpc client all](#)

Tree [all](#)

Notes The following elements are part of a choice: **all** or **ip-address**.

Introduced 21.5.R1

Platforms All

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

Synopsis IP address for debugging

Context [debug system grpc client ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [ip-address](#)

Notes The following elements are part of a choice: **all** or **ip-address**.

Introduced 21.5.R1

Platforms All

type *keyword*

Synopsis RPCs or service types to debug

Context [debug system grpc type keyword](#)

Tree [type](#)

Options gnmi-capabilities, gnmi-get, gnmi-set, gnmi-subscribe, rib-api-modify, rib-api-getversion, gnoi-cert-mgmt-rpcs, gnoi-file-rpcs, gnoi-system-rpcs

Max. Instances 10

Introduced 21.5.R1

Platforms All

grpc-tunnel

Synopsis Enter the **grpc-tunnel** context

Context [debug system grpc-tunnel](#)

Tree	grpc-tunnel
Introduced	22.10.R1
Platforms	All

tunnel

Synopsis	Enter the tunnel context
Context	debug system grpc-tunnel tunnel
Tree	tunnel
Introduced	22.10.R1
Platforms	All

all

Synopsis	Set debug output for all tunnels
Context	debug system grpc-tunnel tunnel all
Tree	all
Notes	The following elements are part of a choice: all or name .
Introduced	22.10.R1
Platforms	All

name *string*

Synopsis	Name of the tunnel to restrict the debug output
Context	debug system grpc-tunnel tunnel name string
Tree	name
String Length	1 to 32
Notes	The following elements are part of a choice: all or name .
Introduced	22.10.R1
Platforms	All

http-connections

Synopsis	Enable the http-connections context
Context	debug system http-connections

Tree	http-connections
Introduced	22.10.R1
Platforms	All

client-ip-prefix (*ipv4-prefix | ipv6-prefix | keyword*)

Synopsis	HTTP client IP prefix
Context	debug system http-connections client-ip-prefix (<i>ipv4-prefix ipv6-prefix keyword</i>)
Tree	client-ip-prefix
Default	any
Options	any
Introduced	22.10.R1
Platforms	All

management-interface

Synopsis	Enter the management-interface context
Context	debug system management-interface
Tree	management-interface
Introduced	21.5.R1
Platforms	All

netconf *keyword*

Synopsis	Debugging verbosity for NETCONF
Context	debug system management-interface netconf <i>keyword</i>
Tree	netconf
Options	error, warning, info
Introduced	21.5.R1
Platforms	All

remote-management

Synopsis	Enter the remote-management context
Context	debug system management-interface remote-management

Tree	remote-management
Introduced	21.7.R1
Platforms	All

manager

Synopsis	Enter the manager context
Context	debug system management-interface remote-management manager
Tree	manager
Introduced	21.7.R1
Platforms	All

all

Synopsis	Enable debug of all managers
Context	debug system management-interface remote-management manager all
Tree	all
Notes	The following elements are part of a choice: all or manager-name .
Introduced	21.7.R1
Platforms	All

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

Synopsis	Add a list entry for manager-name
Context	debug system management-interface remote-management manager manager-name <i>string</i>
Tree	manager-name
Notes	The following elements are part of a choice: all or manager-name .
Introduced	21.7.R1
Platforms	All

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

Synopsis	Manager name
Context	debug system management-interface remote-management manager manager-name <i>string</i>

Tree	manager-name
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

service *boolean*

Synopsis	Enable service level debug
Context	debug system management-interface remote-management service <i>boolean</i>
Tree	service
Default	false
Introduced	21.7.R1
Platforms	All

wlan-gw

Synopsis	Enter the wlan-gw context
Context	debug wlan-gw
Tree	wlan-gw
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

group [*id*] *number*

Synopsis	Enter the group list instance
Context	debug wlan-gw group <i>number</i>
Tree	group
Max. Instances	1
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	WLAN-GW group ID in the system
Context	debug wlan-gw group number
Tree	group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis	Enable the learn-ap-mac context
Context	debug wlan-gw group number learn-ap-mac
Tree	learn-ap-mac
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IP address of the remote tunnel endpoint
Context	debug wlan-gw group number learn-ap-mac tunnel-remote-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	tunnel-remote-address
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistic [[type](#)] *keyword name string*

Synopsis	Enter the statistic list instance
Context	debug wlan-gw group number statistic keyword name string
Tree	statistic
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[type] keyword

Synopsis	Type of statistic to trace
Context	<code>debug wlan-gw group number statistic keyword name string</code>
Tree	<code>statistic</code>
Options	packet-error, host-error, bd-error, forwarding, reassembly, aa, radius, arp, dhcp4, dhcp6, icmp4, icmp6
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name string

Synopsis	Name of the statistic to trace
Context	<code>debug wlan-gw group number statistic keyword name string</code>
Tree	<code>statistic</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

capture-packet boolean

Synopsis	Set a single packet capture trigger for the statistic
Context	<code>debug wlan-gw group number statistic keyword name string capture-packet boolean</code>
Tree	<code>capture-packet</code>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue

Synopsis	Enable the ue context
Context	<code>debug wlan-gw group number ue</code>
Tree	<code>ue</code>

Introduced 22.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bridge-domain *number*

Synopsis Bridge domain of the UEs to debug
Context [debug wlan-gw group number ue bridge-domain number](#)
Tree [bridge-domain](#)
Range 1 to 4294967295
Introduced 22.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *string*

Synopsis MAC address of the UE to debug
Context [debug wlan-gw group number ue mac-address string](#)
Tree [mac-address](#)
Introduced 22.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocols

Synopsis Enable the **protocols** context
Context [debug wlan-gw group number ue protocols](#)
Tree [protocols](#)
Introduced 22.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp *boolean*

Synopsis Enable debugging for the ARP protocol
Context [debug wlan-gw group number ue protocols arp boolean](#)
Tree [arp](#)
Default false
Introduced 22.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4 boolean

Synopsis Enable debugging for the DHCP protocol

Context [debug wlan-gw group number ue protocols dhcp4 boolean](#)

Tree [dhcp4](#)

Default false

Introduced 22.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6 boolean

Synopsis Enable debugging for the DHCPv6 protocol

Context [debug wlan-gw group number ue protocols dhcp6 boolean](#)

Tree [dhcp6](#)

Default false

Introduced 22.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp4 boolean

Synopsis Enable debugging for the ICMP protocol

Context [debug wlan-gw group number ue protocols icmp4 boolean](#)

Tree [icmp4](#)

Default false

Introduced 22.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6 boolean

Synopsis Enable debugging for the ICMPv6 protocol

Context [debug wlan-gw group number ue protocols icmp6 boolean](#)

Tree [icmp6](#)

Default false

Introduced 22.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius *boolean*

Synopsis Enable debugging for the RADIUS protocol
Context [debug wlan-gw group number ue protocols radius boolean](#)
Tree [radius](#)
Default false
Introduced 22.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.14 esa commands

```
configure
- esa number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - host-port string
  - vm number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cores number
    - description string
    - host-port reference
    - memory number
    - vm-type keyword
```

3.14.1 esa command descriptions

esa [[esa-id](#)] *number*

Synopsis	Enter the esa list instance
Context	configure esa <i>number</i>
Tree	esa
Description	Commands in this context configure the Extended Services Appliance (ESA) instance.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *number*

Synopsis	ESA ID
Context	configure esa <i>number</i>
Tree	esa
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the ESA
Context	configure esa <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
----------	------------------

Context	configure <i>esa number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

host-port [*host-port*] *string*

Synopsis	Add a list entry for host-port
Context	configure <i>esa number host-port string</i>
Tree	<i>host-port</i>
Max. Instances	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[host-port] *string*

Synopsis	Ethernet port associated with the ESA
Context	configure <i>esa number host-port string</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm [*vm-id*] *number*

Synopsis	Enter the vm list instance
Context	configure <i>esa number vm number</i>
Tree	<i>vm</i>
Description	Commands in this context configure the ESA-VM instance.
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[vm-id] *number*

Synopsis VM ID
 Context **configure** *esa number vm number*
 Tree **vm**
 Range 1 to 4
 Notes This element is part of a list key.
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis Administrative state of the ESA-VM instance
 Context **configure** *esa number vm number admin-state keyword*
 Tree **admin-state**
 Description This command configures the administrative state of the ESA-VM instance. The state affects the operational state of the instance and all entities contained within the instance; however, configuration settings or statistics are not changed, reset, or removed.
 Default disable
 Options enable, disable
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

cores *number*



WARNING:

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

Synopsis Number of CPU physical cores allocated to the ESA-VM
 Context **configure** *esa number vm number cores number*
 Tree **cores**
 Description This command specifies the number of CPU physical cores allocated to the ESA-VM instance. If an invalid value is configured for the number of cores, the VM remains in a failed state.

Range	0 to 128
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure <i>esa number vm number description string</i>
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

host-port *reference*



WARNING:

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

Synopsis	Ethernet port associated with the ESA-VM instance
Context	configure <i>esa number vm number host-port reference</i>
Tree	host-port
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Reference	configure <i>esa number host-port string</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

memory *number*



WARNING:

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

Synopsis	Amount of memory allocated to the ESA-VM
----------	--

Context	configure <i>esa number vm number memory number</i>
Tree	<i>memory</i>
Range	0 to 256
Default	0
Units	gigabytes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm-type *keyword*



WARNING:

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

Synopsis	ESA-VM type
Context	configure <i>esa number vm number vm-type keyword</i>
Tree	<i>vm-type</i>
Options	aa, bb, tunnel, video
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

3.15 eth-cfm commands

```

configure
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - default-domain
    - apply-groups reference
    - apply-groups-exclude reference
    - bridge-identifier string vlan (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - id-permission keyword
    - mhf-creation
      - level (number | keyword)
      - mhf-type keyword
    - mip-ltr-priority (number | keyword)
  - domain string
    - apply-groups reference
    - apply-groups-exclude reference
    - association string
      - apply-groups reference
      - apply-groups-exclude reference
      - auto-mep-discovery boolean
      - bridge-identifier string
        - apply-groups reference
        - apply-groups-exclude reference
        - id-permission keyword
        - mhf-creation keyword
        - mip-ltr-priority number
        - vlan number
      - ccm-hold-time
        - down number
      - ccm-interval keyword
      - facility-id-permission keyword
      - icc-based string
      - integer number
      - ma-index number
      - remote-mep number
        - apply-groups reference
        - apply-groups-exclude reference
        - remote-mac string
      - string string
      - vid number
      - vpn-id string
  - dns string
  - format keyword
  - level number
  - mac string
  - md-index number
  - name string

```

3.15.1 eth-cfm command descriptions

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure eth-cfm
Tree	eth-cfm
Description	Commands in this context configure ETH-CFM parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default-domain

Synopsis	Enter the default-domain context
Context	configure eth-cfm default-domain
Tree	default-domain
Description	<p>Commands in this context configure MIP creation parameters per index (bridge-identifier <i>bridge-id</i> vlan <i>vlan-id</i>) if the MIP creation statement exists as part of the service connection.</p> <p>The MIP creation statement must be present on the connection before any configuration can occur for a MIP under this context. Whether a MIP uses the default-domain creation method is determined by the MIP authoritative nature of the eth-cfm domain association. The eth-cfm default-domain MIP creation is considered only if the eth-cfm domain association is not authoritative.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bridge-identifier [[bridge-name](#)] *string* **vlan** (*number* | *keyword*)

Synopsis	Enter the bridge-identifier list instance
Context	configure eth-cfm default-domain bridge-identifier <i>string</i> vlan (<i>number</i> <i>keyword</i>)
Tree	bridge-identifier
Description	<p>Commands in this context configure the references required to link the CFM function with the service context, allowing the entry of MIP-specific parameters for the index in the default domain table.</p> <p>The info and info detail commands do not display any entries for the instance unless they have previously been accessed. The possible candidates for the instance can be located using the show eth-cfm default-domain command.</p>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[bridge-name] *string*

Synopsis	Bridge name in the default domain table
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number keyword</i>)
Tree	bridge-identifier
Description	This command specifies the bridge name to enter in the default domain associated with the MIP.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan (*number | keyword*)

Synopsis	VLAN ID for the default domain
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number keyword</i>)
Tree	bridge-identifier
Description	This command configures a VLAN ID for the default domain.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

id-permission *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number keyword</i>) id-permission <i>keyword</i>
Tree	id-permission
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.

Default	defer
Options	none, chassis, defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-creation

Synopsis	Enter the mhf-creation context
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number</i> <i>keyword</i>) mhf-creation
Tree	mhf-creation
Description	Commands in this context configure the MIP method of creation. MIP creation mode and other factors are part of the MIP creation authority (association or default-domain) logic. The MIP creation algorithm may result in multiple potential MIPs. Only the lowest-level valid MIP is instantiated.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level (*number* | *keyword*)

Synopsis	Requested level of the MIP
Context	configure eth-cfm default-domain bridge-identifier string vlan (<i>number</i> <i>keyword</i>) mhf-creation level (<i>number</i> <i>keyword</i>)
Tree	level
Description	This command configures the requested level of the MIP. This is used by the MIP creation algorithm to determine its validity in comparison to other ETH-CFM MIPs and MEPs. If the level is configured as defer , the level value is inherited from the global read-only system values.
Range	0 to 7
Default	defer
Options	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-type *keyword*

Synopsis	MIP creation mode
----------	-------------------

Context	configure eth-cfm default-domain bridge-identifier <i>string</i> vlan (<i>number</i> <i>keyword</i>) mhf-creation mhf-type <i>keyword</i>
Tree	mhf-type
Default	defer
Options	none, default, explicit, defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip-ltr-priority (*number* | *keyword*)

Synopsis	Priority of the Linktrace Response
Context	configure eth-cfm default-domain bridge-identifier <i>string</i> vlan (<i>number</i> <i>keyword</i>) mip-ltr-priority (<i>number</i> <i>keyword</i>)
Tree	mip-ltr-priority
Description	This command allows the operator to set the priority of the Linktrace Response Message (ETH-LTR) from a MIP for this association.
Range	0 to 7
Default	defer
Options	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

domain [**md-admin-name**] *string*

Synopsis	Enter the domain list instance
Context	configure eth-cfm domain <i>string</i>
Tree	domain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[md-admin-name] *string*

Synopsis	Unique domain name
Context	configure eth-cfm domain <i>string</i>
Tree	domain
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

association [[ma-admin-name](#)] *string*

Synopsis	Enter the association list instance
Context	configure eth-cfm domain <i>string</i> association <i>string</i>
Tree	association
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ma-admin-name] *string*

Synopsis	Domain association name
Context	configure eth-cfm domain <i>string</i> association <i>string</i>
Tree	association
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

auto-mep-discovery *boolean*

Synopsis	Enable the ability to auto-discover remote MEPs in the network
Context	configure eth-cfm domain <i>string</i> association <i>string</i> auto-mep-discovery <i>boolean</i>
Tree	auto-mep-discovery
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bridge-identifier [[bridge-name](#)] *string*

Synopsis	Enter the bridge-identifier list instance
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i>

Tree	bridge-identifier
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[bridge-name] *string*

Synopsis	Bridge name that links to the service
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i>
Tree	bridge-identifier
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

id-permission *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> id-permission <i>keyword</i>
Tree	id-permission
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.
Default	none
Options	none, chassis
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mhf-creation *keyword*

Synopsis	MIP method of creation
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> mhf-creation <i>keyword</i>
Tree	mhf-creation

Default	none
Options	none, default, explicit, static
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip-ltr-priority *number*

Synopsis	Priority of the Linktrace Response Message (ETH-LTR) from a MIP
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> mip-ltr-priority <i>number</i>
Tree	mip-ltr-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan *number*

Synopsis	VLAN ID for the default domain index
Context	configure eth-cfm domain <i>string</i> association <i>string</i> bridge-identifier <i>string</i> vlan <i>number</i>
Tree	vlan
Range	1 to 4094
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-hold-time

Synopsis	Enter the ccm-hold-time context
Context	configure eth-cfm domain <i>string</i> association <i>string</i> ccm-hold-time
Tree	ccm-hold-time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis	Additional time before a MEP declares a fault, in CCM timeout conditions
----------	--

Context	configure eth-cfm domain string association string ccm-hold-time down number
Tree	down
Range	1 to 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-interval keyword

Synopsis	CCM transmission interval for all MEPs in association
Context	configure eth-cfm domain string association string ccm-interval keyword
Tree	ccm-interval
Default	10s
Options	300hz, 10ms, 100ms, 1s, 10s, 60s, 600s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-id-permission keyword

Synopsis	Sender ID TLV information for facility base MEPs
Context	configure eth-cfm domain string association string facility-id-permission keyword
Tree	facility-id-permission
Default	none
Options	none, chassis
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icc-based string



WARNING:

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

Synopsis	Maintenance Association name in ICC-based format
Context	configure eth-cfm domain string association string icc-based string
Tree	icc-based

String Length	8 to 13
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

integer number



WARNING:

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

Synopsis	Maintenance Association name in integer format
Context	configure eth-cfm domain <i>string association string integer number</i>
Tree	integer
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-index number



WARNING:

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

Synopsis	Maintenance Association (MA) table index
Context	configure eth-cfm domain <i>string association string ma-index number</i>
Tree	ma-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-mep [**mep-id**] *number*

Synopsis	Enter the remote-mep list instance
----------	---

Context	configure eth-cfm domain string association string remote-mep number
Tree	remote-mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[mep-id] number

Synopsis	Remote MEP ID
Context	configure eth-cfm domain string association string remote-mep number
Tree	remote-mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

remote-mac string

Synopsis	Remote MAC Address for transmitting CFM packets to remote MEPs
Context	configure eth-cfm domain string association string remote-mep number remote-mac string
Tree	remote-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

string string



WARNING:

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

Synopsis	Maintenance Association name in raw ASCII string format
Context	configure eth-cfm domain string association string string string
Tree	string
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vid number



WARNING:

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

Synopsis	Primary VLAN ID for the Maintenance Association name
Context	configure eth-cfm domain string association string vid number
Tree	vid
Range	0 to 4094
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpn-id string



WARNING:

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

Synopsis	VPN ID for the Maintenance Association name
Context	configure eth-cfm domain string association string vpn-id string
Tree	vpn-id
String Length	0 to 15
Notes	The following elements are part of a mandatory choice: icc-based , integer , string , vid , or vpn-id .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dns string

**WARNING:**

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

Synopsis	Domain name like text string derived from a DNS name
Context	configure eth-cfm domain string dns string
Tree	dns
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

format keyword

**WARNING:**

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

Synopsis	Maintenance domain name not to be provided
Context	configure eth-cfm domain string format keyword
Tree	format
Options	none
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level number

**WARNING:**

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

Synopsis	Maintenance Domain Level (MD Level)
Context	configure eth-cfm domain string level number
Tree	level
Range	0 to 7

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac string



WARNING:

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

Synopsis	Maintenance domain MAC name
Context	configure eth-cfm domain string mac string
Tree	mac
String Length	13 to 23
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-index number



WARNING:

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

Synopsis	The index of the Maintenance Domain (MD)
Context	configure eth-cfm domain string md-index number
Tree	md-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name string



WARNING:

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

Synopsis	Maintenance Domain name
Context	configure eth-cfm domain <i>string name string</i>
Tree	<i>name</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: dns , format , mac , or name .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.16 eth-ring commands

```

configure
- eth-ring number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ccm-hold-time
- down number
- up number
- compatible-version number
- description string
- guard-time number
- node-id string
- path string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- eth-cfm
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- control-mep boolean
- description string
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- port-and-raps-tag string
- rpl-end boolean
- revert-time number
- rpl-node keyword
- sub-ring
- interconnect
- propagate-topology-change boolean
- ring-id reference
- vpls
- type keyword

```

3.16.1 eth-ring command descriptions

eth-ring [[ring-index](#)] *number*

Synopsis	Enter the eth-ring list instance
Context	configure eth-ring <i>number</i>
Tree	eth-ring
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ring-index] *number*

Synopsis	Ring ID
Context	configure eth-ring <i>number</i>
Tree	eth-ring
Range	1 to 128
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the Ethernet ring
Context	configure eth-ring <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-hold-time

Synopsis	Enter the ccm-hold-time context
Context	configure eth-ring <i>number</i> ccm-hold-time
Tree	ccm-hold-time

Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis Hold timer for down event dampening
Context **configure** *eth-ring number ccm-hold-time down number*
Tree *down*
Range 1 to 5000
Units centiseconds
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

up *number*

Synopsis Hold timer for recovery reporting
Context **configure** *eth-ring number ccm-hold-time up number*
Tree *up*
Range 0 to 5000
Default 20
Units deciseconds
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

compatible-version *number*

Synopsis Compatibility version for the Ethernet ring
Context **configure** *eth-ring number compatible-version number*
Tree *compatible-version*
Range 1 to 2
Default 2
Introduced 21.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure <i>eth-ring number description string</i>
Tree	<i>description</i>
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

guard-time *number*

Synopsis	Ethernet ring guard time
Context	configure <i>eth-ring number guard-time number</i>
Tree	<i>guard-time</i>
Range	1 to 20
Default	5
Units	deciseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

node-id *string*

Synopsis	MAC address of the RPL link
Context	configure <i>eth-ring number node-id string</i>
Tree	<i>node-id</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

path [*path-index*] *string*

Synopsis	Enter the path list instance
Context	configure <i>eth-ring number path string</i>
Tree	<i>path</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[path-index] *string*

Synopsis	Path ID
Context	configure eth-ring number path string
Tree	path
String Length	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the Ethernet ring path
Context	configure eth-ring number path string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure eth-ring number path string description string
Tree	description
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure eth-ring number path string eth-cfm
Tree	eth-cfm
Introduced	21.7.R1

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

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis Enter the **mep** list instance

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Introduced 21.7.R1

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

md-admin-name reference

Synopsis Maintenance Domain (MD) name

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

Reference **configure eth-cfm domain string**

Notes This element is part of a list key.

Introduced 21.7.R1

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

ma-admin-name reference

Synopsis Maintenance Association (MA) name

Context **configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number**

Tree **mep**

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

Notes This element is part of a list key.

Introduced 21.7.R1

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

mep-id number

Synopsis Maintenance Endpoint (MEP) ID

Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
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Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7

Default	7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

control-mep *boolean*

Synopsis	Enable Ethernet ring control on the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> control-mep <i>boolean</i>
Tree	control-mep
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window number

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number
Tree	priority
Range	0 to 7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed boolean

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean
Tree	rx-eth-ed

Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.
Default	true

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure eth-ring <i>number</i> path <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
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Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold number

Synopsis	Threshold time limit for the one-way delay test
Context	configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-and-raps-tag string



WARNING:

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

Synopsis	Port ID and Ring APS tag ID
Context	configure eth-ring number path string port-and-raps-tag string
Tree	port-and-raps-tag
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rpl-end *boolean*

**WARNING:**

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

Synopsis	Enable path as a Ring Protection Link (RPL) end
Context	configure eth-ring number path string rpl-end boolean
Tree	rpl-end
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

revert-time *number*

Synopsis	Revert time for the Ethernet ring
Context	configure eth-ring number revert-time number
Tree	revert-time
Range	0 60 to 720
Default	300
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rpl-node *keyword*

Synopsis	Ring Protection Link (RPL) type for the Ethernet ring
Context	configure eth-ring number rpl-node keyword
Tree	rpl-node
Options	owner, neighbor
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sub-ring

Synopsis	Enter the sub-ring context
Context	configure eth-ring number sub-ring

Tree	sub-ring
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interconnect

Synopsis	Enter the interconnect context
Context	configure eth-ring <i>number</i> sub-ring interconnect
Tree	interconnect
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

propagate-topology-change *boolean*

Synopsis	Propagate topology changes
Context	configure eth-ring <i>number</i> sub-ring interconnect propagate-topology-change <i>boolean</i>
Tree	propagate-topology-change
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ring-id *reference*

Synopsis	Ring instance of the connection ring for the sub-ring
Context	configure eth-ring <i>number</i> sub-ring interconnect ring-id <i>reference</i>
Tree	ring-id
Reference	configure eth-ring <i>number</i>
Notes	The following elements are part of a choice: ring-id or vpls .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vpls

Synopsis	Connect sub-ring to VPLS ID that contains sub-ring SAP
Context	configure eth-ring <i>number</i> sub-ring interconnect vpls

Tree	vpls
Notes	The following elements are part of a choice: ring-id or vpls .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Sub-ring type
Context	configure eth-ring <i>number</i> sub-ring type <i>keyword</i>
Tree	type
Options	virtual-link, non-virtual-link
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.17 filter commands

```

configure
- filter
  - apply-groups reference
  - apply-groups-exclude reference
  - dhcp-filter number
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - bypass-host-creation
      - drop
    - description string
    - entry number
      - action
        - bypass-host-creation
        - drop
      - apply-groups reference
      - apply-groups-exclude reference
      - option
        - absent
        - match
          - exact boolean
          - hex string
          - invert boolean
          - string string
        - number number
        - present
    - dhcp6-filter number
      - apply-groups reference
      - apply-groups-exclude reference
      - default-action
        - bypass-host-creation
          - na boolean
          - pd boolean
        - drop
      - description string
      - entry number
        - action
          - bypass-host-creation
            - na boolean
            - pd boolean
          - drop
        - apply-groups reference
        - apply-groups-exclude reference
        - option
          - absent
          - match
            - exact boolean
            - hex string
            - invert boolean
            - string string
          - number number
          - present
    - gre-tunnel-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - ipv4
        - destination-address string
        - gre-key (keyword | number)

```

configure filter gre-tunnel-template ipv4 skip-ttl-decrement

```

- skip-ttl-decrement boolean
- source-address string
- ipv6
- destination-address string
- gre-key keyword
- skip-hop-decrement boolean
- source-address string
- ip-exception string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dst-ip
- address (ipv4-prefix-with-host-bits | ipv4-address)
- mask string
- dst-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- icmp
- code number
- type number
- protocol (number | keyword)
- src-ip
- address (ipv4-prefix-with-host-bits | ipv4-address)
- mask string
- src-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- filter-id number
- ip-filter string
- apply-groups reference
- apply-groups-exclude reference
- chain-to-system-filter boolean
- default-action keyword
- description string
- embed
- filter reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- flowspec offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- group number
- router-instance string
- openflow reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- grt
- sap reference

```

configure filter ip-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
- action
- accept
- accept-when
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- apply-groups reference
- apply-groups-exclude reference
- drop
- drop-when
- extracted-traffic
- packet-length
- eq number
- gt number
- lt number
- range
  - end number
  - start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- ttl
- eq number
- gt number
- lt number
- range
  - end number
  - start number
- fc keyword
- forward
- bonding-connection number
- esi-l2
- esi-value string
- vpls reference
- esi-l3
- esi-value string
- sf-ip string
- vas-interface reference
- vprn reference
- gre-tunnel reference
- lsp string
- mpls-policy
- endpoint string
- next-hop
- interface-name string
- nh-ip
- address string
- indirect boolean
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- redirect-policy reference
- router-instance string
- sap
- sap-id reference

```

configure filter ip-filter entry action forward sap vpls

```

- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- srte-policy
- color number
- endpoint string
- vprn-target
- adv-prefix string
- bgp-nh string
- lsp string
- vprn reference
- gtp-local-breakout
- http-redirect
- allow-override boolean
- url (keyword | http-redirect-url)
- ignore-match
- l2-aware-nat-bypass boolean
- nat
- nat-policy reference
- rate-limit
- extracted-traffic
- packet-length
- eq number
- gt number
- lt number
- range
- end number
- start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- pir (number | keyword)
- pps-pir (number | keyword)
- ttl
- eq number
- gt number
- lt number
- range
- end number
- start number
- reassemble
- remark
- dscp keyword
- secondary
- apply-groups reference
- apply-groups-exclude reference
- forward
- next-hop
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- sap
- sap-id reference
- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- vprn-target
- adv-prefix string
- bgp-nh string

```

configure filter ip-filter entry action secondary forward vprn-target lsp

```

    - lsp string
    - vprn reference
  - remark
    - dscp keyword
  - tcp-mss-adjust
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-pbr keyword
- filter-sample boolean
- interface-sample boolean
- log reference
- match
  - destination-class number
  - dscp keyword
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
- icmp
  - code number
  - type number
- ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)
  - ip-prefix-list reference
  - mask string
- ip-option
  - mask number
  - type number
- multiple-option boolean
- option-present boolean
- packet-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- protocol (number | keyword)
- protocol-list reference
- src-ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)
  - ip-prefix-list reference
  - mask string
- src-mac
  - address string
  - mask string

```

configure filter ip-filter entry match src-port

- **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **src-route-option** *boolean*
- **tcp-established**
- **tcp-flags**
 - **ack** *boolean*
 - **cwr** *boolean*
 - **ece** *boolean*
 - **fin** *boolean*
 - **ns** *boolean*
 - **psh** *boolean*
 - **rst** *boolean*
 - **syn** *boolean*
 - **urg** *boolean*
- **ttl**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
- **pbr-down-action-override** *keyword*
- **sample-profile** *reference*
- **sticky-dest** (*number* | *keyword*)
- **filter-id** *number*
- **scope** *keyword*
- **shared-policer** *boolean*
- **subscriber-mgmt**
 - **host-specific-entry**
 - **credit-control**
 - **range**
 - **end** *number*
 - **start** *number*
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
 - **shared-entry**
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **pcc-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
- **type** *keyword*
- **ipv6-exception** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*

configure filter ipv6-exception entry apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - dst-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - icmp
    - code number
    - type number
  - next-header (number | keyword)
  - port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - src-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
- filter-id number
- ipv6-filter string
- apply-groups reference
- apply-groups-exclude reference
- chain-to-system-filter boolean
- default-action keyword
- description string
- embed
  - filter reference offset number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - flowspec offset number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - group number
    - router-instance string
  - openflow reference offset number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - grt
    - sap reference

```

configure filter ipv6-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
- action
- accept
- accept-when
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- apply-groups reference
- apply-groups-exclude reference
- drop
- drop-when
- extracted-traffic
- hop-limit
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- payload-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- fc keyword
- forward
- bonding-connection number
- esi-l2
  - esi-value string
  - vpls reference
- esi-l3
  - esi-value string
  - sf-ip string
  - vas-interface reference
  - vprn reference
- gre-tunnel reference
- lsp string
- mpls-policy
  - endpoint string
- next-hop
- nh-ip
  - address string
  - indirect boolean
- nh-ip-vrf
  - address string
  - indirect boolean
  - router-instance string
- redirect-policy reference
- router-instance string
- sap
  - sap-id reference
  - vpls reference

```

configure filter ipv6-filter entry action forward sdp

```

- sdp
  - sdp-bind-id string
  - vpls reference
- srte-policy
  - color number
  - endpoint string
- vprn-target
  - adv-prefix string
  - bgp-nh string
  - lsp string
  - vprn reference
- http-redirect
  - allow-override boolean
  - url (keyword | http-redirect-url)
- ignore-match
- nat
  - nat-policy reference
  - nat-type keyword
- rate-limit
  - extracted-traffic
  - hop-limit
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- payload-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pir (number | keyword)
- pps-pir (number | keyword)
- remark
  - dscp keyword
- secondary
  - apply-groups reference
  - apply-groups-exclude reference
- forward
  - next-hop
    - nh-ip-vrf
      - address string
      - indirect boolean
      - router-instance string
  - sap
    - sap-id reference
    - vpls reference
- sdp
  - sdp-bind-id string
  - vpls reference
- vprn-target
  - adv-prefix string
  - bgp-nh string
  - lsp string
  - vprn reference
- remark

```

configure filter ipv6-filter entry action secondary remark dscp

- **dscp** *keyword*
- **tcp-mss-adjust**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress-pbr** *keyword*
- **filter-sample** *boolean*
- **interface-sample** *boolean*
- **log** *reference*
- **match**
 - **destination-class** *number*
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **extension-header**
 - **ah** *boolean*
 - **esp** *boolean*
 - **hop-by-hop** *boolean*
 - **routing-type0** *boolean*
 - **flow-label**
 - **mask** *number*
 - **value** *number*
 - **fragment** *keyword*
 - **hop-limit**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **icmp**
 - **code** *number*
 - **type** *number*
 - **ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **next-header** (*number* | *keyword*)
 - **next-header-list** *reference*
 - **packet-length**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
 - **port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*

configure filter ipv6-filter entry match src-ip

- **src-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
- **src-mac**
 - **address** *string*
 - **mask** *string*
- **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **tcp-established**
- **tcp-flags**
 - **ack** *boolean*
 - **cwr** *boolean*
 - **ece** *boolean*
 - **fin** *boolean*
 - **ns** *boolean*
 - **psh** *boolean*
 - **rst** *boolean*
 - **syn** *boolean*
 - **urg** *boolean*
- **pbr-down-action-override** *keyword*
- **sample-profile** *reference*
- **sticky-dest** (*number* | *keyword*)
- **filter-id** *number*
- **scope** *keyword*
- **shared-policer** *boolean*
- **subscriber-mgmt**
 - **host-specific-entry**
 - **credit-control**
 - **range**
 - **end** *number*
 - **start** *number*
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
 - **shared-entry**
 - **filter-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **pcc-rule**
 - **range**
 - **end** *number*
 - **start** *number*
 - **watermark**
 - **high** *number*
 - **low** *number*
- **type** *keyword*
- **log** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **destination**

configure filter log destination memory

```

- memory
  - max-entries number
  - stop-on-full boolean
- syslog
  - name reference
  - summary
    - admin-state keyword
    - summary-crit keyword
- mac-filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - description string
  - embed
  - entry number
  - action
    - accept
    - apply-groups reference
    - apply-groups-exclude reference
    - drop
    - forward
      - esi-l2
        - esi-value string
        - vpls reference
      - sap
        - sap-id reference
        - vpls reference
      - sdp
        - sdp-bind-id string
        - vpls reference
    - http-redirect
      - url string
    - ignore-match
    - rate-limit
      - pir (number | keyword)
    - secondary
      - apply-groups reference
      - apply-groups-exclude reference
      - forward
        - sap
          - sap-id reference
          - vpls reference
        - sdp
          - sdp-bind-id string
          - vpls reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - log reference
  - match
    - dot1p
      - mask number
      - priority number
    - dst-mac
      - address string
      - mask string
    - etype string
    - frame-type keyword
    - inner-tag
      - mask number
      - tag number
    - isid
      - range
        - end number

```

configure filter mac-filter entry match isid range start

```

    - start number
    - value number
  - llc-dsap
    - dsap number
    - mask number
  - llc-ssap
    - mask number
    - ssap number
  - outer-tag
    - mask number
    - tag number
  - snap-oui keyword
  - snap-pid number
  - src-mac
    - address string
    - mask string
  - pbr-down-action-override keyword
  - sticky-dest (number | keyword)
- filter-id number
- scope keyword
- type keyword
- match-list
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
  - apply-path
    - bgp-peers number
      - apply-groups reference
      - apply-groups-exclude reference
      - group string
      - neighbor string
      - router-instance string
    - description string
    - prefix string
    - prefix-exclude string
  - ipv6-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
  - apply-path
    - bgp-peers number
      - apply-groups reference
      - apply-groups-exclude reference
      - group string
      - neighbor string
      - router-instance string
    - description string
    - prefix string
    - prefix-exclude string
  - port-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port number
    - range start number end number
  - protocol-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - protocol (number | keyword)
- md-auto-id
  - filter-id-range
    - apply-groups reference

```

configure filter md-auto-id filter-id-range apply-groups-exclude

- **apply-groups-exclude** *reference*
- **end** *number*
- **start** *number*
- **redirect-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ping-test**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **hold-down** *number*
 - **interval** *number*
 - **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **timeout** *number*
 - **priority** *number*
 - **unicast-rt-test**
 - **notify-dest-change** *boolean*
 - **router-instance** *string*
 - **sticky-dest** (*number* | *keyword*)
- **redirect-policy-binding** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **binding-operator** *keyword*
 - **redirect-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination** *reference*
- **system-filter**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip** *reference*
 - **ipv6** *reference*

3.17.1 filter command descriptions

filter

Synopsis	Enter the filter context
Context	configure filter
Tree	filter
Introduced	16.0.R1
Platforms	All

dhcp-filter [[filter-id](#)] *number*

Synopsis	Enter the dhcp-filter list instance
Context	configure filter dhcp-filter <i>number</i>
Tree	dhcp-filter
Introduced	16.0.R1
Platforms	All

[\[filter-id\]](#) *number*

Synopsis	Unique DHCP filter policy ID
Context	configure filter dhcp-filter <i>number</i>
Tree	dhcp-filter
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enable the default-action context
Context	configure filter dhcp-filter <i>number</i> default-action
Tree	default-action
Introduced	16.0.R1

Platforms All

bypass-host-creation

Synopsis Host creation options to bypass

Context **configure** [filter](#) [dhcp-filter](#) *number* [default-action](#) [bypass-host-creation](#)

Tree [bypass-host-creation](#)

Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.

Introduced 16.0.R1

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

drop

Synopsis DHCP host creation when the filter entry is matched

Context **configure** [filter](#) [dhcp-filter](#) *number* [default-action](#) [drop](#)

Tree [drop](#)

Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [filter](#) [dhcp-filter](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [filter](#) [dhcp-filter](#) *number* [entry](#) *number*

Tree [entry](#)

Max. Instances	10
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	DHCP filter entry index
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Host creation options to bypass
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	DHCP host creation when the filter entry is matched
----------	---

Context	configure filter dhcp-filter number entry number action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enable the option context
Context	configure filter dhcp-filter number entry number option
Tree	option
Introduced	16.0.R1
Platforms	All

absent

Synopsis	Require the absence of related option
Context	configure filter dhcp-filter number entry number option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enable the match context
Context	configure filter dhcp-filter number entry number option match
Tree	match
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
----------	--

Context	configure filter dhcp-filter number entry number option match exact boolean
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

hex string

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp-filter number entry number option match hex string
Tree	hex
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	16.0.R1
Platforms	All

invert boolean

Synopsis	Invert (partial) matching criteria
Context	configure filter dhcp-filter number entry number option match invert boolean
Tree	invert
Default	false
Introduced	16.0.R1
Platforms	All

string string

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp-filter number entry number option match string string
Tree	string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option <i>number</i> <i>number</i>
Tree	number
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

present

Synopsis	Require the presence of related option
Context	configure filter dhcp-filter <i>number</i> entry <i>number</i> option present
Tree	present
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

dhcp6-filter [[filter-id](#)] *number*

Synopsis	Enter the dhcp6-filter list instance
Context	configure filter dhcp6-filter <i>number</i>
Tree	dhcp6-filter
Introduced	16.0.R1
Platforms	All

[filter-id] *number*

Synopsis	Unique DHCP filter policy ID
Context	configure filter dhcp6-filter <i>number</i>
Tree	dhcp6-filter
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

default-action

Synopsis Enable the **default-action** context
 Context **configure filter dhcp6-filter number default-action**
 Tree [default-action](#)
 Introduced 16.0.R1
 Platforms All

bypass-host-creation

Synopsis Enable the **bypass-host-creation** context
 Context **configure filter dhcp6-filter number default-action bypass-host-creation**
 Tree [bypass-host-creation](#)
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

na boolean

Synopsis Bypass the DHCPv6 NA host creation
 Context **configure filter dhcp6-filter number default-action bypass-host-creation na boolean**
 Tree [na](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pd boolean

Synopsis Bypass the DHCPv6 PD host creation
 Context **configure filter dhcp6-filter number default-action bypass-host-creation pd boolean**
 Tree [pd](#)
 Default true
 Introduced 16.0.R1

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

drop

Synopsis Drop DHCPv6 message (do not process)

Context **configure filter dhcp6-filter** *number* **default-action drop**

Tree **drop**

Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure filter dhcp6-filter** *number* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*entry-id*] *number*

Synopsis Enter the **entry** list instance

Context **configure filter dhcp6-filter** *number* **entry** *number*

Tree **entry**

Max. Instances 10

Introduced 16.0.R1

Platforms All

[*entry-id*] *number*

Synopsis DHCP filter entry index

Context **configure filter dhcp6-filter** *number* **entry** *number*

Tree **entry**

Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter dhcp6-filter number entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

bypass-host-creation

Synopsis	Enable the bypass-host-creation context
Context	configure filter dhcp6-filter number entry number action bypass-host-creation
Tree	bypass-host-creation
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

na *boolean*

Synopsis	Bypass the DHCPv6 NA host creation
Context	configure filter dhcp6-filter number entry number action bypass-host-creation na boolean
Tree	na
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pd *boolean*

Synopsis	Bypass the DHCPv6 PD host creation
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Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> action bypass-host-creation pd <i>boolean</i>
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis	Drop DHCPv6 message (do not process)
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: bypass-host-creation or drop .
Introduced	16.0.R1
Platforms	All

option

Synopsis	Enable the option context
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> option
Tree	option
Introduced	16.0.R1
Platforms	All

absent

Synopsis	Require the absence of related option
Context	configure filter dhcp6-filter <i>number</i> entry <i>number</i> option absent
Tree	absent
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enable the match context
Context	configure filter dhcp6-filter number entry number option match
Tree	match
Notes	The following elements are part of a mandatory choice: absent , match , or present .
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	configure filter dhcp6-filter number entry number option match exact boolean
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

hex *string*

Synopsis	Matching pattern for the filtered option
Context	configure filter dhcp6-filter number entry number option match hex string
Tree	hex
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: hex or string .
Introduced	16.0.R1
Platforms	All

invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	configure filter dhcp6-filter number entry number option match invert boolean
Tree	invert
Default	false
Introduced	16.0.R1

Platforms All

string *string*

Synopsis Matching pattern for the filtered option
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [match](#) *string* *string*
 Tree [string](#)
 String Length 1 to 127
 Notes The following elements are part of a mandatory choice: **hex** or **string**.
 Introduced 16.0.R1
 Platforms All

number *number*

Synopsis Number for DHCP or DHCPv6 option to filter on
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [number](#) *number*
 Tree [number](#)
 Range 0 to 255
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

present

Synopsis Require the presence of related option
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [present](#)
 Tree [present](#)
 Notes The following elements are part of a mandatory choice: **absent**, **match**, or **present**.
 Introduced 16.0.R1
 Platforms All

gre-tunnel-template [[gre-tunnel-template-name](#)] *string*

Synopsis Enter the **gre-tunnel-template** list instance
 Context **configure** [filter](#) [gre-tunnel-template](#) *string*

Tree	gre-tunnel-template
Max. Instances	8191
Introduced	16.0.R1
Platforms	All

[gre-tunnel-template-name] *string*

Synopsis	GRE tunnel template ID
Context	configure filter gre-tunnel-template <i>string</i>
Tree	gre-tunnel-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter gre-tunnel-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure filter gre-tunnel-template <i>string</i> ipv4
Tree	ipv4
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	16.0.R1
Platforms	All

destination-address [[address](#)] *string*

Synopsis	Add a list entry for destination-address
Context	configure filter gre-tunnel-template <i>string</i> ipv4 destination-address <i>string</i>
Tree	destination-address
Description	This command defines a destination for the GRE IP header used to encapsulate the matching IPv4/IPv6 packet. A single destination address can be specified for an IPv6 gre-tunnel-template . Traffic matching the associated IPv4 or IPv6 filter is hashed across any available ECMP or UCMP route next hop available to the destination address. If no destination address is available, then matching traffic follows the configured pbr-down-action-override action, if configured. If no pbr-down-action-override is configured traffic is discarded.
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[address] *string*

Synopsis	Destination IPv4 address
Context	configure filter gre-tunnel-template <i>string</i> ipv4 destination-address <i>string</i>
Tree	destination-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

gre-key (*keyword* | *number*)

Synopsis	GRE key
Context	configure filter gre-tunnel-template <i>string</i> ipv4 gre-key (<i>keyword</i> <i>number</i>)
Tree	gre-key
Max. Range	0 to 4294967295
Options	if-index
Introduced	16.0.R1
Platforms	All

skip-ttl-decrement *boolean*

Synopsis	Decrement TTL
Context	configure filter gre-tunnel-template <i>string</i> ipv4 skip-ttl-decrement <i>boolean</i>
Tree	skip-ttl-decrement
Default	false
Introduced	16.0.R1
Platforms	All

source-address *string*

Synopsis	Source IP address of the GRE encapsulated
Context	configure filter gre-tunnel-template <i>string</i> ipv4 source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure filter gre-tunnel-template <i>string</i> ipv6
Tree	ipv6
Notes	The following elements are part of a choice: ipv4 or ipv6 .
Introduced	22.7.R1
Platforms	All

destination-address [*address*] *string*

Synopsis	Add a list entry for destination-address
Context	configure filter gre-tunnel-template <i>string</i> ipv6 destination-address <i>string</i>
Tree	destination-address
Max. Instances	1
Introduced	22.7.R1
Platforms	All

[address] *string*

Synopsis	IPv6 destination address
Context	configure filter gre-tunnel-template <i>string</i> ipv6 destination-address <i>string</i>
Tree	destination-address
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

gre-key *keyword*

Synopsis	Include a key value in GRE header
Context	configure filter gre-tunnel-template <i>string</i> ipv6 gre-key <i>keyword</i>
Tree	gre-key
Description	This command includes a key value in the GRE header of ifIndex of the ingress interface.
Options	if-index
Introduced	22.7.R1
Platforms	All

skip-hop-decrement *boolean*

Synopsis	Decrement TTL of the received packet
Context	configure filter gre-tunnel-template <i>string</i> ipv6 skip-hop-decrement <i>boolean</i>
Tree	skip-hop-decrement
Description	When configured to true , the system decrements the TTL of the IP packet matching the IPv4 or IPv6 filter when it is encapsulated into the GRE tunnel header. When configured to false , the system increases the TTL of the received packet.
Default	false
Introduced	22.7.R1
Platforms	All

source-address *string*

Synopsis	Source IPv6 address of the GRE encapsulated
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Context	configure filter gre-tunnel-template <i>string ipv6 source-address string</i>
Tree	source-address
Introduced	22.7.R1
Platforms	All

ip-exception [[filter-name](#)] *string*

Synopsis	Enter the ip-exception list instance
Context	configure filter ip-exception <i>string</i>
Tree	ip-exception
Introduced	20.10.R1
Platforms	VSR

[filter-name] *string*

Synopsis	Filter name
Context	configure filter ip-exception <i>string</i>
Tree	ip-exception
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure filter ip-exception <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
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Context	configure filter ip-exception string entry number
Tree	entry
Introduced	20.10.R1
Platforms	VSR

[entry-id] number

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ip-exception string entry number
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description string

Synopsis	Text description
Context	configure filter ip-exception string entry number description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

match

Synopsis	Enter the match context
Context	configure filter ip-exception string entry number match
Tree	match
Introduced	20.10.R1
Platforms	VSR

dst-ip

Synopsis	Enter the dst-ip context
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Context	configure filter ip-exception string entry number match dst-ip
Tree	dst-ip
Introduced	20.10.R1
Platforms	VSR

address (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	IP address to match
Context	configure filter ip-exception string entry number match dst-ip address (<i>ipv4-prefix-with-host-bits ipv4-address</i>)
Tree	address
Introduced	20.10.R1
Platforms	VSR

mask string

Synopsis	Mask applied as an AND to the IP address
Context	configure filter ip-exception string entry number match dst-ip mask string
Tree	mask
Introduced	20.10.R1
Platforms	VSR

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ip-exception string entry number match dst-port
Tree	dst-port
Introduced	20.10.R1
Platforms	VSR

eq number

Synopsis	Exact match criterion
Context	configure filter ip-exception string entry number match dst-port eq number
Tree	eq
Range	0 to 65535

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Condition on being greater than the specified value.
Context	configure filter ip-exception string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

lt number

Synopsis	Condition on being less than the specified value.
Context	configure filter ip-exception string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the range context
Context	configure filter ip-exception string entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

end number

Synopsis	Upper bound of the port range to match
Context	configure filter ip-exception string entry number match dst-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure filter ip-exception string entry number match dst-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

icmp

Synopsis	Enter the icmp context
Context	configure filter ip-exception string entry number match icmp
Tree	icmp
Introduced	20.10.R1
Platforms	VSR

code number

Synopsis	ICMP code value to match
Context	configure filter ip-exception string entry number match icmp code number
Tree	code
Range	0 to 255
Introduced	20.10.R1

Platforms VSR

type number

Synopsis ICMP type value to match
 Context **configure filter ip-exception string entry number match icmp type number**
 Tree [type](#)
 Range 0 to 255
 Introduced 20.10.R1
 Platforms VSR

protocol (number | keyword)

Synopsis IP protocol to match.
 Context **configure filter ip-exception string entry number match protocol (number | keyword)**
 Tree [protocol](#)
 Range 0 to 255
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
 Introduced 20.10.R1
 Platforms VSR

src-ip

Synopsis Enter the **src-ip** context
 Context **configure filter ip-exception string entry number match src-ip**
 Tree [src-ip](#)
 Introduced 20.10.R1
 Platforms VSR

address (ipv4-prefix-with-host-bits | ipv4-address)

Synopsis IP address to match
 Context **configure filter ip-exception string entry number match src-ip address (ipv4-prefix-with-host-bits | ipv4-address)**

Tree	address
Introduced	20.10.R1
Platforms	VSR

mask string

Synopsis	Mask applied as an AND to the IP address
Context	configure filter ip-exception string entry number match src-ip mask string
Tree	mask
Introduced	20.10.R1
Platforms	VSR

src-port

Synopsis	Enter the src-port context
Context	configure filter ip-exception string entry number match src-port
Tree	src-port
Introduced	20.10.R1
Platforms	VSR

eq number

Synopsis	Exact match criterion
Context	configure filter ip-exception string entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Condition on being greater than the specified value.
Context	configure filter ip-exception string entry number match src-port gt number
Tree	gt

Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Condition on being less than the specified value.
Context	configure filter ip-exception string entry number match src-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the range context
Context	configure filter ip-exception string entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	20.10.R1
Platforms	VSR

end *number*

Synopsis	Upper bound of the port range to match
Context	configure filter ip-exception string entry number match src-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range to match
Context	configure filter ip-exception string entry number match src-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

filter-id number**WARNING:**

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

Synopsis	Filter ID
Context	configure filter ip-exception string filter-id number
Tree	filter-id
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

ip-filter [filter-name] string

Synopsis	Enter the ip-filter list instance
Context	configure filter ip-filter string
Tree	ip-filter
Introduced	16.0.R1
Platforms	All

[filter-name] string

Synopsis	Filter name
Context	configure filter ip-filter string
Tree	ip-filter
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

chain-to-system-filter *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	configure filter ip-filter <i>string</i> chain-to-system-filter <i>boolean</i>
Tree	chain-to-system-filter
Default	false
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	configure filter ip-filter <i>string</i> default-action <i>keyword</i>
Tree	default-action
Default	drop
Options	drop, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter ip-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the embed context
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Context	configure filter ip-filter string embed
Tree	embed
Description	Commands in this context embed a previously defined IPv4 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

filter [name] reference offset number

Synopsis	Enter the filter list instance
Context	configure filter ip-filter string embed filter reference offset number
Tree	filter
Introduced	16.0.R1
Platforms	All

[name] reference

Synopsis	IPv4 policy to be embedded in the filter
Context	configure filter ip-filter string embed filter reference offset number
Tree	filter
Reference	configure filter ip-filter string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

offset number

Synopsis	Offset of the inserted entries
Context	configure filter ip-filter string embed filter reference offset number
Tree	filter
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter *string* embed filter *reference* offset *number* admin-state *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

flowspec [offset](#) *number*

Synopsis Enter the **flowspec** list instance

Context **configure** filter ip-filter *string* embed [flowspec](#) [offset](#) *number*

Tree [flowspec](#)

Introduced 16.0.R1

Platforms All

offset *number*

Synopsis Offset of the inserted entries

Context **configure** filter ip-filter *string* embed [flowspec](#) [offset](#) *number*

Tree [flowspec](#)

Range 0 to 2097151

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter *string* embed [flowspec](#) [offset](#) *number* admin-state *keyword*

Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group *number*



WARNING:

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

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	configure filter ip-filter <i>string</i> embed flowspec offset <i>number</i> group <i>number</i>
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

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

Synopsis	Virtual router for an external configured set of flowspec rules
Context	configure filter ip-filter <i>string</i> embed flowspec offset <i>number</i> router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

openflow [*of-switch*] *reference* offset *number*

Synopsis	Enter the openflow list instance
Context	configure filter ip-filter <i>string</i> embed openflow <i>reference</i> offset <i>number</i>
Tree	openflow
Introduced	16.0.R4

Platforms All

[of-switch] *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name

Context **configure** [filter](#) [ip-filter](#) *string* [embed](#) [openflow](#) *reference* [offset](#) *number*

Tree [openflow](#)

Reference **configure** [openflow](#) [of-switch](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

offset *number*

Synopsis Offset of the inserted entries

Context **configure** [filter](#) [ip-filter](#) *string* [embed](#) [openflow](#) *reference* [offset](#) *number*

Tree [openflow](#)

Range 0 to 2097150

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

admin-state *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** [filter](#) [ip-filter](#) *string* [embed](#) [openflow](#) *reference* [offset](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R4

Platforms All

grt

**WARNING:**

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

Synopsis	Global routing context
Context	configure filter ip-filter string embed openflow reference offset number grt
Tree	grt
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4
Platforms	All

sap reference

**WARNING:**

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

Synopsis	SAP context
Context	configure filter ip-filter string embed openflow reference offset number sap reference
Tree	sap
Reference	configure service vpls string sap string
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4
Platforms	All

system

**WARNING:**

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

Synopsis	System context
Context	configure filter ip-filter string embed openflow reference offset number system
Tree	system
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4

Platforms All

vpls reference



WARNING:

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

Synopsis VPLS context

Context **configure** filter ip-filter string embed openflow reference offset number vpls reference

Tree vpls

Reference **configure** service vpls string

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

vprn reference



WARNING:

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

Synopsis VPRN context

Context **configure** filter ip-filter string embed openflow reference offset number vprn reference

Tree vprn

Reference **configure** service vprn string

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

entry [entry-id] number

Synopsis Enter the **entry** list instance

Context **configure** filter ip-filter string entry number

Tree entry

Introduced 16.0.R1

Platforms All

[entry-id] *number*

Synopsis ID for a match criteria and the corresponding action

Context **configure filter ip-filter string entry number**

Tree [entry](#)

Range 1 to 2097151

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

action

Synopsis Enable the **action** context

Context **configure filter ip-filter string entry number action**

Tree [action](#)

Introduced 16.0.R1

Platforms All

accept

Synopsis Accept regular routing to forward a matching packet

Context **configure filter ip-filter string entry number action accept**

Tree [accept](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.

Introduced 16.0.R1

Platforms All

accept-when

Synopsis Enable the **accept-when** context

Context **configure filter ip-filter string entry number action accept-when**

Tree [accept-when](#)

Introduced	19.5.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ip-filter string entry number action accept-when pattern
Tree	pattern
Introduced	19.5.R1
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	configure filter ip-filter string entry number action accept-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	configure filter ip-filter string entry number action accept-when pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
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Context	configure filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

drop-when

Synopsis	Enable the drop-when context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop-when
Tree	drop-when
Introduced	16.0.R1

Platforms All

extracted-traffic

Synopsis Drop traffic extracted to CPM
 Context **configure filter ip-filter** *string entry number action drop-when extracted-traffic*
 Tree [extracted-traffic](#)
 Introduced 16.0.R1
 Platforms All

packet-length

Synopsis Enable the **packet-length** context
 Context **configure filter ip-filter** *string entry number action drop-when packet-length*
 Tree [packet-length](#)
 Notes The following elements are part of a choice: **packet-length** or **tll**.
 Introduced 16.0.R1
 Platforms All

eq *number*

Synopsis Exact match criterion for the length
 Context **configure filter ip-filter** *string entry number action drop-when packet-length eq number*
 Tree [eq](#)
 Range 0 to 65535
 Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
 Introduced 16.0.R1
 Platforms All

gt *number*

Synopsis Greater than match criterion for the length
 Context **configure filter ip-filter** *string entry number action drop-when packet-length gt number*
 Tree [gt](#)
 Range 0 to 65534

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ip-filter string entry number action drop-when packet-length lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number action drop-when packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ip-filter string entry number action drop-when packet-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter string entry number action drop-when packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ip-filter string entry number action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression string

Synopsis	Pattern expression to match
Context	configure filter ip-filter string entry number action drop-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask string

Synopsis	Mask for the pattern expression
Context	configure filter ip-filter string entry number action drop-when pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.

Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ip-filter <i>string</i> entry number action drop-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ip-filter <i>string</i> entry number action drop-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

ttl

Synopsis	Enable the ttl context
Context	configure filter ip-filter <i>string</i> entry number action drop-when ttl
Tree	ttl
Notes	The following elements are part of a choice: packet-length or ttl .
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action drop-when ttl range
Tree	range

Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter string entry number action drop-when ttl range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter string entry number action drop-when ttl range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Class name to be forwarded for matching packets
Context	configure filter ip-filter string entry number action fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward
Tree	forward
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward bonding-connection <i>number</i>
Tree	bonding-connection
Range	1 to 2
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi-l2

Synopsis	Enable the esi-l2 context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
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Context	configure filter ip-filter string entry number action forward esi-l2 esi-value string
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS service name
Context	configure filter ip-filter string entry number action forward esi-l2 vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

esi-l3

Synopsis	Enable the esi-l3 context
Context	configure filter ip-filter string entry number action forward esi-l3
Tree	esi-l3
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.
Introduced	16.0.R1
Platforms	All

esi-value string



WARNING:

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

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter ip-filter string entry number action forward esi-l3 esi-value string
Tree	esi-value

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sf-ip string



WARNING:

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

Synopsis	IP address of the service function to forward traffic
Context	configure filter ip-filter string entry number action forward esi-l3 sf-ip string
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vas-interface reference



WARNING:

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

Synopsis	Egress R-VPLS IP interface name
Context	configure filter ip-filter string entry number action forward esi-l3 vas-interface reference
Tree	vas-interface
Reference	configure service vprn string interface string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn reference



WARNING:

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

Synopsis	VPRN service name
Context	configure filter ip-filter <i>string entry number action forward esi-l3 vprn reference</i>
Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gre-tunnel *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	configure filter ip-filter <i>string entry number action forward gre-tunnel reference</i>
Tree	gre-tunnel
Reference	configure filter gre-tunnel-template <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ip-filter <i>string entry number action forward lsp string</i>
Tree	lsp
String Length	1 to 64
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

mpls-policy

Synopsis	Enable the mpls-policy context
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Context	configure filter ip-filter <i>string</i> <i>entry number</i> <i>action forward mpls-policy</i>
Tree	mpls-policy
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	MPLS forwarding policy endpoint IPv4 address
Context	configure filter ip-filter <i>string</i> <i>entry number</i> <i>action forward mpls-policy endpoint</i> <i>string</i>
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ip-filter <i>string</i> <i>entry number</i> <i>action forward next-hop</i>
Tree	next-hop
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

interface-name *string*

Synopsis	IP interface name that forwards matching packets
Context	configure filter ip-filter <i>string</i> <i>entry number</i> <i>action forward next-hop interface-name</i> <i>string</i>
Tree	interface-name
String Length	1 to 32

Notes	The following elements are part of a mandatory choice: interface-name , nh-ip , or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

nh-ip

Synopsis	Enable the nh-ip context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: interface-name , nh-ip , or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

address *string*



WARNING:

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

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip indirect <i>boolean</i>
Tree	indirect
Default	false
Introduced	16.0.R1

Platforms All

nh-ip-vrf

Synopsis Enable the **nh-ip-vrf** context

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf**

Tree [nh-ip-vrf](#)

Notes The following elements are part of a mandatory choice: **interface-name**, **nh-ip**, or **nh-ip-vrf**.

Introduced 16.0.R1

Platforms All

address string



WARNING:

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

Synopsis IPv4 address of next hop to forward matching packets

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

indirect boolean

Synopsis Allow next hop to be indirectly reachable

Context **configure filter ip-filter string entry number action forward next-hop nh-ip-vrf indirect boolean**

Tree [indirect](#)

Default false

Introduced 16.0.R1

Platforms All

router-instance *string*

**WARNING:**

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

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ip-filter <i>string</i> entry number action forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy *reference*

**WARNING:**

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

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	configure filter ip-filter <i>string</i> entry number action forward redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

router-instance *string*

**WARNING:**

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

Synopsis	Router name or VPRN service name
Context	configure filter ip-filter <i>string</i> entry number action forward router-instance <i>string</i>
Tree	router-instance

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ip-filter string entry number action forward sap
Tree	sap
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	configure filter ip-filter string entry number action forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SAP
Context	configure filter ip-filter string entry number action forward sap vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

sdp

Synopsis Enable the **sdp** context

Context **configure filter ip-filter string entry number action forward sdp**

Tree **sdp**

Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, or **vprn-target**.

Introduced 16.0.R1

Platforms All

sdp-bind-id string

Synopsis VPLS SDP bind ID used to forward matching packets

Context **configure filter ip-filter string entry number action forward sdp sdp-bind-id string**

Tree **sdp-bind-id**

String Length 3 to 16

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

vpls reference

Synopsis VPLS associated with the SDP

Context **configure filter ip-filter string entry number action forward sdp vpls reference**

Tree **vpls**

Reference **configure service vpls string**

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

srte-policy

Synopsis	Enable the srte-policy context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	SR-TE policy color ID
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy color <i>number</i>
Tree	color
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

endpoint *string*

Synopsis	SR-TE policy endpoint IPv4 address
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward srte-policy endpoint <i>string</i>
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

vprn-target

Synopsis	Enable the vprn-target context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action forward vprn-target
Tree	vprn-target

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

adv-prefix string

Synopsis	Advertised IP prefix for target destination
Context	configure filter ip-filter string entry number action forward vprn-target adv-prefix string
Tree	adv-prefix
Introduced	16.0.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ip-filter string entry number action forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ip-filter string entry number action forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

vprn reference

Synopsis	Routing context used for route lookup
Context	configure filter ip-filter string entry number action forward vprn-target vprn reference

Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gtp-local-breakout

Synopsis	Break out matching traffic locally from a GTP tunnel for GTP-subscriber-hosts, or forward for other entities
Context	configure filter ip-filter <i>string</i> entry number action gtp-local-breakout
Tree	gtp-local-breakout
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-redirect

Synopsis	Enable the http-redirect context
Context	configure filter ip-filter <i>string</i> entry number action http-redirect
Tree	http-redirect
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	configure filter ip-filter <i>string</i> entry number action http-redirect allow-override <i>boolean</i>
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to true , the RADIUS VSA can override the HTTP redirect URL.

When configured to **false**, the HTTP redirect URL is not overridden.
This does not apply if the CPF option is specified for the URL.

Default	false
Introduced	16.0.R1
Platforms	All

url (*keyword* | *http-redirect-url*)



WARNING:

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

Synopsis	URL used for HTTP redirect action
Context	configure filter ip-filter string entry number action http-redirect url (<i>keyword</i> <i>http-redirect-url</i>)
Tree	url
Description	<p>This command specifies the URL to use for HTTP redirection for this filter entry.</p> <p>A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only.</p> <p>The following macro substitutions may be used:</p> <p>\$URL — request-URI in the HTTP GET request received</p> <p>\$MAC — a string that represents the MAC address of the subscriber host</p> <p>\$IP — a string that represents the IP address of the subscriber host</p> <p>\$SUB — a string that represents the subscriber ID</p> <p>\$SAP — a string that represents a SAP ID</p> <p>\$SAPDESC — description string configured on the SAP</p> <p>\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)</p> <p>\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)</p>
String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	configure filter ip-filter <i>string entry number action ignore-match</i>
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

l2-aware-nat-bypass *boolean*

Synopsis	Divert traffic from an L2-Aware NAT subscriber
Context	configure filter ip-filter <i>string entry number action l2-aware-nat-bypass boolean</i>
Tree	l2-aware-nat-bypass
Description	<p>When configured to true, the filter action selectively diverts traffic from a L2-Aware NAT subscriber away from NAT. This action is only applicable to L2-Aware NAT subscribers and must be configured together with action accept. Traffic identified in the match condition bypasses L2-Aware NAT. An example is to bypass NAT for on-net destinations (within the customer network).</p> <p>For selective NAT bypass to take effect, in addition to IP filter configuration, the L2-Aware NAT subscriber must be specifically enabled for selective bypass via the allow-bypass configuration option in the configure subscriber-mgmt sub-profile nat allow-bypass context.</p> <p>When configured to false, traffic that is not classified for bypass automatically diverts to L2-Aware NAT, unless it is explicitly configured in the IP filter action to be dropped.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enable the nat context
Context	configure filter ip-filter <i>string entry number action nat</i>
Tree	nat
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy name when action is NAT
 Context **configure** filter ip-filter *string* entry *number* action nat nat-policy *reference*
 Tree [nat-policy](#)
 Reference **configure** service nat nat-policy *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit

Synopsis Enable the **rate-limit** context
 Context **configure** filter ip-filter *string* entry *number* action rate-limit
 Tree [rate-limit](#)
 Introduced 16.0.R1
 Platforms All

extracted-traffic

Synopsis Limit the rate of traffic extracted to the CPM
 Context **configure** filter ip-filter *string* entry *number* action rate-limit extracted-traffic
 Tree [extracted-traffic](#)
 Introduced 22.2.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

packet-length

Synopsis Enable the **packet-length** context
 Context **configure** filter ip-filter *string* entry *number* action rate-limit packet-length
 Tree [packet-length](#)
 Notes The following elements are part of a choice: **packet-length** or **ttl**.

Introduced 16.0.R1
Platforms All

eq *number*

Synopsis Exact match criterion for the length
Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [packet-length](#) **eq** *number*
Tree [eq](#)
Range 0 to 65535
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

gt *number*

Synopsis Greater than match criterion for the length
Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [packet-length](#) **gt** *number*
Tree [gt](#)
Range 0 to 65534
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

lt *number*

Synopsis Less than match criterion for the length
Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [packet-length](#) **lt** *number*
Tree [lt](#)
Range 1 to 65535
Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.
Introduced 16.0.R1
Platforms All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number action rate-limit packet-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ip-filter string entry number action rate-limit packet-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ip-filter string entry number action rate-limit packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ip-filter string entry number action rate-limit pattern
Tree	pattern

Introduced 16.0.R4
Platforms All

expression *string*

Synopsis Pattern expression to match
Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [pattern](#) *expression* *string*
Tree [expression](#)
String Length 3 to 18
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

mask *string*

Synopsis Mask for the pattern expression
Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [pattern](#) *mask* *string*
Tree [mask](#)
String Length 3 to 18
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

offset-type *keyword*

Synopsis Starting point reference for offset value of pattern
Context **configure** [filter](#) [ip-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [pattern](#) *offset-type* *keyword*
Tree [offset-type](#)
Options layer-3, layer-4, data, dns-qtype
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

pir (*number* | *keyword*)

Synopsis	Peak information rate
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	16.0.R1
Platforms	All

pps-pir (*number* | *keyword*)

Synopsis	Peak information rate
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pps-pir (<i>number</i> <i>keyword</i>)
Tree	pps-pir
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

tll

Synopsis	Enable the tll context
Context	configure filter ip-filter string entry number action rate-limit tll
Tree	tll
Notes	The following elements are part of a choice: packet-length or tll .
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Equal to condition match value
Context	configure filter ip-filter string entry number action rate-limit tll eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than condition match value
Context	configure filter ip-filter string entry number action rate-limit tll gt number
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than condition match value
Context	configure filter ip-filter string entry number action rate-limit tll lt number
Tree	lt
Range	1 to 255

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number action rate-limit ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter string entry number action rate-limit ttl range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter string entry number action rate-limit ttl range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

reassemble

Synopsis	Forward matching packets to reassembly function
Context	configure filter ip-filter <i>string entry number action reassemble</i>
Tree	reassemble
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remark

Synopsis	Enable the remark context
Context	configure filter ip-filter <i>string entry number action remark</i>
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	Destination SAP
Context	configure filter ip-filter <i>string entry number action remark dscp keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary

Synopsis	Enable the secondary context
Context	configure filter ip-filter <i>string entry number action secondary</i>

Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward next-hop
Tree	next-hop
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

address *string*

**WARNING:**

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

Synopsis	IPv4 address of next hop to forward matching packets
Context	configure filter ip-filter <i>string</i> entry number action secondary forward next-hop nh-ip-vrf address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ip-filter <i>string</i> entry number action secondary forward next-hop nh-ip-vrf indirect <i>boolean</i>
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance *string*

**WARNING:**

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

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ip-filter <i>string</i> entry number action secondary forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id *reference***WARNING:**

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

Synopsis	SAP ID used to forward packets matching the entry
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward sap sap-id <i>reference</i>
Tree	sap-id
Reference	configure service vpls <i>string</i> sap <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS the sdp-bind-id belongs to
Context	configure filter ip-filter <i>string</i> entry <i>number</i> action secondary forward sap vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter ip-filter string entry number action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sdp-bind-id string

**WARNING:**

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

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter ip-filter string entry number action secondary forward sdp sdp-bind-id string
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SDP
Context	configure filter ip-filter string entry number action secondary forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-target

Synopsis	Enable the vprn-target context
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Context	configure filter ip-filter string entry number action secondary forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	21.7.R1
Platforms	All

adv-prefix string

Synopsis	Advertised IP prefix for the target destination
Context	configure filter ip-filter string entry number action secondary forward vprn-target adv-prefix string
Tree	adv-prefix
Introduced	21.7.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ip-filter string entry number action secondary forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ip-filter string entry number action secondary forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1
Platforms	All

vprn reference

Synopsis	Routing context used for route lookup
Context	configure filter ip-filter string entry number action secondary forward vprn-target vprn reference
Tree	vprn
Reference	configure service vprn string
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

remark

Synopsis	Enable the remark context
Context	configure filter ip-filter string entry number action secondary remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	Destination SAP
Context	configure filter ip-filter string entry number action secondary remark dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
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Context	configure filter ip-filter string entry number action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: accept , drop , forward , gtp-local-breakout , http-redirect , ignore-match , nat , reassemble , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure filter ip-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress-pbr *keyword*



WARNING:

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

Synopsis	PBR that has an effect when this filter is applied on egress
Context	configure filter ip-filter string entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

filter-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	configure filter ip-filter string entry number filter-sample boolean
Tree	filter-sample
Default	false
Introduced	16.0.R1

Platforms All

interface-sample *boolean*

Synopsis Sample matching traffic if IP interface is set to cflowd interface mode
 Context **configure filter ip-filter** *string entry number interface-sample boolean*
 Tree [interface-sample](#)
 Default true
 Introduced 16.0.R1
 Platforms All

log *reference*

Synopsis Log that is used for packets matching this entry
 Context **configure filter ip-filter** *string entry number log reference*
 Tree [log](#)
 Reference **configure filter log** *number*
 Introduced 16.0.R1
 Platforms All

match

Synopsis Enter the **match** context
 Context **configure filter ip-filter** *string entry number match*
 Tree [match](#)
 Description Commands in this context configure match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
 Introduced 16.0.R1
 Platforms All

destination-class *number*

Synopsis Destination class as a match criterion
 Context **configure filter ip-filter** *string entry number match destination-class number*
 Tree [destination-class](#)

Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the destination-class-lookup command (under the ingress context for the service interface) to be enabled (set to true).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

dscp keyword

Synopsis	DSCP used as an IP filter match criterion
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1

Platforms All

ip-prefix-list *reference*

Synopsis IPv4 address prefix list used as match criterion

Context **configure** filter ip-filter *string* entry *number* match dst-ip ip-prefix-list *reference*

Tree [ip-prefix-list](#)

Reference **configure** filter match-list ip-prefix-list *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

mask *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure** filter ip-filter *string* entry *number* match dst-ip mask *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

dst-port

Synopsis Enter the **dst-port** context

Context **configure** filter ip-filter *string* entry *number* match dst-port

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms All

eq *number*

Synopsis Exact match criterion for the port number

Context **configure** filter ip-filter *string* entry *number* match dst-port eq *number*

Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-filter string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ip-filter string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter string entry number match dst-port port-list reference
Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter string entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match dst-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match dst-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Match criterion for fragmented packets
Context	configure filter ip-filter string entry number match fragment keyword
Tree	fragment
Options	false, true, first-only, non-first-only

Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure filter ip-filter string entry number match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

code number

Synopsis	ICMP code value to match
Context	configure filter ip-filter string entry number match icmp code number
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	All

type number

Synopsis	ICMP type value to match
Context	configure filter ip-filter string entry number match icmp type number
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	All

ip

Synopsis	Enter the ip context
Context	configure filter ip-filter string entry number match ip
Tree	ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).

Introduced	21.10.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	configure filter ip-filter <i>string entry number match ip address</i> (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	21.10.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP4 address prefix list used as match criterion
Context	configure filter ip-filter <i>string entry number match ip ip-prefix-list reference</i>
Tree	ip-prefix-list
Reference	configure filter match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	21.10.R1
Platforms	All

mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	configure filter ip-filter <i>string entry number match ip mask string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	21.10.R1
Platforms	All

ip-option

Synopsis	Enable the ip-option context
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Context	configure filter ip-filter <i>string entry number match ip-option</i>
Tree	ip-option
Introduced	16.0.R1
Platforms	All

mask *number*

Synopsis	Mask that is ANDed with ip-option value in the packet header
Context	configure filter ip-filter <i>string entry number match ip-option mask number</i>
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

type *number*

Synopsis	Specific IP option to match
Context	configure filter ip-filter <i>string entry number match ip-option type number</i>
Tree	type
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multiple-option *boolean*

Synopsis	Match based on presence of multiple options in header
Context	configure filter ip-filter <i>string entry number match multiple-option boolean</i>
Tree	multiple-option
Introduced	16.0.R1
Platforms	All

option-present *boolean*

Synopsis	Match on the presence of any IP option in the packet
Context	configure filter ip-filter string entry number match option-present boolean
Tree	option-present
Introduced	16.0.R1
Platforms	All

packet-length

Synopsis	Enable the packet-length context
Context	configure filter ip-filter string entry number match packet-length
Tree	packet-length
Introduced	19.5.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ip-filter string entry number match packet-length eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the length
Context	configure filter ip-filter string entry number match packet-length gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the length
Context	configure filter ip-filter <i>string entry number match packet-length lt number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string entry number match packet-length range</i>
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

end *number*

Synopsis	Upper bound of the length range
Context	configure filter ip-filter <i>string entry number match packet-length range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

start *number*

Synopsis	Lower bound of the length range
Context	configure filter ip-filter <i>string entry number match packet-length range start number</i>
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

port

Synopsis	Enter the port context
Context	configure filter ip-filter string entry number match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ip-filter string entry number match port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-filter string entry number match port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ip-filter <i>string</i> entry number match port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter <i>string</i> entry number match port port-list reference
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> entry number match port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ip-filter <i>string</i> entry number match port range end number
Tree	end
Range	1 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ip-filter string entry number match port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

protocol (number | keyword)

Synopsis	IP protocol identifier as a match criterion
Context	configure filter ip-filter string entry number match protocol (number keyword)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: protocol or protocol-list .
Introduced	16.0.R1
Platforms	All

protocol-list reference

Synopsis	Name of the protocol list as a match criterion
Context	configure filter ip-filter string entry number match protocol-list reference
Tree	protocol-list
Reference	configure filter match-list protocol-list string
Notes	The following elements are part of a choice: protocol or protocol-list .
Introduced	20.7.R1

Platforms All

src-ip

Synopsis Enter the **src-ip** context

Context **configure filter ip-filter string entry number match src-ip**

Tree [src-ip](#)

Notes The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).

Introduced 16.0.R1

Platforms All

address (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis IPv4 address used as the match criterion

Context **configure filter ip-filter string entry number match src-ip address (*ipv4-prefix-with-host-bits | ipv4-address*)**

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

ip-prefix-list *reference*

Synopsis IP4 address prefix list used as match criterion

Context **configure filter ip-filter string entry number match src-ip ip-prefix-list reference**

Tree [ip-prefix-list](#)

Reference **configure filter match-list ip-prefix-list string**

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

mask *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure filter ip-filter string entry number match src-ip mask string**

Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	configure filter ip-filter string entry number match src-mac
Tree	src-mac
Introduced	19.5.R1
Platforms	All

address string

Synopsis	MAC address used as the match criterion
Context	configure filter ip-filter string entry number match src-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask string

Synopsis	MAC address mask as the match criterion
Context	configure filter ip-filter string entry number match src-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.5.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure filter ip-filter string entry number match src-port

Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the port number
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Less than match criterion for the port number
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ip-filter <i>string entry number match src-port port-list reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ip-filter <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ip-filter <i>string entry number match src-port range start number</i>
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

src-route-option *boolean*

Synopsis	Match based on presence of source route option
Context	configure filter ip-filter <i>string</i> entry number match src-route-option <i>boolean</i>
Tree	src-route-option
Introduced	16.0.R1
Platforms	All

tcp-established

Synopsis	Match packets containing the TCP flag as ACK or RST
Context	configure filter ip-filter <i>string</i> entry number match tcp-established
Tree	tcp-established
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	22.10.R1
Platforms	All

tcp-flags

Synopsis	Enter the tcp-flags context
Context	configure filter ip-filter <i>string</i> entry number match tcp-flags
Tree	tcp-flags
Notes	The following elements are part of a choice: tcp-established or tcp-flags .
Introduced	16.0.R1
Platforms	All

ack *boolean*

Synopsis	Match TCP ACK as per value of the ACK TCP flag bit
Context	configure filter ip-filter <i>string</i> entry number match tcp-flags ack <i>boolean</i>
Tree	ack

Introduced 16.0.R1
Platforms All

cwr boolean

Synopsis Match TCP CWR as per value of the CWR TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags cwr boolean**
Tree [cwr](#)
Introduced 16.0.R1
Platforms All

ece boolean

Synopsis Match TCP ECE as per value of the ECE TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags ece boolean**
Tree [ece](#)
Introduced 16.0.R1
Platforms All

fin boolean

Synopsis Match TCP FIN as per value of the FIN TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags fin boolean**
Tree [fin](#)
Introduced 16.0.R1
Platforms All

ns boolean

Synopsis Match TCP NS as per value of the NS TCP flag bit
Context **configure filter ip-filter string entry number match tcp-flags ns boolean**
Tree [ns](#)
Introduced 16.0.R1
Platforms All

psh boolean

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags psh boolean
Tree	psh
Introduced	16.0.R1
Platforms	All

rst boolean

Synopsis	Match TCP RST as per value of the RST TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags rst boolean
Tree	rst
Introduced	16.0.R1
Platforms	All

syn boolean

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags syn boolean
Tree	syn
Introduced	16.0.R1
Platforms	All

urg boolean

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	configure filter ip-filter string entry number match tcp-flags urg boolean
Tree	urg
Introduced	16.0.R1
Platforms	All

ttl

Synopsis	Enable the ttl context
Context	configure filter ip-filter string entry number match ttl

Tree	ttl
Introduced	21.10.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match ttl eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match ttl gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

lt *number*

Synopsis	Less than condition match value
Context	configure filter ip-filter <i>string</i> entry <i>number</i> match ttl lt <i>number</i>
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> entry number match ttl range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ip-filter <i>string</i> entry number match ttl range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ip-filter <i>string</i> entry number match ttl range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	configure filter ip-filter <i>string</i> entry number pbr-down-action-override <i>keyword</i>

Tree	pbr-down-action-override
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

sample-profile *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	configure filter ip-filter <i>string</i> entry number sample-profile <i>reference</i>
Tree	sample-profile
Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	configure cflowd sample-profile <i>number</i>
Introduced	20.10.R1
Platforms	All

sticky-dest (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	configure filter ip-filter <i>string</i> entry number sticky-dest (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

filter-id *number*



WARNING:

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

Synopsis	IP filter ID
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Context	configure filter ip-filter <i>string filter-id number</i>
Tree	filter-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of this filter definition
Context	configure filter ip-filter <i>string scope keyword</i>
Tree	scope
Default	template
Options	exclusive, template, embedded, system
Introduced	16.0.R1
Platforms	All

shared-policer *boolean*

Synopsis	Share policer among active ports in the LAG
Context	configure filter ip-filter <i>string shared-policer boolean</i>
Tree	shared-policer
Description	<p>When configured to true, and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP.</p> <p>When configured to false, and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.</p>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure filter ip-filter <i>string subscriber-mgmt</i>
Tree	subscriber-mgmt
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-specific-entry

Synopsis Enter the **host-specific-entry** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry**

Tree [host-specific-entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control

Synopsis Enter the **credit-control** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control**

Tree [credit-control](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range**

Tree [range](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of range for credit control filter entries

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range end number**

Tree [end](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of range for credit control filter entries

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis Enter the **filter-rule** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule**

Tree [filter-rule](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range**

Tree [range](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of range for inserting filter rule entries

Context **configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range end number**

Tree [end](#)

Range 1 to 2097151

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting filter rule entries
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry filter-rule range start <i>number</i>
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enter the watermark context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry watermark high <i>number</i>
Tree	high
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	configure filter ip-filter <i>string</i> subscriber-mgmt host-specific-entry watermark low number
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-entry

Synopsis	Enter the shared-entry context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the filter-rule context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for inserting shared host rules
Context	configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting shared host rules
Context	configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule

Synopsis	Enter the pcc-rule context
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule
Tree	pcc-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the range for PCC rule filter entries
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the range for PCC rule filter entries
Context	configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enable the watermark context
Context	configure filter ip-filter string subscriber-mgmt shared-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	Limit of RADIUS shared filters before generating high watermark notification
Context	configure filter ip-filter string subscriber-mgmt shared-entry watermark high number
Tree	high
Range	1 to 8000
Notes	This element is mandatory.

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

low number

Synopsis	Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context	configure filter ip-filter <i>string</i> subscriber-mgmt shared-entry watermark low number
Tree	low
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis	Set of match criteria for the filter policy
Context	configure filter ip-filter <i>string</i> type keyword
Tree	type
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Default	normal
Options	normal, src-mac, packet-length, destination-class
Introduced	19.5.R1
Platforms	All

ipv6-exception [[filter-name](#)] *string*

Synopsis	Enter the ipv6-exception list instance
Context	configure filter ipv6-exception <i>string</i>
Tree	ipv6-exception
Introduced	20.10.R1
Platforms	VSR

[filter-name] *string*

Synopsis	Filter name
Context	configure filter ipv6-exception <i>string</i>
Tree	ipv6-exception
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure filter ipv6-exception <i>string description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter ipv6-exception <i>string entry</i> <i>number</i>
Tree	entry
Introduced	20.10.R1
Platforms	VSR

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ipv6-exception <i>string entry</i> <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1

Platforms VSR

description *string*

Synopsis Text description
Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 20.10.R1
Platforms VSR

match

Synopsis Enter the **match** context
Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#)
Tree [match](#)
Introduced 20.10.R1
Platforms VSR

dst-ip

Synopsis Enter the **dst-ip** context
Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#)
Tree [dst-ip](#)
Introduced 20.10.R1
Platforms VSR

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis IPv6 address used as the match criterion
Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [address](#) (*ipv6-prefix-with-host-bits* | *ipv6-address*)
Tree [address](#)
Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.
Introduced 20.10.R1

Platforms VSR

ipv6-prefix-list *reference*

Synopsis IPv6 address prefix list used as match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [ipv6-prefix-list](#) *reference*

Tree [ipv6-prefix-list](#)

Reference **configure** filter [match-list](#) [ipv6-prefix-list](#) *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 20.10.R1

Platforms VSR

mask *string*

Synopsis IPv6 address mask used as the match criterion

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-ip](#) [mask](#) *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 20.10.R1

Platforms VSR

dst-port

Synopsis Enter the **dst-port** context

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-port](#)

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 20.10.R1

Platforms VSR

eq *number*

Synopsis Exact match criterion for the port number

Context **configure** filter [ipv6-exception](#) *string* [entry](#) *number* [match](#) [dst-port](#) [eq](#) *number*

Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-exception string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-exception string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-exception string entry number match dst-port port-list reference
Tree	port-list
Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>dst-port</i> range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>dst-port</i> range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>dst-port</i> range start <i>number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

icmp

Synopsis	Enter the icmp context
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match icmp
Tree	icmp
Introduced	20.10.R1

Platforms VSR

code number

Synopsis ICMPv6 code value to match
 Context **configure filter ipv6-exception** *string* **entry number match icmp code number**
 Tree [code](#)
 Range 0 to 255
 Introduced 20.10.R1
 Platforms VSR

type number

Synopsis ICMPv6 type value to match
 Context **configure filter ipv6-exception** *string* **entry number match icmp type number**
 Tree [type](#)
 Range 0 to 255
 Introduced 20.10.R1
 Platforms VSR

next-header (*number* | *keyword*)

Synopsis IP protocol to match
 Context **configure filter ipv6-exception** *string* **entry number match next-header** (*number* | *keyword*)
 Tree [next-header](#)
 Range 0 to 255
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
 Introduced 20.10.R1
 Platforms VSR

port

Synopsis Enter the **port** context

Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i>
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	20.10.R1
Platforms	VSR

eq *number*

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i> eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

gt *number*

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i> gt <i>number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

lt *number*

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match <i>port</i> lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1

Platforms VSR

port-list *reference*

Synopsis Name of the port list as the match criterion

Context **configure** [filter](#) [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [port-list](#) *reference*

Tree [port-list](#)

Reference **configure** [filter](#) [match-list](#) [port-list](#) *string*

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 20.10.R1

Platforms VSR

range

Synopsis Enable the **range** context

Context **configure** [filter](#) [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#)

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 20.10.R1

Platforms VSR

end *number*

Synopsis Upper bound of the port range as port match criterion

Context **configure** [filter](#) [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#) [end](#) *number*

Tree [end](#)

Range 1 to 65535

Notes This element is mandatory.

Introduced 20.10.R1

Platforms VSR

start *number*

Synopsis Lower bound of the port range as port match criterion

Context **configure** [filter](#) [ipv6-exception](#) *string* [entry](#) *number* [match](#) [port](#) [range](#) [start](#) *number*

Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match src-ip
Tree	src-ip
Introduced	20.10.R1
Platforms	VSR

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.10.R1
Platforms	VSR

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-exception <i>string</i> entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.10.R1
Platforms	VSR

mask string

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-exception string entry number match src-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.10.R1
Platforms	VSR

src-port

Synopsis	Enter the src-port context
Context	configure filter ipv6-exception string entry number match src-port
Tree	src-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	20.10.R1
Platforms	VSR

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-exception string entry number match src-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	VSR

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-exception string entry number match src-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .

Introduced 20.10.R1
 Platforms VSR

lt *number*

Synopsis Less than match criterion for the port number
 Context **configure filter ipv6-exception** *string entry number match src-port lt number*
 Tree **lt**
 Range 1 to 65535
 Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range**.
 Introduced 20.10.R1
 Platforms VSR

port-list *reference*

Synopsis Name of the port list as the match criterion
 Context **configure filter ipv6-exception** *string entry number match src-port port-list reference*
 Tree **port-list**
 Reference **configure filter match-list port-list** *string*
 Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range**.
 Introduced 20.10.R1
 Platforms VSR

range

Synopsis Enable the **range** context
 Context **configure filter ipv6-exception** *string entry number match src-port range*
 Tree **range**
 Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range**.
 Introduced 20.10.R1
 Platforms VSR

end *number*

Synopsis Upper bound of the port range as port match criterion

Context	configure filter ipv6-exception <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-exception <i>string entry number match src-port range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

filter-id number**WARNING:**

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

Synopsis	Filter ID
Context	configure filter ipv6-exception <i>string filter-id number</i>
Tree	filter-id
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

ipv6-filter [[filter-name](#)] *string*

Synopsis	Enter the ipv6-filter list instance
Context	configure filter ipv6-filter <i>string</i>
Tree	ipv6-filter
Introduced	16.0.R1

Platforms All

[filter-name] *string*

Synopsis Filter name
Context **configure filter ipv6-filter** *string*
Tree [ipv6-filter](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

chain-to-system-filter *boolean*

Synopsis Chain filter policy to the active IPvX system filter policy
Context **configure filter ipv6-filter** *string chain-to-system-filter* *boolean*
Tree [chain-to-system-filter](#)
Default false
Introduced 16.0.R1
Platforms All

default-action *keyword*

Synopsis Action for packets that do not match any entry
Context **configure filter ipv6-filter** *string default-action* *keyword*
Tree [default-action](#)
Default drop
Options drop, accept
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure filter ipv6-filter** *string description* *string*

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the embed context
Context	configure filter ipv6-filter string embed
Tree	embed
Description	Commands in this context embed a previously defined IPv6 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

filter [[name](#)] *reference offset number*

Synopsis	Enter the filter list instance
Context	configure filter ipv6-filter string embed filter reference offset number
Tree	filter
Introduced	16.0.R1
Platforms	All

[\[name\]](#) *reference*

Synopsis	IPv6 policy to be embedded in the filter
Context	configure filter ipv6-filter string embed filter reference offset number
Tree	filter
Reference	configure filter ipv6-filter string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

offset number

Synopsis	Offset of the inserted entries
Context	configure filter ipv6-filter string embed filter reference offset number
Tree	filter
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the embedded filter
Context	configure filter ipv6-filter string embed filter reference offset number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

flowspec offset number

Synopsis	Enter the flowspec list instance
Context	configure filter ipv6-filter string embed flowspec offset number
Tree	flowspec
Introduced	16.0.R1
Platforms	All

offset number

Synopsis	Offset of the inserted entries
Context	configure filter ipv6-filter string embed flowspec offset number
Tree	flowspec
Range	0 to 2097151
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the embedded filter
Context	configure filter ipv6-filter <i>string</i> embed flowspec offset <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group *number*



WARNING:

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

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	configure filter ipv6-filter <i>string</i> embed flowspec offset <i>number</i> group <i>number</i>
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	configure filter ipv6-filter <i>string</i> embed flowspec offset <i>number</i> router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

openflow [*of-switch*] *reference offset number*

Synopsis Enter the **openflow** list instance

Context **configure filter ipv6-filter string embed openflow reference offset number**

Tree [openflow](#)

Introduced 16.0.R4

Platforms All

[of-switch] *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name

Context **configure filter ipv6-filter string embed openflow reference offset number**

Tree [openflow](#)

Reference **configure openflow of-switch string**

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

offset number

Synopsis Offset of the inserted entries

Context **configure filter ipv6-filter string embed openflow reference offset number**

Tree [openflow](#)

Range 0 to 2097150

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

admin-state keyword

Synopsis Administrative state of the embedded filter

Context **configure filter ipv6-filter string embed openflow reference offset number admin-state keyword**

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

grt



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	configure filter ipv6-filter <i>string</i> embed openflow <i>reference</i> <i>offset</i> <i>number</i> grt
Tree	grt
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4
Platforms	All

sap reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	configure filter ipv6-filter <i>string</i> embed openflow <i>reference</i> <i>offset</i> <i>number</i> sap <i>reference</i>
Tree	sap
Reference	configure service vpls <i>string</i> sap <i>string</i>
Notes	The following elements are part of a choice: grt , system , (sap and vpls), or vprn .
Introduced	16.0.R4
Platforms	All

system



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	configure filter ipv6-filter string embed openflow reference offset number system
Tree	system
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4
Platforms	All

vpls reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS context
Context	configure filter ipv6-filter string embed openflow reference offset number vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.
Introduced	16.0.R4
Platforms	All

vprn reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN context
Context	configure filter ipv6-filter string embed openflow reference offset number vprn reference
Tree	vprn
Reference	configure service vprn string
Notes	The following elements are part of a choice: grt, system, (sap and vpls), or vprn.

Introduced	16.0.R4
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure filter ipv6-filter <i>string entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter ipv6-filter <i>string entry number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter ipv6-filter <i>string entry number action</i>
Tree	action
Introduced	16.0.R1
Platforms	All

accept

Synopsis	Accept regular routing to forward a matching packet
Context	configure filter ipv6-filter <i>string entry number action accept</i>
Tree	accept

Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

accept-when

Synopsis	Enable the accept-when context
Context	configure filter ipv6-filter string entry number action accept-when
Tree	accept-when
Introduced	19.5.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ipv6-filter string entry number action accept-when pattern
Tree	pattern
Introduced	19.5.R1
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	configure filter ipv6-filter string entry number action accept-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	configure filter ipv6-filter string entry number action accept-when pattern mask string

Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

drop

Synopsis	Drop a packet matching this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .

Introduced	16.0.R1
Platforms	All

drop-when

Synopsis	Enable the drop-when context
Context	configure filter ipv6-filter string entry number action drop-when
Tree	drop-when
Introduced	16.0.R1
Platforms	All

extracted-traffic

Synopsis	Drop traffic extracted to CPM
Context	configure filter ipv6-filter string entry number action drop-when extracted-traffic
Tree	extracted-traffic
Introduced	16.0.R1
Platforms	All

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter string entry number action drop-when hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter string entry number action drop-when hop-limit eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .

Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter string entry number action drop-when hop-limit gt number
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than condition match value
Context	configure filter ipv6-filter string entry number action drop-when hop-limit lt number
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number action drop-when hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ipv6-filter string entry number action drop-when hop-limit range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
Context	configure filter ipv6-filter string entry number action drop-when hop-limit range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ipv6-filter string entry number action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression string

Synopsis	Pattern expression to match
Context	configure filter ipv6-filter string entry number action drop-when pattern expression string
Tree	expression
String Length	3 to 18

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	configure filter ipv6-filter string entry number action drop-when pattern mask <i>string</i>
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ipv6-filter string entry number action drop-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ipv6-filter string entry number action drop-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

payload-length

Synopsis	Enable the payload-length context
Context	configure filter ipv6-filter string entry number action drop-when payload-length
Tree	payload-length
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter string entry number action drop-when payload-length eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter string entry number action drop-when payload-length gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter string entry number action drop-when payload-length lt number

Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>string entry number action drop-when payload-length range</i>
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ipv6-filter <i>string entry number action drop-when payload-length range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ipv6-filter <i>string entry number action drop-when payload-length range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

fc keyword

Synopsis Class name to be forwarded for matching packets
 Context **configure filter ipv6-filter** *string* **entry** *number* **action** **fc** *keyword*
 Tree **fc**
 Options be, l2, af, l1, h2, ef, h1, nc
 Introduced 16.0.R1
 Platforms All

forward

Synopsis Enter the **forward** context
 Context **configure filter ipv6-filter** *string* **entry** *number* **action** **forward**
 Tree **forward**
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.
 Introduced 16.0.R1
 Platforms All

bonding-connection *number*

Synopsis Connection ID over which packet is forwarded
 Context **configure filter ipv6-filter** *string* **entry** *number* **action** **forward** **bonding-connection** *number*
 Tree **bonding-connection**
 Range 1 to 2
 Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, or **vprn-target**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esi-l2

Synopsis	Enable the esi-l2 context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> esi-l2
Tree	esi-l2
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> esi-l2 esi-value <i>string</i>
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS service name
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> esi-l2 vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

esi-l3

Synopsis	Enable the esi-l3 context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>forward</i> esi-l3
Tree	esi-l3

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

esi-value *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-l3 esi-value <i>string</i>
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sf-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-l3 sf-ip <i>string</i>
Tree	sf-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vas-interface *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-I3 vas-interface <i>reference</i>
Tree	vas-interface
Reference	configure service vprn <i>string</i> interface <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward esi-I3 vprn <i>reference</i>
Tree	vprn
Reference	configure service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

gre-tunnel reference

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward gre-tunnel <i>reference</i>
Tree	gre-tunnel
Reference	configure filter gre-tunnel-template <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-I2 , esi-I3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ipv6-filter string entry number action forward lsp string
Tree	lsp
String Length	1 to 64
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

mpls-policy

Synopsis	Enable the mpls-policy context
Context	configure filter ipv6-filter string entry number action forward mpls-policy
Tree	mpls-policy
Notes	The following elements are part of a choice: bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy , or vprn-target .
Introduced	19.10.R1
Platforms	All

endpoint string

Synopsis	MPLS forwarding policy endpoint IPv6 address
Context	configure filter ipv6-filter string entry number action forward mpls-policy endpoint string
Tree	endpoint
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ipv6-filter string entry number action forward next-hop
Tree	next-hop

Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , isp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

nh-ip

Synopsis	Enable the nh-ip context
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: nh-ip or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip address string
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf
Tree	nh-ip-vrf
Notes	The following elements are part of a mandatory choice: nh-ip or nh-ip-vrf .
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf address string
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip-vrf router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward redirect-policy <i>reference</i>
Tree	redirect-policy
Reference	configure filter redirect-policy <i>string</i>
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

router-instance *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward router-instance <i>string</i>
Tree	router-instance
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ipv6-filter string entry number action forward sap
Tree	sap
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	configure filter ipv6-filter string entry number action forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SAP
Context	configure filter ipv6-filter string entry number action forward sap vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter ipv6-filter string entry number action forward sdp

Tree	sdp
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward sdp sdp-bind-id <i>string</i>
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward sdp vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srte-policy

Synopsis	Enable the srte-policy context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action forward srte-policy
Tree	srte-policy
Notes	The following elements are part of a choice: bonding-connection , esi-l2 , esi-l3 , gre-tunnel , lsp , mpls-policy , next-hop , redirect-policy , router-instance , sap , sdp , srte-policy , or vprn-target .
Introduced	19.10.R1

Platforms All

color number

Synopsis SR-TE policy color ID

Context **configure filter ipv6-filter string entry number action forward srte-policy color number**

Tree [color](#)

Range 0 to 4294967295

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

endpoint string

Synopsis SR-TE policy endpoint IPv6 address

Context **configure filter ipv6-filter string entry number action forward srte-policy endpoint string**

Tree [endpoint](#)

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

vprn-target

Synopsis Enable the **vprn-target** context

Context **configure filter ipv6-filter string entry number action forward vprn-target**

Tree [vprn-target](#)

Notes The following elements are part of a choice: **bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, or vprn-target.**

Introduced 16.0.R1

Platforms All

adv-prefix string

Synopsis Advertised IP prefix for target destination

Context **configure filter ipv6-filter string entry number action forward vprn-target adv-prefix string**

Tree	adv-prefix
Introduced	16.0.R1
Platforms	All

bgp-nh string

Synopsis	Target BGP next hop IP address
Context	configure filter ipv6-filter string entry number action forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ipv6-filter string entry number action forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

vprn reference

Synopsis	Routing context used for route lookup
Context	configure filter ipv6-filter string entry number action forward vprn-target vprn reference
Tree	vprn
Reference	configure service vprn string
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

http-redirect

Synopsis	Enable the http-redirect context
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Context	configure filter ipv6-filter string entry number action http-redirect
Tree	http-redirect
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	All

allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	configure filter ipv6-filter string entry number action http-redirect allow-override boolean
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to true , the RADIUS VSA can override the HTTP redirect URL. When configured to false , the HTTP redirect URL is not overridden. This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

url (*keyword* | *http-redirect-url*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	configure filter ipv6-filter string entry number action http-redirect url (keyword http-redirect-url)
Tree	url
Description	This command specifies the URL to use for HTTP redirection for this filter entry. A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only. The following macro substitutions may be used: \$URL — request-URI in the HTTP GET request received

\$MAC — a string that represents the MAC address of the subscriber host

\$IP — a string that represents the IP address of the subscriber host

\$SUB — a string that represents the subscriber ID

\$SAP — a string that represents a SAP ID

\$SAPDESC — description string configured on the SAP

\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)

\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)

String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ignore-match

Synopsis	Ignore match criteria for the entry
Context	configure filter ipv6-filter <i>string entry number action ignore-match</i>
Tree	ignore-match
Notes	The following elements are part of a mandatory choice: accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.
Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the nat context
Context	configure filter ipv6-filter <i>string entry number action nat</i>
Tree	nat
Notes	The following elements are part of a mandatory choice: accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action nat nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-type *keyword*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT type to assign when action is NAT
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action nat nat-type <i>keyword</i>
Tree	nat-type
Options	dslite, nat64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit

Synopsis	Enable the rate-limit context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit
Tree	rate-limit
Introduced	16.0.R1
Platforms	All

extracted-traffic

Synopsis	Limit the rate of traffic extracted to the CPM
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Context	configure filter ipv6-filter string entry number action rate-limit extracted-traffic
Tree	extracted-traffic
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit
Tree	hop-limit
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit eq number
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit gt number
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than condition match value
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit lt number
Tree	lt
Range	1 to 255
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit range
Tree	range
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: eq, gt, lt, or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the range
Context	configure filter ipv6-filter string entry number action rate-limit hop-limit range end number
Tree	end
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the range
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Context	configure filter ipv6-filter string entry number action rate-limit hop-limit range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pattern

Synopsis	Enable the pattern context
Context	configure filter ipv6-filter string entry number action rate-limit pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

expression *string*

Synopsis	Pattern expression to match
Context	configure filter ipv6-filter string entry number action rate-limit pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	Mask for the pattern expression
Context	configure filter ipv6-filter string entry number action rate-limit pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-type *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	configure filter ipv6-filter <i>string</i> entry number action rate-limit pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

offset-value *number*

Synopsis	Offset value for the pattern expression
Context	configure filter ipv6-filter <i>string</i> entry number action rate-limit pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

payload-length

Synopsis	Enable the payload-length context
Context	configure filter ipv6-filter <i>string</i> entry number action rate-limit payload-length
Tree	payload-length
Notes	The following elements are part of a choice: hop-limit or payload-length .
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter <i>string</i> entry number action rate-limit payload-length eq <i>number</i>

Tree	eq
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter string entry number action rate-limit payload-length gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter string entry number action rate-limit payload-length lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number action rate-limit payload-length range
Tree	range
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the length range
Context	configure filter ipv6-filter string entry number action rate-limit payload-length range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the length range
Context	configure filter ipv6-filter string entry number action rate-limit payload-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

pir (number | keyword)

Synopsis	Peak information rate
Context	configure filter ipv6-filter string entry number action rate-limit pir (number keyword)
Tree	pir
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	16.0.R1
Platforms	All

pps-pir (*number* | *keyword*)

Synopsis	Peak information rate
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action rate-limit pps-pir (<i>number</i> <i>keyword</i>)
Tree	pps-pir
Range	0 to 100000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: pir or pps-pir .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

remark

Synopsis	Enable the remark context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action remark
Tree	remark
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	Destination SAP
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action remark dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

secondary

Synopsis	Enable the secondary context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i>
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i> <i>forward</i>
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enable the next-hop context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i> <i>forward</i> <i>next-hop</i>
Tree	next-hop
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

nh-ip-vrf

Synopsis	Enable the nh-ip-vrf context
Context	configure filter ipv6-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>secondary</i> <i>forward</i> <i>next-hop</i> <i>nh-ip-vrf</i>
Tree	nh-ip-vrf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf address string
Tree	address
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf indirect boolean
Tree	indirect
Default	false
Introduced	16.0.R1
Platforms	All

router-instance string**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf router-instance string
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter ipv6-filter string entry number action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sap-id reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	configure filter ipv6-filter string entry number action secondary forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS the sdp-bind-id belongs to
Context	configure filter ipv6-filter string entry number action secondary forward sap vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter ipv6-filter string entry number action secondary forward sdp
Tree	sdp
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	16.0.R1
Platforms	All

sdp-bind-id *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter ipv6-filter string entry number action secondary forward sdp sdp-bind-id string
Tree	sdp-bind-id
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls *reference*

Synopsis	VPLS associated with the SDP
Context	configure filter ipv6-filter string entry number action secondary forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-target

Synopsis	Enable the vprn-target context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target
Tree	vprn-target
Notes	The following elements are part of a choice: next-hop , sap , sdp , or vprn-target .
Introduced	21.7.R1
Platforms	All

adv-prefix *string*

Synopsis	Advertised IP prefix for the target destination
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target adv-prefix <i>string</i>
Tree	adv-prefix
Introduced	21.7.R1
Platforms	All

bgp-nh *string*

Synopsis	Target BGP next hop IP address
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target bgp-nh <i>string</i>
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1

Platforms All

vprn *reference*

Synopsis Routing context used for route lookup

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [forward](#) [vprn-target](#) [vprn](#) *reference*

Tree [vprn](#)

Reference **configure** [service](#) [vprn](#) *string*

Notes This element is mandatory.

Introduced 21.7.R1

Platforms All

remark

Synopsis Enable the **remark** context

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [remark](#)

Tree [remark](#)

Introduced 16.0.R1

Platforms All

dscp *keyword*

Synopsis Destination SAP

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [secondary](#) [remark](#) [dscp](#) *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

tcp-mss-adjust

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	configure filter ipv6-filter string entry number action tcp-mss-adjust
Tree	tcp-mss-adjust
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , ignore-match , nat , or tcp-mss-adjust .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure filter ipv6-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress-pbr keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	configure filter ipv6-filter string entry number egress-pbr keyword
Tree	egress-pbr
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

filter-sample boolean

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	configure filter ipv6-filter string entry number filter-sample boolean

Tree	filter-sample
Default	false
Introduced	16.0.R1
Platforms	All

interface-sample *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> interface-sample <i>boolean</i>
Tree	interface-sample
Default	true
Introduced	16.0.R1
Platforms	All

log *reference*

Synopsis	Log that is used for packets matching this entry
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> log <i>reference</i>
Tree	log
Reference	configure filter log <i>number</i>
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match
Tree	match
Description	Commands in this context provide match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class as a match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match destination-class <i>number</i>
Tree	destination-class
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the destination-class-lookup command (under the ingress context for the service interface) to be enabled (set to true).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
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Context	configure filter ipv6-filter <i>string</i> entry number match dst-ip <i>address</i> (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter <i>string</i> entry number match dst-ip <i>ipv6-prefix-list reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list <i>ipv6-prefix-list string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter <i>string</i> entry number match dst-ip <i>mask string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure filter ipv6-filter <i>string</i> entry number match <i>dst-port</i>
Tree	dst-port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-filter string entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-filter string entry number match dst-port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-filter string entry number match dst-port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-filter string entry number match dst-port port-list reference
Tree	port-list

Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match dst-port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match dst-port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

extension-header

Synopsis	Enter the extension-header context
Context	configure filter ipv6-filter string entry number match extension-header
Tree	extension-header
Introduced	16.0.R1
Platforms	All

ah boolean

Synopsis	Match a packet as per the existence of an AH Extension Header
Context	configure filter ipv6-filter string entry number match extension-header ah boolean
Tree	ah
Introduced	16.0.R1
Platforms	All

esp boolean

Synopsis	Match a packet as per the existence of an Encapsulation security payload extension header
Context	configure filter ipv6-filter string entry number match extension-header esp boolean
Tree	esp
Introduced	16.0.R1
Platforms	All

hop-by-hop boolean

Synopsis	Match on Hop-by-Hop Options Extension Header existence
Context	configure filter ipv6-filter string entry number match extension-header hop-by-hop boolean
Tree	hop-by-hop
Introduced	16.0.R2
Platforms	All

routing-type0 boolean

Synopsis	Match a packet as per the existence of a routing Extension Header
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Context	configure filter ipv6-filter string entry number match extension-header routing-type0 boolean
Tree	routing-type0
Introduced	16.0.R1
Platforms	All

flow-label

Synopsis	Enable the flow-label context
Context	configure filter ipv6-filter string entry number match flow-label
Tree	flow-label
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	Flow label mask for this policy IP filter entry
Context	configure filter ipv6-filter string entry number match flow-label mask number
Tree	mask
Range	1 to 1048575
Default	1048575
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Flow label as match criterion
Context	configure filter ipv6-filter string entry number match flow-label value number
Tree	value
Range	0 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Match criterion for fragmented packages
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

hop-limit

Synopsis	Enable the hop-limit context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match hop-limit
Tree	hop-limit
Introduced	21.10.R1
Platforms	All

eq *number*

Synopsis	Equal to condition match value
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match hop-limit eq <i>number</i>
Tree	eq
Range	0 to 255
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1
Platforms	All

gt *number*

Synopsis	Greater than condition match value
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match hop-limit gt <i>number</i>
Tree	gt
Range	0 to 254
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	21.10.R1

Platforms All

lt number

Synopsis Less than condition match value

Context **configure filter ipv6-filter string entry number match hop-limit lt number**

Tree **lt**

Range 1 to 255

Notes The following elements are part of a mandatory choice: **eq, gt, lt, or range**.

Introduced 21.10.R1

Platforms All

range

Synopsis Enable the **range** context

Context **configure filter ipv6-filter string entry number match hop-limit range**

Tree **range**

Description This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).

Notes The following elements are part of a mandatory choice: **eq, gt, lt, or range**.

Introduced 21.10.R1

Platforms All

end number

Synopsis Upper bound of the range

Context **configure filter ipv6-filter string entry number match hop-limit range end number**

Tree **end**

Range 1 to 255

Notes This element is mandatory.

Introduced 21.10.R1

Platforms All

start number

Synopsis	Lower bound of the range
Context	configure filter ipv6-filter string entry number match hop-limit range start number
Tree	start
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure filter ipv6-filter string entry number match icmp
Tree	icmp
Introduced	16.0.R1
Platforms	All

code number

Synopsis	ICMPv6 code value to match
Context	configure filter ipv6-filter string entry number match icmp code number
Tree	code
Range	0 to 255
Introduced	16.0.R1
Platforms	All

type number

Synopsis	ICMPv6 type value to match
Context	configure filter ipv6-filter string entry number match icmp type number
Tree	type
Range	0 to 255
Introduced	16.0.R1
Platforms	All

ip

Synopsis	Enter the ip context
Context	configure filter ipv6-filter string entry number match ip
Tree	ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	21.10.R1
Platforms	All

address (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter string entry number match ip address (<i>ipv6-prefix-with-host-bits ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	21.10.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter string entry number match ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	21.10.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter string entry number match ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .

Introduced	21.10.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: next-header or next-header-list .
Introduced	16.0.R1
Platforms	All

next-header-list *reference*

Synopsis	Name of the protocol list as a match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match next-header-list <i>reference</i>
Tree	next-header-list
Reference	configure filter match-list protocol-list <i>string</i>
Notes	The following elements are part of a choice: next-header or next-header-list .
Introduced	20.7.R1
Platforms	All

packet-length

Synopsis	Enable the packet-length context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match packet-length
Tree	packet-length
Introduced	19.5.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the length
Context	configure filter ipv6-filter string entry number match packet-length eq number
Tree	eq
Range	40 to 65575
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the length
Context	configure filter ipv6-filter string entry number match packet-length gt number
Tree	gt
Range	40 to 65574
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the length
Context	configure filter ipv6-filter string entry number match packet-length lt number
Tree	lt
Range	41 to 65575
Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number match packet-length range
Tree	range

Notes	The following elements are part of a mandatory choice: eq , gt , lt , or range .
Introduced	19.5.R1
Platforms	All

end number

Synopsis	Upper bound of packet length range as match criterion
Context	configure filter ipv6-filter string entry number match packet-length range end number
Tree	end
Range	41 to 65575
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

start number

Synopsis	Lower bound of packet length range as match criterion
Context	configure filter ipv6-filter string entry number match packet-length range start number
Tree	start
Range	40 to 65574
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

port

Synopsis	Enter the port context
Context	configure filter ipv6-filter string entry number match port
Tree	port
Notes	The following elements are part of a choice: port or (dst-port and src-port).
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact match criterion for the port number
Context	configure filter ipv6-filter string entry number match port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than match criterion for the port number
Context	configure filter ipv6-filter string entry number match port gt number
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than match criterion for the port number
Context	configure filter ipv6-filter string entry number match port lt number
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure filter ipv6-filter string entry number match port port-list reference
Tree	port-list

Reference	configure filter match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string entry number match port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match port range end number
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-filter string entry number match port range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-ip
Tree	src-ip
Notes	The following elements are part of a choice: ip or (dst-ip and src-ip).
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure filter match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1

Platforms All

src-mac

Synopsis Enable the **src-mac** context

Context **configure filter ipv6-filter string entry number match src-mac**

Tree [src-mac](#)

Introduced 19.5.R1

Platforms All

address string

Synopsis MAC address used as the match criterion

Context **configure filter ipv6-filter string entry number match src-mac address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 19.5.R1

Platforms All

mask string

Synopsis MAC address mask as the match criterion

Context **configure filter ipv6-filter string entry number match src-mac mask string**

Tree [mask](#)

Default ff:ff:ff:ff:ff:ff

Introduced 19.5.R1

Platforms All

src-port

Synopsis Enter the **src-port** context

Context **configure filter ipv6-filter string entry number match src-port**

Tree [src-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms All

eq *number*

Synopsis Exact match criterion for the port number

Context **configure** **filter** **ipv6-filter** *string* **entry** *number* **match** **src-port** **eq** *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

gt *number*

Synopsis Greater than match criterion for the port number

Context **configure** **filter** **ipv6-filter** *string* **entry** *number* **match** **src-port** **gt** *number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

lt *number*

Synopsis Less than match criterion for the port number

Context **configure** **filter** **ipv6-filter** *string* **entry** *number* **match** **src-port** **lt** *number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

port-list *reference*

Synopsis Name of the port list as the match criterion

Context	configure filter ipv6-filter <i>string entry number match src-port port-list reference</i>
Tree	port-list
Reference	configure filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>string entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range as port match criterion
Context	configure filter ipv6-filter <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range as port match criterion
Context	configure filter ipv6-filter <i>string entry number match src-port range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

tcp-established

Synopsis Match packets containing the TCP flag as ACK or RST

Context **configure filter ipv6-filter string entry number match tcp-established**

Tree [tcp-established](#)

Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.

Introduced 22.10.R1

Platforms All

tcp-flags

Synopsis Enter the **tcp-flags** context

Context **configure filter ipv6-filter string entry number match tcp-flags**

Tree [tcp-flags](#)

Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.

Introduced 16.0.R1

Platforms All

ack boolean

Synopsis Match TCP ACK as per value of the ACK TCP flag bit

Context **configure filter ipv6-filter string entry number match tcp-flags ack boolean**

Tree [ack](#)

Introduced 16.0.R1

Platforms All

cwr boolean

Synopsis Match TCP CWR as per value of the CWR TCP flag bit

Context **configure filter ipv6-filter string entry number match tcp-flags cwr boolean**

Tree [cwr](#)

Introduced 16.0.R1

Platforms All

ece boolean

Synopsis	Match TCP ECE as per value of the ECE TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags ece boolean
Tree	ece
Introduced	16.0.R1
Platforms	All

fin boolean

Synopsis	Match TCP FIN as per value of the FIN TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags fin boolean
Tree	fin
Introduced	16.0.R1
Platforms	All

ns boolean

Synopsis	Match TCP NS as per value of the NS TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags ns boolean
Tree	ns
Introduced	16.0.R1
Platforms	All

psh boolean

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	configure filter ipv6-filter string entry number match tcp-flags psh boolean
Tree	psh
Introduced	16.0.R1
Platforms	All

rst boolean

Synopsis	Match TCP RST as per value of the RST TCP flag bit
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Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match tcp-flags rst <i>boolean</i>
Tree	rst
Introduced	16.0.R1
Platforms	All

syn *boolean*

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match tcp-flags syn <i>boolean</i>
Tree	syn
Introduced	16.0.R1
Platforms	All

urg *boolean*

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> match tcp-flags urg <i>boolean</i>
Tree	urg
Introduced	16.0.R1
Platforms	All

pbr-down-action-override *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> pbr-down-action-override <i>keyword</i>
Tree	pbr-down-action-override
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

sample-profile *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> sample-profile <i>reference</i>
Tree	sample-profile

Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	configure cflowd sample-profile <i>number</i>
Introduced	20.10.R1
Platforms	All

sticky-dest (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	configure filter ipv6-filter <i>string</i> entry <i>number</i> sticky-dest (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

filter-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 filter identifier
Context	configure filter ipv6-filter <i>string</i> filter-id <i>number</i>
Tree	filter-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of this filter definition
Context	configure filter ipv6-filter <i>string</i> scope <i>keyword</i>

Tree	scope
Default	template
Options	exclusive, template, embedded, system
Introduced	16.0.R1
Platforms	All

shared-policer *boolean*

Synopsis	Share policer among active ports in the LAG
Context	configure filter ipv6-filter <i>string</i> shared-policer <i>boolean</i>
Tree	shared-policer
Description	When configured to true , and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP. When configured to false , and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-specific-entry

Synopsis	Enter the host-specific-entry context
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt host-specific-entry
Tree	host-specific-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control

Synopsis	Enter the credit-control context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control
Tree	credit-control
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for credit control filter entries
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for credit control filter entries
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range start number
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the filter-rule context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for inserting filter rule entries
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting filter rule entries
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range start number
Tree	start

Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis	Enter the watermark context
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark
Tree	watermark
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark high number
Tree	high
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark low number
Tree	low
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shared-entry

Synopsis	Enter the shared-entry context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry
Tree	shared-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter-rule

Synopsis	Enter the filter-rule context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule
Tree	filter-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of range for inserting shared host rules
Context	configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range end number
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of range for inserting shared host rules
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt shared-entry filter-rule range start <i>number</i>
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule

Synopsis	Enter the pcc-rule context
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt shared-entry pcc-rule
Tree	pcc-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt shared-entry pcc-rule range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the range for PCC rule filter entries
Context	configure filter ipv6-filter <i>string</i> subscriber-mgmt shared-entry pcc-rule range end <i>number</i>
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the range for PCC rule filter entries

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

watermark

Synopsis Enable the **watermark** context

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark**

Tree [watermark](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis Limit of RADIUS shared filters before generating high watermark notification

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark high number**

Tree [high](#)

Range 1 to 8000

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Limit of RADIUS or Diameter shared filters before clearing high watermark notification

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry watermark low number**

Tree	low
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis	Set of match criteria for the filter policy
Context	configure filter ipv6-filter <i>string</i> type <i>keyword</i>
Tree	type
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Default	normal
Options	normal, src-mac, packet-length, destination-class
Introduced	19.5.R1
Platforms	All

log [[log-id](#)] *number*

Synopsis	Enter the log list instance
Context	configure filter log <i>number</i>
Tree	log
Introduced	16.0.R1
Platforms	All

[log-id] *number*

Synopsis	Filter log identifier
Context	configure filter log <i>number</i>
Tree	log
Range	101 to 199
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of filter logging
Context	configure filter log number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter log number description string
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	configure filter log number destination
Tree	destination
Introduced	16.0.R1
Platforms	All

memory

Synopsis	Enter the memory context
Context	configure filter log number destination memory
Tree	memory
Notes	The following elements are part of a choice: memory or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of memory entries that the log can store
Context	configure filter log <i>number</i> destination memory max-entries <i>number</i>
Tree	max-entries
Range	1 to 50000
Default	1000
Introduced	16.0.R1
Platforms	All

stop-on-full *boolean*

Synopsis	Stop logging when maximum number of memory entries is reached or wrap-around is used
Context	configure filter log <i>number</i> destination memory stop-on-full <i>boolean</i>
Tree	stop-on-full
Default	false
Introduced	16.0.R1
Platforms	All

syslog

Synopsis	Enter the syslog context
Context	configure filter log <i>number</i> destination syslog
Tree	syslog
Notes	The following elements are part of a choice: memory or syslog .
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Syslog server definition ID
Context	configure filter log <i>number</i> destination syslog name <i>reference</i>
Tree	name
Reference	configure log syslog <i>string</i>

Introduced 21.2.R1
 Platforms All

summary

Synopsis Enter the **summary** context
 Context **configure filter log number destination syslog summary**
 Tree [summary](#)
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of filter log summarization
 Context **configure filter log number destination syslog summary admin-state keyword**
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

summary-crit *keyword*

Synopsis Summary for filter log entries
 Context **configure filter log number destination syslog summary summary-crit keyword**
 Tree [summary-crit](#)
 Default src-addr
 Options src-addr, dst-addr
 Introduced 16.0.R1
 Platforms All

mac-filter [[filter-name](#)] *string*

Synopsis Enter the **mac-filter** list instance
 Context **configure filter mac-filter string**

Tree	mac-filter
Introduced	16.0.R1
Platforms	All

[filter-name] *string*

Synopsis	Filter name
Context	configure filter mac-filter <i>string</i>
Tree	mac-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Action for packets that do not match any entry
Context	configure filter mac-filter <i>string</i> default-action <i>keyword</i>
Tree	default-action
Default	drop
Options	drop, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter mac-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

embed

Synopsis	Enter the embed context
Context	configure filter mac-filter string embed
Tree	embed
Description	Commands in this context embed a previously defined MAC embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure filter mac-filter string entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[*entry-id*] *number*

Synopsis	ID for a match criteria and the corresponding action
Context	configure filter mac-filter string entry number
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure filter mac-filter string entry number action
Tree	action
Introduced	16.0.R1

Platforms All

accept

Synopsis Accept regular routing to forward a matching packet

Context **configure filter mac-filter string entry number action accept**

Tree [accept](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

drop

Synopsis Drop a packet matching this entry

Context **configure filter mac-filter string entry number action drop**

Tree [drop](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

forward

Synopsis Enter the **forward** context

Context **configure filter mac-filter string entry number action forward**

Tree [forward](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

esi-l2

Synopsis Enable the **esi-l2** context

Context **configure filter mac-filter string entry number action forward esi-l2**

Tree	esi-l2
Notes	The following elements are part of a choice: esi-l2 , sap , or sdp .
Introduced	16.0.R1
Platforms	All

esi-value string

Synopsis	ESI of the first ESI-identified appliance
Context	configure filter mac-filter string entry number action forward esi-l2 esi-value string
Tree	esi-value
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS service name
Context	configure filter mac-filter string entry number action forward esi-l2 vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter mac-filter string entry number action forward sap
Tree	sap
Notes	The following elements are part of a choice: esi-l2 , sap , or sdp .
Introduced	16.0.R1
Platforms	All

sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sap sap-id <i>reference</i>
Tree	sap-id
Reference	configure service vpls <i>string</i> sap <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SAP
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sap vpls <i>reference</i>
Tree	vpls
Reference	configure service vpls <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sdp

Synopsis	Enable the sdp context
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sdp
Tree	sdp
Notes	The following elements are part of a choice: esi-l2 , sap , or sdp .
Introduced	16.0.R1
Platforms	All

sdp-bind-id string

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	configure filter mac-filter <i>string</i> entry <i>number</i> action forward sdp sdp-bind-id <i>string</i>
Tree	sdp-bind-id
String Length	3 to 16

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vpls reference

Synopsis	VPLS associated with the SDP
Context	configure filter mac-filter string entry number action forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

http-redirect

Synopsis	Enable the http-redirect context
Context	configure filter mac-filter string entry number action http-redirect
Tree	http-redirect
Notes	The following elements are part of a mandatory choice: accept , drop , forward , http-redirect , or ignore-match .
Introduced	16.0.R1
Platforms	All

url string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL that is used for redirecting
Context	configure filter mac-filter string entry number action http-redirect url string
Tree	url
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

ignore-match

Synopsis Ignore match criteria for the entry

Context **configure** filter mac-filter string entry number action ignore-match

Tree [ignore-match](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

rate-limit

Synopsis Enable the **rate-limit** context

Context **configure** filter mac-filter string entry number action rate-limit

Tree [rate-limit](#)

Introduced 16.0.R1

Platforms All

pir (*number* | *keyword*)

Synopsis Peak information rate

Context **configure** filter mac-filter string entry number action rate-limit pir (*number* | *keyword*)

Tree [pir](#)

Range 0 to 2000000000

Units kilobps

Options max

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

secondary

Synopsis Enable the **secondary** context

Context	configure filter mac-filter string entry number action secondary
Tree	secondary
Introduced	16.0.R1
Platforms	All

forward

Synopsis	Enter the forward context
Context	configure filter mac-filter string entry number action secondary forward
Tree	forward
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sap

Synopsis	Enable the sap context
Context	configure filter mac-filter string entry number action secondary forward sap
Tree	sap
Notes	The following elements are part of a choice: sap or sdp .
Introduced	16.0.R1
Platforms	All

sap-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	configure filter mac-filter string entry number action secondary forward sap sap-id reference
Tree	sap-id
Reference	configure service vpls string sap string
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

vpls reference

Synopsis VPLS the sdp-bind-id belongs to

Context **configure** filter mac-filter string entry number action secondary forward sap vpls reference

Tree vpls

Reference **configure** service vpls string

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

sdp

Synopsis Enable the **sdp** context

Context **configure** filter mac-filter string entry number action secondary forward sdp

Tree sdp

Notes The following elements are part of a choice: **sap** or **sdp**.

Introduced 16.0.R1

Platforms All

sdp-bind-id string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS SDP bind ID used to forward matching packets

Context **configure** filter mac-filter string entry number action secondary forward sdp sdp-bind-id string

Tree sdp-bind-id

String Length 3 to 16

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

vpls reference

Synopsis	VPLS associated with the SDP
Context	configure filter mac-filter string entry number action secondary forward sdp vpls reference
Tree	vpls
Reference	configure service vpls string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure filter mac-filter string entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

log reference

Synopsis	Log that is used for packets matching this entry
Context	configure filter mac-filter string entry number log reference
Tree	log
Reference	configure filter log number
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure filter mac-filter string entry number match
Tree	match
Introduced	16.0.R1

Platforms All

dot1p

Synopsis Enable the **dot1p** context

Context **configure filter mac-filter string entry number match dot1p**

Tree [dot1p](#)

Introduced 16.0.R1

Platforms All

mask number

Synopsis 802.1p mask value used as a MAC filter match criterion

Context **configure filter mac-filter string entry number match dot1p mask number**

Tree [mask](#)

Range 1 to 7

Default 7

Introduced 16.0.R1

Platforms All

priority number

Synopsis IEEE 802.1p value used as a MAC filter match criterion

Context **configure filter mac-filter string entry number match dot1p priority number**

Tree [priority](#)

Range 0 to 7

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

dst-mac

Synopsis Enable the **dst-mac** context

Context **configure filter mac-filter string entry number match dst-mac**

Tree [dst-mac](#)

Introduced 16.0.R1
Platforms All

address string

Synopsis MAC address used as the match criterion
Context **configure filter mac-filter string entry number match dst-mac address string**
Tree [address](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

mask string

Synopsis MAC address mask as the match criterion
Context **configure filter mac-filter string entry number match dst-mac mask string**
Tree [mask](#)
Default ff:ff:ff:ff:ff:ff
Introduced 16.0.R1
Platforms All

etype string

Synopsis Ethernet type
Context **configure filter mac-filter string entry number match etype string**
Tree [etype](#)
String Length 5 to 6
Introduced 16.0.R1
Platforms All

frame-type keyword

Synopsis MAC frame as match criteria
Context **configure filter mac-filter string entry number match frame-type keyword**
Tree [frame-type](#)

Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1
Platforms	All

inner-tag

Synopsis	Enable the inner-tag context
Context	configure filter mac-filter string entry number match inner-tag
Tree	inner-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	configure filter mac-filter string entry number match inner-tag mask number
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tag number

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	configure filter mac-filter string entry number match inner-tag tag number
Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

isid

Synopsis	Enter the isid context
Context	configure filter mac-filter string entry number match isid
Tree	isid
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enable the range context
Context	configure filter mac-filter string entry number match isid range
Tree	range
Notes	The following elements are part of a choice: range or value .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the ISID range
Context	configure filter mac-filter string entry number match isid range end number
Tree	end
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the ISID range
Context	configure filter mac-filter string entry number match isid range start number
Tree	start
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

value number

Synopsis Lowest value of 24-bit service instance identifier for the service matching this entry

Context **configure filter mac-filter string entry number match isid value number**

Tree [value](#)

Range 0 to 16777215

Notes The following elements are part of a choice: **range** or **value**.

Introduced 16.0.R1

Platforms All

llc-dsap

Synopsis Enable the **llc-dsap** context

Context **configure filter mac-filter string entry number match llc-dsap**

Tree [llc-dsap](#)

Introduced 16.0.R1

Platforms All

dsap number

Synopsis DSAP value

Context **configure filter mac-filter string entry number match llc-dsap dsap number**

Tree [dsap](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

mask number

Synopsis Destination SAP mask

Context **configure filter mac-filter string entry number match llc-dsap mask number**

Tree [mask](#)

Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure filter mac-filter string entry number match llc-ssap
Tree	llc-ssap
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	Source SAP mask
Context	configure filter mac-filter string entry number match llc-ssap mask number
Tree	mask
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

ssap number

Synopsis	Source or destination SAP value
Context	configure filter mac-filter string entry number match llc-ssap ssap number
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

outer-tag

Synopsis	Enable the outer-tag context
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match outer-tag
Tree	outer-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match outer-tag mask <i>number</i>
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tag number

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match outer-tag tag <i>number</i>
Tree	tag
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snap-oui keyword

Synopsis	Parameter snap-oui as a MAC filter match criteria
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match snap-oui <i>keyword</i>
Tree	snap-oui
Options	zero, non-zero

Introduced	16.0.R1
Platforms	All

snap-pid *number*

Synopsis	Parameter snap-pid as a MAC filter match criteria
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match snap-pid <i>number</i>
Tree	snap-pid
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	MAC address used as the match criterion
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match src-mac address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	MAC address mask as the match criterion
Context	configure filter mac-filter <i>string</i> entry <i>number</i> match src-mac mask <i>string</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff

Introduced 16.0.R1
 Platforms All

pbr-down-action-override *keyword*

Synopsis Action when PBR or PBF target for this entry is not available
 Context **configure** **filter** **mac-filter** *string* **entry** *number* **pbr-down-action-override** *keyword*
 Tree **pbr-down-action-override**
 Options drop, forward, filter-default-action
 Introduced 16.0.R1
 Platforms All

sticky-dest (*number* | *keyword*)

Synopsis Time before action with available PBR or PBF destination and highest priority
 Context **configure** **filter** **mac-filter** *string* **entry** *number* **sticky-dest** (*number* | *keyword*)
 Tree **sticky-dest**
 Range 0 to 65535
 Units seconds
 Options no-hold-time-up
 Introduced 16.0.R1
 Platforms All

filter-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MAC filter ID
 Context **configure** **filter** **mac-filter** *string* **filter-id** *number*
 Tree **filter-id**
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

scope *keyword*

Synopsis	Scope of this filter definition
Context	configure filter mac-filter <i>string scope keyword</i>
Tree	scope
Default	template
Options	exclusive, template, embedded, system
Introduced	16.0.R1
Platforms	All

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC filter policy
Context	configure filter mac-filter <i>string type keyword</i>
Tree	type
Default	normal
Options	normal, isid, vid
Introduced	16.0.R1
Platforms	All

match-list

Synopsis	Enter the match-list context
Context	configure filter match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

ip-prefix-list [[prefix-list-name](#)] *string*

Synopsis	Enter the ip-prefix-list list instance
Context	configure filter match-list ip-prefix-list <i>string</i>

Tree	ip-prefix-list
Introduced	16.0.R1
Platforms	All

[prefix-list-name] *string*

Synopsis	IP prefix list name
Context	configure filter match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

apply-path

Synopsis	Enter the apply-path context
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path
Tree	apply-path
Introduced	16.0.R1
Platforms	All

bgp-peers [[criterion-index](#)] *number*

Synopsis	Enter the bgp-peers list instance
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Introduced	16.0.R1
Platforms	All

[criterion-index] *number*

Synopsis	BGP peers auto-generation configuration index
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers

Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> group <i>string</i>
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

neighbor *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	configure filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list ip-prefix-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

prefix [**ip-prefix**] *string*

Synopsis	Add a list entry for prefix
Context	configure filter match-list ip-prefix-list <i>string</i> prefix <i>string</i>
Tree	prefix
Description	<p>Commands in this context add IPv4 prefixes to the prefix match list. Prefixes can overlap IPv4 address space.</p> <p>An IPv4 prefix addition is blocked if resource exhaustion is detected anywhere in the system due to filter policies that use the prefix list.</p>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[ip-prefix] string

Synopsis	IPv4 prefix to be added to the prefix list
Context	configure filter match-list ip-prefix-list string prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

prefix-exclude [ip-prefix] string

Synopsis	Add a list entry for prefix-exclude
Context	configure filter match-list ip-prefix-list string prefix-exclude string
Tree	prefix-exclude
Description	Commands in this context exclude IPv4 prefixes from the prefix match list. This command is mutually exclusive with the apply-path command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

[ip-prefix] string

Synopsis	IPv4 prefix to be added to the prefix list
Context	configure filter match-list ip-prefix-list string prefix-exclude string
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ipv6-prefix-list [prefix-list-name] string

Synopsis	Enter the ipv6-prefix-list list instance
Context	configure filter match-list ipv6-prefix-list string
Tree	ipv6-prefix-list
Introduced	16.0.R1

Platforms All

[prefix-list-name] *string*

Synopsis IP prefix list name

Context **configure** filter match-list ipv6-prefix-list *string*

Tree [ipv6-prefix-list](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

apply-path

Synopsis Enter the **apply-path** context

Context **configure** filter match-list ipv6-prefix-list *string* apply-path

Tree [apply-path](#)

Introduced 16.0.R1

Platforms All

bgp-peers [[criterion-index](#)] *number*

Synopsis Enter the **bgp-peers** list instance

Context **configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number*

Tree [bgp-peers](#)

Introduced 16.0.R1

Platforms All

[criterion-index] *number*

Synopsis BGP peers auto-generation configuration index

Context **configure** filter match-list ipv6-prefix-list *string* apply-path bgp-peers *number*

Tree [bgp-peers](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	All

group *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	configure filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers number group <i>string</i>
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

neighbor *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	configure filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers number neighbor <i>string</i>
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	configure filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list ipv6-prefix-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

prefix [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for prefix
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix <i>string</i>
Tree	prefix
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[[ipv6-prefix](#)] *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix <i>string</i>

Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

prefix-exclude [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for prefix-exclude
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix-exclude <i>string</i>
Tree	prefix-exclude
Description	Commands in this context exclude IPv6 prefixes from the prefix match list. This command is mutually exclusive with the apply-path command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	configure filter match-list ipv6-prefix-list <i>string</i> prefix-exclude <i>string</i>
Tree	prefix-exclude
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port-list [[port-list-name](#)] *string*

Synopsis	Enter the port-list list instance
Context	configure filter match-list port-list <i>string</i>
Tree	port-list
Max. Instances	5120
Introduced	16.0.R1
Platforms	All

[port-list-name] *string*

Synopsis	Port list name
Context	configure filter match-list port-list <i>string</i>
Tree	port-list
Description	This command specifies the port list name. If special characters are used (#, \$, spaces, and so on), the string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list port-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

port [[value](#)] *number*

Synopsis	Add a list entry for port
Context	configure filter match-list port-list <i>string</i> port <i>number</i>
Tree	port
Introduced	16.0.R1
Platforms	All

[value] *number*

Synopsis	Port value
Context	configure filter match-list port-list <i>string</i> port <i>number</i>
Tree	port
Range	0 to 65535

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range *start number end number*

Synopsis	Add a list entry for range
Context	configure filter match-list port-list <i>string range start number end number</i>
Tree	range
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the port list range
Context	configure filter match-list port-list <i>string range start number end number</i>
Tree	range
Range	0 to 65534
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port list range
Context	configure filter match-list port-list <i>string range start number end number</i>
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

protocol-list [[protocol-list-name](#)] *string*

Synopsis	Enter the protocol-list list instance
----------	--

Context	configure filter match-list protocol-list <i>string</i>
Tree	protocol-list
Max. Instances	512
Introduced	20.7.R1
Platforms	All

[protocol-list-name] *string*

Synopsis	Protocol list name
Context	configure filter match-list protocol-list <i>string</i>
Tree	protocol-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter match-list protocol-list <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

protocol [[protocol-id](#)] (*number* | *keyword*)

Synopsis	Add a list entry for protocol
Context	configure filter match-list protocol-list <i>string</i> protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Max. Instances	32
Introduced	20.7.R1
Platforms	All

[protocol-id] (*number* | *keyword*)

Synopsis	IP protocol identifier
Context	configure filter match-list protocol-list string protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure filter md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

filter-id-range

Synopsis	Enable the filter-id-range context
Context	configure filter md-auto-id filter-id-range
Tree	filter-id-range
Introduced	16.0.R1
Platforms	All

end number**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
----------	-----------------------------

Context	configure filter md-auto-id filter-id-range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	configure filter md-auto-id filter-id-range start <i>number</i>
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

redirect-policy [[redirect-policy-name](#)] *string*

Synopsis	Enter the redirect-policy list instance
Context	configure filter redirect-policy <i>string</i>
Tree	redirect-policy
Introduced	16.0.R1
Platforms	All

[redirect-policy-name] *string*

Synopsis	Redirect policy name
Context	configure filter redirect-policy <i>string</i>
Tree	redirect-policy

Description	This command specifies the redirect policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the redirect policy
Context	configure filter redirect-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter redirect-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination [**destination-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the destination list instance
Context	configure filter redirect-policy <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Introduced	16.0.R1
Platforms	All

[destination-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address and type of destination
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	destination
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the destination
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ping-test

Synopsis	Enable the ping-test context
Context	configure filter redirect-policy <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test

Tree	ping-test
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Number of consecutive requests that fail before destination is declared unreachable
Context	configure filter redirect-policy <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test drop-count <i>number</i>
Tree	drop-count
Range	1 to 60
Default	3
Introduced	16.0.R1
Platforms	All

hold-down *number*

Synopsis	Time for the system to be held down if this test has marked it unreachable
Context	configure filter redirect-policy <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test hold-down <i>number</i>
Tree	hold-down
Range	0 to 86400
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time between consecutive requests which are sent to the far end host
Context	configure filter redirect-policy <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) ping-test interval <i>number</i>
Tree	interval
Range	1 to 60
Default	1
Units	seconds

Introduced 16.0.R1
 Platforms All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address to use in the IP packet of the ping test
 Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **ping-test source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [source-address](#)
 Introduced 16.0.R4
 Platforms All

timeout *number*

Synopsis Time required to receive a response from the far end host
 Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **ping-test timeout** *number*
 Tree [timeout](#)
 Range 1 to 60
 Default 1
 Units seconds
 Introduced 16.0.R1
 Platforms All

priority *number*

Synopsis Priority for this destination
 Context **configure filter redirect-policy** *string destination* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **priority** *number*
 Tree [priority](#)
 Range 1 to 255
 Default 100
 Introduced 16.0.R1
 Platforms All

unicast-rt-test

Synopsis	Enable the unicast-rt-test context
Context	configure filter redirect-policy <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) unicast-rt-test
Tree	unicast-rt-test
Introduced	16.0.R1
Platforms	All

notify-dest-change *boolean*

Synopsis	Send notifications when the active destination changes
Context	configure filter redirect-policy <i>string</i> notify-dest-change <i>boolean</i>
Tree	notify-dest-change
Description	When configured to true , notifications (such as Log and SNMP) are sent when the active destination of a redirect policy changes. No notification is sent when there are no more active destinations (as this scenario is covered by another notification). When configured to false , the notification generation is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

router-instance *string*

Synopsis	Routing context to use for route lookup
Context	configure filter redirect-policy <i>string</i> router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R1
Platforms	All

sticky-dest (*number* | *keyword*)

Synopsis	Time required by system before applying the current best destination as active destination
Context	configure filter redirect-policy <i>string</i> sticky-dest (<i>number</i> <i>keyword</i>)
Tree	sticky-dest
Range	0 to 65535

Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

redirect-policy-binding [[binding-name](#)] *string*

Synopsis	Enter the redirect-policy-binding list instance
Context	configure filter redirect-policy-binding <i>string</i>
Tree	redirect-policy-binding
Max. Instances	16
Introduced	16.0.R4
Platforms	All

[binding-name] *string*

Synopsis	Binding name
Context	configure filter redirect-policy-binding <i>string</i>
Tree	redirect-policy-binding
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

binding-operator *keyword*

Synopsis	Logical operator used to obtain the master test result
Context	configure filter redirect-policy-binding <i>string</i> binding-operator <i>keyword</i>
Tree	binding-operator
Description	This command configures the logical operator to use with the destinations' test results to obtain the master test result (the redirect policy binding test result).
Default	and
Options	and, or
Introduced	16.0.R4

Platforms All

redirect-policy [[redirect-policy-name](#)] *reference*

Synopsis Enter the **redirect-policy** list instance

Context **configure** [filter](#) [redirect-policy-binding](#) *string* [redirect-policy](#) *reference*

Tree [redirect-policy](#)

Introduced 16.0.R4

Platforms All

[redirect-policy-name] *reference*

Synopsis Redirect policy name

Context **configure** [filter](#) [redirect-policy-binding](#) *string* [redirect-policy](#) *reference*

Tree [redirect-policy](#)

Reference **configure** [filter](#) [redirect-policy](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

destination [[destination-address](#)] *reference*

Synopsis Add a list entry for **destination**

Context **configure** [filter](#) [redirect-policy-binding](#) *string* [redirect-policy](#) *reference* [destination](#) *reference*

Tree [destination](#)

Min. 1

Instances

Introduced 16.0.R4

Platforms All

[destination-address] *reference*

Synopsis IP address of redirect policy destination to binding

Context **configure** [filter](#) [redirect-policy-binding](#) *string* [redirect-policy](#) *reference* [destination](#) *reference*

Tree	destination
Reference	configure filter redirect-policy <i>string destination (ipv4-address-no-zone ipv6-address-no-zone)</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

system-filter

Synopsis	Enter the system-filter context
Context	configure filter system-filter
Tree	system-filter
Introduced	16.0.R1
Platforms	All

ip [[ip-filter](#)] *reference*

Synopsis	Add a list entry for ip
Context	configure filter system-filter ip reference
Tree	ip
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[[ip-filter](#)] *reference*

Synopsis	Active IPv4 system filter policy
Context	configure filter system-filter ip reference
Tree	ip
Reference	configure filter ip-filter string
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

ipv6 [ipv6-filter] reference

Synopsis	Add a list entry for ipv6
Context	configure filter system-filter ipv6 reference
Tree	ipv6
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[ipv6-filter] reference

Synopsis	Active IPv6 system filter policy
Context	configure filter system-filter ipv6 reference
Tree	ipv6
Reference	configure filter ipv6-filter string
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

3.18 fwd-path-ext commands

```

configure
- fwd-path-ext
- apply-groups reference
- apply-groups-exclude reference
- fpe number
- application
- pw-port-extension
- interface-a
- qos
- network-policy reference
- interface-b
- qos
- network-policy reference
- srv6
- interface-a
- qos
- network-policy reference
- interface-b
- mtu number
- qos
- network-policy reference
- type keyword
- sub-mgmt-extension boolean
- vxlan
- router-instance string
- apply-groups reference
- apply-groups-exclude reference
- description string
- multi-path
- path number
- apply-groups reference
- apply-groups-exclude reference
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- path
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- sdp-id-range
- apply-groups reference
- apply-groups-exclude reference
- end number
- start number

```

3.18.1 fwd-path-ext command descriptions

fwd-path-ext

Synopsis	Enter the fwd-path-ext context
Context	configure fwd-path-ext
Tree	fwd-path-ext
Description	Commands in this context configure a Forwarding Path Extension (FPE). Some applications that rely on PXC functionality utilize FPE to simplify the configuration of these applications.
Introduced	16.0.R1
Platforms	All

fpe [[fpe-id](#)] *number*

Synopsis	Enter the fpe list instance
Context	configure fwd-path-ext fpe <i>number</i>
Tree	fpe
Description	Commands in this context configure the Forwarding Path Extension (FPE), which associates an application with a PXC (a paired set of PXC sub-ports or a paired set of PXC-based LAGs).
Introduced	16.0.R1
Platforms	All

[\[fpe-id\]](#) *number*

Synopsis	FPE ID
Context	configure fwd-path-ext fpe <i>number</i>
Tree	fpe
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

application

Synopsis	Enter the application context
Context	configure fwd-path-ext fpe number application
Tree	application
Description	Commands in this context configure the attributes of the FPE application.
Introduced	16.0.R1
Platforms	All

pw-port-extension

Synopsis	Enable the pw-port-extension context
Context	configure fwd-path-ext fpe number application pw-port-extension
Tree	pw-port-extension
Description	<p>Commands in this context configure the type of the cross-connect required to terminate an external tunnel to an anchored PW port. The system automatically builds the internal infrastructure required to perform the tunnel termination on a PW port.</p> <p>PW ports support the following types of tunnels:</p> <ul style="list-style-type: none"> • GRE/MPLS PW with SDP of type MPLS or GRE • L2oGRE bridged Ethernet over GRE, where GRE protocol number is 0x6558
Introduced	22.2.R1
Platforms	All

interface-a

Synopsis	Enter the interface-a context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-a
Tree	interface-a
Description	Commands in this context configure the command options for network interface-a of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-a qos

Tree	qos
Introduced	22.10.R1
Platforms	All

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	configure fwd-path-ext fpe number application pw-port-extension interface-a qos network-policy <i>reference</i>
Tree	network-policy
Reference	configure qos network <i>string</i>
Introduced	22.10.R1
Platforms	All

interface-b

Synopsis	Enter the interface-b context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-b
Tree	interface-b
Description	Commands in this context configure command options for network interface-b of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application pw-port-extension interface-b qos
Tree	qos
Introduced	22.10.R1
Platforms	All

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
----------	---

Context	configure fwd-path-ext fpe number application pw-port-extension interface-b qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	22.10.R1
Platforms	All

srv6

Synopsis	Enable the srv6 context
Context	configure fwd-path-ext fpe number application srv6
Tree	srv6
Description	Commands in this context configure the SRv6 FPE application used for origination or termination of SRv6 tunnels.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-a

Synopsis	Enter the interface-a context
Context	configure fwd-path-ext fpe number application srv6 interface-a
Tree	interface-a
Description	Commands in this context configure the parameters of network interface-a of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application srv6 interface-a qos
Tree	qos
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

network-policy *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	configure fwd-path-ext fpe number application srv6 interface-a qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-b

Synopsis	Enter the interface-b context
Context	configure fwd-path-ext fpe number application srv6 interface-b
Tree	interface-b
Description	Commands in this context configure the parameters of network interface-b of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mtu *number*

Synopsis	MTU size of SRv6 origination FPE interface-b
Context	configure fwd-path-ext fpe number application srv6 interface-b mtu number
Tree	mtu
Description	<p>This command configures the Maximum Transfer Unit (MTU) of interface-b of the SRv6 origination FPE.</p> <p>The MTU is used to check if an IPv4 service packet should be fragmented and if an IPv6 service packet should be dropped when tunneled over SRv6.</p> <p>The minimum value is the IPv6 minimum MTU value. The maximum value is set to the maximum Ethernet port MTU (9800) minus 14 bytes for Null Ethernet encapsulation.</p>
Range	0 1280 to 9786
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

qos

Synopsis	Enter the qos context
Context	configure fwd-path-ext fpe number application srv6 interface-b qos
Tree	qos
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

network-policy reference

Synopsis	Network QoS policy applied to the FPE interface
Context	configure fwd-path-ext fpe number application srv6 interface-b qos network-policy reference
Tree	network-policy
Reference	configure qos network string
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

type keyword

Synopsis	SRv6 FPE application type
Context	configure fwd-path-ext fpe number application srv6 type keyword
Tree	type
Description	<p>This command specifies if the SRv6 FPE application is used for origination or termination of SRv6 tunnels.</p> <p>A dedicated SRv6 FPE is required for origination and termination of SRv6 tunnels on services and they cannot share the same FPE.</p> <p>A single FPE can be configured for SRv6 origination. One or more FPEs can be configured for SRv6 termination, where a termination SRv6 FPE is assigned one or more configured locators.</p> <p>Transit SRv6 routers do not require SRv6 FPEs.</p>
Options	origination, termination
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sub-mgmt-extension *boolean*

Synopsis	Enable FPE for subscriber management extensions
Context	configure fwd-path-ext fpe number application sub-mgmt-extension boolean
Tree	sub-mgmt-extension
Description	When configured to true , the FPE is used for subscriber management extensions. The FPE can be used for multiple subscriber management applications, but it cannot be used for other applications. When configured to false , the FPE is not used for subscriber management extensions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan

Synopsis	Enable the vxlan context
Context	configure fwd-path-ext fpe number application vxlan
Tree	vxlan
Introduced	22.2.R1
Platforms	All

router-instance *string*

Synopsis	Router instance for VXLAN termination
Context	configure fwd-path-ext fpe number application vxlan router-instance string
Tree	router-instance
Default	Base
Introduced	22.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure fwd-path-ext fpe number description string
Tree	description
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

multi-path

Synopsis	Enable the multi-path context
Context	configure fwd-path-ext fpe number multi-path
Tree	multi-path
Description	Commands in this context configure a multipath FPE that can contain multiple PXC ports or LAGs of PXC ports.
Notes	The following elements are part of a choice: multi-path or path .
Introduced	21.10.R1
Platforms	All

path [path-id] number

Synopsis	Enter the path list instance
Context	configure fwd-path-ext fpe number multi-path path number
Tree	path
Description	Commands in this context configure a multipath FPE forwarding path. A single path in a multipath FPE can contain a single PXC port or a LAG of PXC ports.
Introduced	21.10.R1
Platforms	All

[path-id] number

Synopsis	Multipath FPE forwarding path ID
Context	configure fwd-path-ext fpe number multi-path path number
Tree	path
Range	1 to 64
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

pxc reference

Synopsis	Dedicated PXC ID used by the FPE path
Context	configure fwd-path-ext fpe number multi-path path number pxc reference
Tree	pxc
Reference	configure port-xc pxc number
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	21.10.R1
Platforms	All

xc-lag-a reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	configure fwd-path-ext fpe number multi-path path number xc-lag-a reference
Tree	xc-lag-a
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate xc-lag-a with the LAG containing either supports.a or supports.b. The system does not enforce a match between xc-lag-a and the LAG ID containing supports.a.
Reference	configure lag string
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	21.10.R1
Platforms	All

xc-lag-b reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	configure fwd-path-ext fpe number multi-path path number xc-lag-b reference
Tree	xc-lag-b
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate xc-lag-b with the LAG containing either supports.a or supports.b. The system does not enforce a match between xc-lag-b and the LAG ID containing supports.b.
Reference	configure lag string
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	21.10.R1

Platforms All

path

Synopsis Enter the **path** context

Context **configure fwd-path-ext fpe number path**

Tree [path](#)

Notes The following elements are part of a choice: **multi-path** or **path**.

Introduced 16.0.R1

Platforms All

pxc reference

Synopsis Dedicated PXC ID used by the FPE path

Context **configure fwd-path-ext fpe number path pxc reference**

Tree [pxc](#)

Reference **configure port-xc pxc number**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R1

Platforms All

xc-lag-a reference

Synopsis PXC LAG identifier dedicated to the FPE path

Context **configure fwd-path-ext fpe number path xc-lag-a reference**

Tree [xc-lag-a](#)

Description This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-a** with the LAG containing either supports.a or supports.b. The system does not enforce a match between **xc-lag-a** and the LAG ID containing supports.a.

Reference **configure lag string**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R4

Platforms All

xc-lag-b reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	configure fwd-path-ext fpe <i>number</i> path xc-lag-b <i>reference</i>
Tree	xc-lag-b
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate xc-lag-b with the LAG containing either <i>supports.a</i> or <i>supports.b</i> . The system does not enforce a match between xc-lag-b and the LAG ID containing <i>supports.b</i> .
Reference	configure lag <i>string</i>
Notes	The following elements are part of a choice: pxc or (xc-lag-a and xc-lag-b).
Introduced	16.0.R4
Platforms	All

sdp-id-range

Synopsis	Enable the sdp-id-range context
Context	configure fwd-path-ext sdp-id-range
Tree	sdp-id-range
Description	<p>Commands in this context configure the SDP ID range used by the FPE based PW port and VXLAN termination applications.</p> <p>Each configured FPE-based PW port is associated with two internal SDPs (one in each direction) whose IDs are allocated from the configured SDP ID range. When the FPE is associated with VXLAN termination, an internal SDP is allocated from the configured SDP ID range and is used for R-VPLS services that terminate VXLAN IPv6. A spoke SDP per VXLAN IPv6 R-VPLS service is created on that SDP for egress processing of the packets. The SDP ID range cannot be modified if any of its IDs are currently in use.</p>
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the SDP ID range
Context	configure fwd-path-ext sdp-id-range end <i>number</i>
Tree	end
Range	1 to 32767
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

start number

Synopsis Lower bound of the SDP ID range

Context **configure fwd-path-ext sdp-id-range start number**

Tree [start](#)

Range 1 to 32767

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

3.19 group-encryption commands

```
configure
- group-encryption
- apply-groups reference
- apply-groups-exclude reference
- encryption-keygroup number
- active-outbound-security-association reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-algorithm keyword
- description string
- encryption-algorithm keyword
- keygroup-name string
- security-association number
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- encryption-key string
- group-encryption-label number
```

3.19.1 group-encryption command descriptions

group-encryption

Synopsis	Enter the group-encryption context
Context	configure group-encryption
Tree	group-encryption
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup [*id*] *number*

Synopsis	Enter the encryption-keygroup list instance
Context	configure group-encryption encryption-keygroup <i>number</i>
Tree	encryption-keygroup
Max. Instances	127
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	Encryption key group ID
Context	configure group-encryption encryption-keygroup <i>number</i>
Tree	encryption-keygroup
Range	1 to 127
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-outbound-security-association *reference*

Synopsis	SPI to use for egressing packets for the key group
Context	configure group-encryption encryption-keygroup <i>number</i> active-outbound-security-association <i>reference</i>

Tree	active-outbound-security-association
Reference	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hashing algorithm used for the authentication function
Context	configure group-encryption encryption-keygroup <i>number</i> authentication-algorithm <i>keyword</i>
Tree	authentication-algorithm
Default	sha256
Options	sha256, sha512
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure group-encryption encryption-keygroup <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm for encryption on ESP
Context	configure group-encryption encryption-keygroup <i>number</i> encryption-algorithm <i>keyword</i>

Tree	encryption-algorithm
Default	aes128
Options	aes128, aes256
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keygroup-name *string*

Synopsis	Key group name
Context	configure group-encryption encryption-keygroup <i>number</i> keygroup-name <i>string</i>
Tree	keygroup-name
String Length	0 to 64
Default	
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-association [[security-parameter-index](#)] *number*

Synopsis	Enter the security-association list instance
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Tree	security-association
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[security-parameter-index](#)] *number*

Synopsis	Security Parameter Index (SPI)
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i>
Tree	security-association
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 115
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	configure group-encryption encryption-keygroup <i>number</i> security-association <i>number</i> encryption-key <i>string</i>
Tree	encryption-key
String Length	1 to 71
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption-label *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network-wide unique MPLS label for group encryption
Context	configure group-encryption group-encryption-label <i>number</i>

Tree	group-encryption-label
Range	32 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.20 ipsec commands

```

configure
- ipsec
  - apply-groups reference
  - apply-groups-exclude reference
  - cert-profile string
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - entry number
    - apply-groups reference
    - apply-groups-exclude reference
    - cert string
    - key string
    - rsa-signature keyword
    - send-chain
      - ca-profile reference
  - client-db string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - client-name string
      - credential
        - pre-shared-key string
      - identification
        - idi
          - any boolean
          - fqdn string
          - fqdn-suffix string
          - ipv4-prefix string
          - ipv4-prefix-any boolean
          - ipv6-prefix string
          - ipv6-prefix-any boolean
          - rfc822 string
          - rfc822-suffix string
        - peer-ip-prefix
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ipv4-only boolean
          - ipv6-only boolean
      - private-interface string
      - private-service-name string
      - ts-list string
      - tunnel-template number
    - description string
  - match-list
    - idi boolean
    - peer-ip-prefix boolean
  - ike-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - dpd
    - interval number
    - max-retries number
    - reply-only boolean
  - ike-transform reference

```


configure ipsec ike-policy ike-version-1

- **ike-version-1**
 - **auth-method** *keyword*
 - **ike-mode** *keyword*
 - **own-auth-method** *keyword*
 - **ph1-responder-delete-notify** *boolean*
- **ike-version-2**
 - **auth-method** *keyword*
 - **auto-eap-method** *keyword*
 - **ikev2-fragment**
 - **mtu** *number*
 - **reassemble-timeout** *number*
 - **own-auth-method** *keyword*
 - **own-auto-eap-method** *keyword*
 - **send-idr-after-eap-success** *boolean*
- **ipsec-lifetime** *number*
- **limit-init-exchange**
 - **admin-state** *keyword*
 - **reduced-max-exchange-timeout** (*number* | *keyword*)
- **lockout**
 - **block** (*number* | *keyword*)
 - **duration** *number*
 - **failed-attempts** *number*
 - **max-port-per-ip** *number*
- **match-peer-id-to-cert** *boolean*
- **nat-traversal**
 - **force** *boolean*
 - **force-keep-alive** *boolean*
 - **keep-alive-interval** *number*
- **pfs**
 - **dh-group** *keyword*
- **relay-unsolicited-cfg-attribute**
 - **internal-ip4-address** *boolean*
 - **internal-ip4-dns** *boolean*
 - **internal-ip4-netmask** *boolean*
 - **internal-ip6-address** *boolean*
 - **internal-ip6-dns** *boolean*
- **ike-transform** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dh-group** *keyword*
 - **ike-auth-algorithm** *keyword*
 - **ike-encryption-algorithm** *keyword*
 - **ike-prf-algorithm** *keyword*
 - **isakmp-lifetime** *number*
- **ipsec-transform** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **esp-auth-algorithm** *keyword*
 - **esp-encryption-algorithm** *keyword*
 - **extended-sequence-number** *boolean*
 - **ipsec-lifetime** *number*
 - **pfs-dh-group** *keyword*
- **ipsec-transport-mode-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **key-exchange**
 - **dynamic**
 - **auto-establish** *boolean*
 - **cert**
 - **cert-profile** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **primary** *keyword*

configure ipsec ipsec-transport-mode-profile key-exchange dynamic cert status-verify secondary

```

    - secondary keyword
    - trust-anchor-profile reference
  - id
    - fqdn string
    - ipv4 string
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - max-history-key-records
    - esp number
    - ike number
  - replay-window number
- radius
  - accounting-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - include-radius-attribute
    - acct-stats boolean
    - called-station-id boolean
    - calling-station-id boolean
    - framed-ip-addr boolean
    - framed-ipv6-prefix boolean
    - nas-identifier boolean
    - nas-ip-addr boolean
    - nas-port-id boolean
  - radius-server-policy reference
  - update-interval
    - jitter number
    - value number
  - authentication-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - include-radius-attribute
    - called-station-id boolean
    - calling-station-id boolean
    - client-cert-subject-key-id boolean
    - nas-identifier boolean
    - nas-ip-addr boolean
    - nas-port-id boolean
  - password string
  - radius-server-policy reference
- show-ipsec-keys boolean
- static-sa string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - algorithm keyword
    - key string
  - description string
  - direction keyword
  - protocol keyword
  - spi number
- trust-anchor-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - trust-anchor reference
- ts-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - local
    - entry number
    - address
      - prefix (ipv4-prefix | ipv6-prefix)

```

configure ipsec ts-list local entry address range

```

- range
  - begin (ipv4-address-no-zone | ipv6-address-no-zone)
  - end (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- protocol
  - any
  - id
    - icmp
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
    - icmp6
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
    - mipv6
      - opaque
      - port-range
        - begin number
        - end number
    - protocol-id-with-any-port (keyword | number)
  - sctp
    - opaque
    - port-range
      - begin number
      - end number
  - tcp
    - opaque
    - port-range
      - begin number
      - end number
  - udp
    - opaque
    - port-range
      - begin number
      - end number
- remote
  - entry number
    - address
      - prefix (ipv4-prefix | ipv6-prefix)
      - range
        - begin (ipv4-address-no-zone | ipv6-address-no-zone)
        - end (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - protocol
      - any
      - id
        - icmp
          - opaque
          - port-range
            - begin-icmp-code number
            - begin-icmp-type number
            - end-icmp-code number
            - end-icmp-type number
        - icmp6
          - opaque

```

configure ipsec ts-list remote entry protocol id icmp6 port-range

- **port-range**
 - **begin-icmp-code** *number*
 - **begin-icmp-type** *number*
 - **end-icmp-code** *number*
 - **end-icmp-type** *number*
- **mipv6**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **protocol-id-with-any-port** (*keyword* | *number*)
- **sctp**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **tcp**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **udp**
 - **opaque**
 - **port-range**
 - **begin** *number*
 - **end** *number*
- **tunnel-template** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-df-bit** *boolean*
 - **copy-traffic-class-upon-decapsulation** *boolean*
 - **description** *string*
 - **encapsulated-ip-mtu** *number*
 - **icmp-generation**
 - **frag-required**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
 - **icmp6-generation**
 - **pkt-too-big**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
 - **ignore-default-route** *boolean*
 - **ip-mtu** *number*
 - **ipsec-transform** *reference*
 - **pmtu-discovery-aging** *number*
 - **private-tcp-mss-adjust** *number*
 - **propagate-pmtu-v4** *boolean*
 - **propagate-pmtu-v6** *boolean*
 - **public-tcp-mss-adjust** (*number* | *keyword*)
 - **replay-window** *number*
 - **sp-reverse-route** *keyword*

3.20.1 ipsec command descriptions

ipsec

Synopsis	Enter the ipsec context
Context	configure ipsec
Tree	ipsec
Description	Commands in this context configure Internet Protocol Security (IPsec) commands.
Introduced	16.0.R4
Platforms	All

cert-profile [[name](#)] *string*

Synopsis	Enter the cert-profile list instance
Context	configure ipsec cert-profile <i>string</i>
Tree	cert-profile
Description	Commands in this context configure the certificate profile.
Max. Instances	10200
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[name\]](#) *string*

Synopsis	Certificate profile name
Context	configure ipsec cert-profile <i>string</i>
Tree	cert-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the certificate profile
----------	---

Context	configure ipsec cert-profile <i>string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure ipsec cert-profile <i>string entry number</i>
Tree	entry
Description	Commands in this context configure the certificate profile entry.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	Certificate profile entry ID
Context	configure ipsec cert-profile <i>string entry number</i>
Tree	entry
Range	1 to 8
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert *string*

Synopsis	File name of the imported certificate for the entry
Context	configure ipsec cert-profile <i>string entry number cert string</i>
Tree	cert
String Length	1 to 95
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key string

Synopsis File name of the imported key used for authentication
 Context **configure ipsec cert-profile string entry number key string**
 Tree [key](#)
 String Length 1 to 95
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rsa-signature keyword

Synopsis Signature scheme for the RSA key
 Context **configure ipsec cert-profile string entry number rsa-signature keyword**
 Tree [rsa-signature](#)
 Default pkcs1
 Options pkcs1, pss
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-chain

Synopsis Enter the **send-chain** context
 Context **configure ipsec cert-profile string entry number send-chain**
 Tree [send-chain](#)
 Description Commands in this context allow the system to send additional CA certificates to the peer. These additional CA certificates must be in the certificate chain of the certificate specified by the **cert** command in the same entry.
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ca-profile reference

Synopsis CA certificate to send to the peer
 Context **configure ipsec cert-profile string entry number send-chain ca-profile reference**

Tree	ca-profile
Reference	configure system security pki ca-profile <i>string</i>
Max. Instances	7
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-db [[name](#)] *string*

Synopsis	Enter the client-db list instance
Context	configure ipsec client-db <i>string</i>
Tree	client-db
Max. Instances	1000
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPsec client database name
Context	configure ipsec client-db <i>string</i>
Tree	client-db
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the client database
Context	configure ipsec client-db <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client [id] *number*

Synopsis Enter the **client** list instance

Context **configure ipsec client-db** *string client number*

Tree [client](#)

Description Commands in this context configure the IPsec client entry in the client database.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis Client ID

Context **configure ipsec client-db** *string client number*

Tree [client](#)

Range 1 to 8000

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the database client

Context **configure ipsec client-db** *string client number admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client name
Context	configure ipsec client-db <i>string</i> client <i>number</i> client-name <i>string</i>
Tree	client-name
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

credential**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the credential context
Context	configure ipsec client-db <i>string</i> client <i>number</i> credential
Tree	credential
Description	Commands in this context authenticate peers.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key used to authenticate peers
Context	configure ipsec client-db <i>string</i> client <i>number</i> credential pre-shared-key <i>string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

identification



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the identification context
Context	configure ipsec client-db <i>string client number identification</i>
Tree	identification
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idi



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the idi context
Context	configure ipsec client-db <i>string client number identification idi</i>
Tree	idi
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any IDi value as a match
Context	configure ipsec client-db <i>string client number identification idi any boolean</i>
Tree	any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi fqdn string
Tree	fqdn
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn-suffix string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN suffix used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi fqdn-suffix string
Tree	fqdn-suffix
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-prefix string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 prefix used as the match criteria for the IDi
Context	configure ipsec client-db string client number identification idi ipv4-prefix string

Tree	ipv4-prefix
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-prefix-any *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 prefix as a match for the IDi
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi ipv4-prefix-any <i>boolean</i>
Tree	ipv4-prefix-any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 prefix used as the match criteria for the IDi
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi ipv6-prefix <i>string</i>
Tree	ipv6-prefix
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-prefix-any *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 prefix as a match for the IDi
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi ipv6-prefix-any <i>boolean</i>
Tree	ipv6-prefix-any
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rfc822 *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address (RFC 822) used as match criteria for IDi
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi rfc822 <i>string</i>
Tree	rfc822
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rfc822-suffix *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address domain (RFC 822) as IDi match criteria
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification idi rfc822-suffix <i>string</i>
Tree	rfc822-suffix
String Length	0 to 255

Notes	The following elements are part of a mandatory choice: any , fqdn , fqdn-suffix , ipv4-prefix , ipv4-prefix-any , ipv6-prefix , ipv6-prefix-any , rfc822 , or rfc822-suffix .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-ip-prefix



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the peer-ip-prefix context
Context	configure ipsec client-db <i>string</i> <i>client</i> <i>number</i> <i>identification</i> peer-ip-prefix
Tree	peer-ip-prefix
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix* | *ipv6-prefix*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP prefix used as the match criteria
Context	configure ipsec client-db <i>string</i> <i>client</i> <i>number</i> <i>identification</i> peer-ip-prefix ip-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	ip-prefix
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 address as a match
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification peer-ip-prefix ipv4-only <i>boolean</i>
Tree	ipv4-only
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 address as a match
Context	configure ipsec client-db <i>string</i> client <i>number</i> identification peer-ip-prefix ipv6-only <i>boolean</i>
Tree	ipv6-only
Notes	The following elements are part of a mandatory choice: ip-prefix , ipv4-only , or ipv6-only .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private interface name used for tunnel setup
Context	configure ipsec client-db <i>string</i> client <i>number</i> private-interface <i>string</i>
Tree	private-interface
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-service-name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the private service used for tunnel setup
Context	configure ipsec client-db <i>string</i> client <i>number</i> private-service-name <i>string</i>
Tree	private-service-name
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic selector list used by the tunnel
Context	configure ipsec client-db <i>string</i> client <i>number</i> ts-list <i>string</i>
Tree	ts-list
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-template *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel template ID
Context	configure ipsec client-db <i>string</i> client <i>number</i> tunnel-template <i>number</i>
Tree	tunnel-template
Range	1 to 2048
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure ipsec client-db <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match-list

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the match-list context
Context	configure ipsec client-db <i>string</i> match-list
Tree	match-list
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

idi *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use IDi type in the IPsec client matching process
Context	configure ipsec client-db <i>string</i> match-list idi <i>boolean</i>
Tree	idi
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-ip-prefix *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the peer tunnel IP address in the matching process
Context	configure ipsec client-db <i>string match-list peer-ip-prefix boolean</i>
Tree	peer-ip-prefix
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy [*id*] *number*

Synopsis	Enter the ike-policy list instance
Context	configure ipsec ike-policy <i>number</i>
Tree	ike-policy
Description	Commands in this context configure an Internet Key Exchange (IKE) policy.
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IKE policy ID
Context	configure ipsec ike-policy <i>number</i>
Tree	ike-policy
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
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Context	configure ipsec ike-policy number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dpd

Synopsis	Enable the dpd context
Context	configure ipsec ike-policy number dpd
Tree	dpd
Description	Commands in this context configure the dead peer detection mechanism.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval number

Synopsis	DPD interval
Context	configure ipsec ike-policy number dpd interval number
Tree	interval
Description	This command specifies the DPD interval. Because more time is necessary to determine if there is incoming traffic, the actual time needed to bring down the tunnel is larger than the DPD interval multiplied by the value configured for maximum retry attempts.
Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-retries number

Synopsis	Maximum number of retries before the tunnel is removed
Context	configure ipsec ike-policy number dpd max-retries number
Tree	max-retries

Range	2 to 5
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reply-only *boolean*

Synopsis	Initiate DPD request for incoming ESP or IKE packets
Context	configure ipsec ike-policy <i>number</i> dpd reply-only <i>boolean</i>
Tree	reply-only
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-transform *reference*

Synopsis	IKE transform instance associated with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-transform <i>reference</i>
Tree	ike-transform
Description	This command specifies the IKE transform instance associated with the IKE policy. If multiple IDs are specified, the system selects an IKE transform based on the proposal of the peer. If the system is a tunnel initiator, it uses the configured IKE transform to generate the SA payload.
Reference	configure ipsec ike-transform <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-version-1

Synopsis	Enter the ike-version-1 context
Context	configure ipsec ike-policy <i>number</i> ike-version-1
Tree	ike-version-1
Description	Commands in this context configure the IKE version 1 mode of operation that the IKE policy uses.

Notes	The following elements are part of a choice: ike-version-1 or ike-version-2 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-version-1 auth-method <i>keyword</i>
Tree	auth-method
Default	psk
Options	psk, plain-psk-xauth
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-mode *keyword*

Synopsis	Mode of operation
Context	configure ipsec ike-policy <i>number</i> ike-version-1 ike-mode <i>keyword</i>
Tree	ike-mode
Default	main
Options	main, aggressive
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auth-method *keyword*

Synopsis	Authentication method used with policy on its own side
Context	configure ipsec ike-policy <i>number</i> ike-version-1 own-auth-method <i>keyword</i>
Tree	own-auth-method
Default	symmetric
Options	symmetric
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ph1-responder-delete-notify *boolean*

Synopsis	Send delete notification for IKEv1 phase 1 removal
Context	configure ipsec ike-policy <i>number</i> ike-version-1 ph1-responder-delete-notify <i>boolean</i>
Tree	ph1-responder-delete-notify
Description	When configured to true , a delete notification is sent to the peer when deleting an IKEv1 phase 1 SA for which it was the responder. When configured to false , no notification is sent.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-version-2

Synopsis	Enable the ike-version-2 context
Context	configure ipsec ike-policy <i>number</i> ike-version-2
Tree	ike-version-2
Description	Commands in this context configure the IKE version 2 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: ike-version-1 or ike-version-2 .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	configure ipsec ike-policy <i>number</i> ike-version-2 auth-method <i>keyword</i>
Tree	auth-method
Default	psk
Options	psk, cert, psk-radius, cert-radius, eap, auto-eap-radius, auto-eap
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-eap-method *keyword*

Synopsis	Authentication method used for the remote peer
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Context	configure ipsec ike-policy <i>number ike-version-2 auto-eap-method keyword</i>
Tree	auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the remote peer.
Default	cert
Options	psk, cert, psk-or-cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ikev2-fragment

Synopsis	Enable the ikev2-fragment context
Context	configure ipsec ike-policy <i>number ike-version-2 ikev2-fragment</i>
Tree	ikev2-fragment
Description	Commands in this context configure IKEv2 protocol level fragmentation (RFC 7383).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum size of the IKEv2 packet
Context	configure ipsec ike-policy <i>number ike-version-2 ikev2-fragment mtu number</i>
Tree	mtu
Range	512 to 9000
Default	1500
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassembly-timeout *number*

Synopsis	Timeout for reassembly of IKEv2 message fragments
Context	configure ipsec ike-policy <i>number ike-version-2 ikev2-fragment reassembly-timeout number</i>
Tree	reassembly-timeout

Range	1 to 5
Default	2
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auth-method *keyword*

Synopsis	Authentication method used with IKE policy on own side
Context	configure ipsec ike-policy <i>number</i> ike-version-2 own-auth-method <i>keyword</i>
Tree	own-auth-method
Default	symmetric
Options	symmetric, psk, cert, eap-only
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

own-auto-eap-method *keyword*

Synopsis	Authentication method used on its own side
Context	configure ipsec ike-policy <i>number</i> ike-version-2 own-auto-eap-method <i>keyword</i>
Tree	own-auto-eap-method
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the peer.
Default	cert
Options	psk, cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-idr-after-eap-success *boolean*

Synopsis	Send IDr payload in last IKE authentication response
Context	configure ipsec ike-policy <i>number</i> ike-version-2 send-idr-after-eap-success <i>boolean</i>
Tree	send-idr-after-eap-success
Description	When configured to true , the Identification Responder (IDr) payload is added in the last IKE authentication response after an Extensible Authentication Protocol (EAP) Success packet is received.

When configured to **false**, the IDr payload is not included in the last IKE.

Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-lifetime *number*

Synopsis	Lifetime of the Phase 2 IKE key
Context	configure ipsec ike-policy <i>number</i> ipsec-lifetime <i>number</i>
Tree	ipsec-lifetime
Range	1200 to 31536000
Default	3600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

limit-init-exchange

Synopsis	Enter the limit-init-exchange context
Context	configure ipsec ike-policy <i>number</i> limit-init-exchange
Tree	limit-init-exchange
Description	Commands in this context limit the number of ongoing IKEv2 initial exchanges per tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of limiting initial IKE exchanges
Context	configure ipsec ike-policy <i>number</i> limit-init-exchange admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reduced-max-exchange-timeout (*number* | *keyword*)

Synopsis	Maximum timeout for in-progress initial IKE exchange
Context	configure ipsec ike-policy <i>number</i> limit-init-exchange reduced-max-exchange-timeout (<i>number</i> <i>keyword</i>)
Tree	reduced-max-exchange-timeout
Description	This command configures the maximum timeout for the in-progress initial IKE exchange. If a new IKEv2 IKE_SA_INIT request is received when there is an ongoing IKEv2 initial exchange from the same peer, the timeout value of the existing exchange is set to this specified value. If the none option is configured for this command, the timeout value remains unchanged.
Range	2 to 60
Default	2
Units	seconds
Options	none
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lockout

Synopsis	Enable the lockout context
Context	configure ipsec ike-policy <i>number</i> lockout
Tree	lockout
Description	Commands in this context specify the lockout mechanism for the IPsec tunnel. These commands apply only when the system acts as a tunnel responder.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block (*number* | *keyword*)

Synopsis	Time a client is blocked for failed authentications
Context	configure ipsec ike-policy <i>number</i> lockout block (<i>number</i> <i>keyword</i>)
Tree	block
Description	This command configures the time the client is blocked if the number of failed authentications exceeds the configured value within the specified duration.
Range	1 to 1440
Default	10

Units	minutes
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	Time interval for failed attempts threshold
Context	configure ipsec ike-policy <i>number</i> lockout duration <i>number</i>
Tree	duration
Description	This command specifies the time interval in which the configured failed authentication count must be exceeded to trigger a lockout.
Range	1 to 60
Default	5
Units	minutes
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failed-attempts *number*

Synopsis	Maximum failed authentications allowed in the duration
Context	configure ipsec ike-policy <i>number</i> lockout failed-attempts <i>number</i>
Tree	failed-attempts
Range	1 to 64
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-port-per-ip *number*

Synopsis	Maximum number of ports allowed under same IP address
Context	configure ipsec ike-policy <i>number</i> lockout max-port-per-ip <i>number</i>
Tree	max-port-per-ip
Description	This command configures the maximum number of ports allowed under the same IP address. When the threshold is exceeded and the client is locked out, all ports behind the IP address are blocked.

Range	1 to 32000
Default	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

match-peer-id-to-cert *boolean*

Synopsis	Check IKE peer ID during certificate authentication
Context	configure ipsec ike-policy <i>number</i> match-peer-id-to-cert <i>boolean</i>
Tree	match-peer-id-to-cert
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-traversal

Synopsis	Enable the nat-traversal context
Context	configure ipsec ike-policy <i>number</i> nat-traversal
Tree	nat-traversal
Description	Commands in this context configure the Network Address Translation Traversal (NAT-T) functionality.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force *boolean*

Synopsis	Enable NAT-T in forced mode
Context	configure ipsec ike-policy <i>number</i> nat-traversal force <i>boolean</i>
Tree	force
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force-keep-alive *boolean*

Synopsis	Continue sending keepalive packets (no expiry)
Context	configure ipsec ike-policy <i>number</i> nat-traversal force-keep-alive <i>boolean</i>
Tree	force-keep-alive
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Keepalive interval for NAT-T
Context	configure ipsec ike-policy <i>number</i> nat-traversal keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Range	120 to 600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pfs

Synopsis	Enable the pfs context
Context	configure ipsec ike-policy <i>number</i> pfs
Tree	pfs
Description	Commands in this context configure perfect forward secrecy on the IPsec tunnel using the policy. PFS provides for a new Diffie-Hellman (DH) key exchange each time the Security Association (SA) key is renegotiated. When the SA key expires, another key is generated (if the SA remains up).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	configure ipsec ike-policy <i>number</i> pfs dh-group <i>keyword</i>
Tree	dh-group

Description	This command specifies which DH group to use for calculating session keys. More bits provide a higher level of security, but require more processing.
Default	group-2
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

relay-unsolicited-cfg-attribute

Synopsis	Enter the relay-unsolicited-cfg-attribute context
Context	configure ipsec ike-policy number relay-unsolicited-cfg-attribute
Tree	relay-unsolicited-cfg-attribute
Description	Commands in this context configure attributes returned from the source (such as a RADIUS server) that are returned to the IKEv2 remote-access tunnel client regardless if the client has requested the attribute in the CFG_REQUEST payload.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-address *boolean*

Synopsis	Return the IPv4 address from the source to the client
Context	configure ipsec ike-policy number relay-unsolicited-cfg-attribute internal-ip4-address boolean
Tree	internal-ip4-address
Description	When configured to true , the system returns the IPv4 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-dns *boolean*

Synopsis	Return IPv4 DNS server address from source to client
Context	configure ipsec ike-policy number relay-unsolicited-cfg-attribute internal-ip4-dns boolean
Tree	internal-ip4-dns

Description	When configured to true , the system returns the IPv4 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip4-netmask *boolean*

Synopsis	Return the IPv4 netmask from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip4-netmask <i>boolean</i>
Tree	internal-ip4-netmask
Description	When configured to true , the system returns the IPv4 netmask from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the netmask in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip6-address *boolean*

Synopsis	Return the IPv6 address from the source to the client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip6-address <i>boolean</i>
Tree	internal-ip6-address
Description	When configured to true , the system returns the IPv6 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

internal-ip6-dns *boolean*

Synopsis	Return IPv6 DNS server address from source to client
Context	configure ipsec ike-policy <i>number</i> relay-unsolicited-cfg-attribute internal-ip6-dns <i>boolean</i>

Tree	internal-ip6-dns
Description	When configured to true , the system returns the IPv6 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-transform [*id*] *number*

Synopsis	Enter the ike-transform list instance
Context	configure ipsec ike-transform <i>number</i>
Tree	ike-transform
Max. Instances	4096
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IKE transform instance ID
Context	configure ipsec ike-transform <i>number</i>
Tree	ike-transform
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dh-group *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	configure ipsec ike-transform <i>number</i> dh-group <i>keyword</i>
Tree	dh-group
Default	group-2
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-auth-algorithm *keyword*

Synopsis IKE authentication algorithm for IKE transform instance

Context **configure** [ipsec](#) [ike-transform](#) *number* [ike-auth-algorithm](#) *keyword*

Tree [ike-auth-algorithm](#)

Default sha-1

Options md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-encryption-algorithm *keyword*

Synopsis IKE encryption algorithm for the IKE transform instance

Context **configure** [ipsec](#) [ike-transform](#) *number* [ike-encryption-algorithm](#) *keyword*

Tree [ike-encryption-algorithm](#)

Default aes-128

Options des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm16, aes256-gcm8, aes256-gcm16

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-prf-algorithm *keyword*

Synopsis PRF algorithm for the IKE transform instance

Context **configure** [ipsec](#) [ike-transform](#) *number* [ike-prf-algorithm](#) *keyword*

Tree [ike-prf-algorithm](#)

Description This command specifies the pseudo-random function algorithm used for IKE security association.

If an encrypted algorithm such as AES-GCM is used for the IKE encryption algorithm, **same-as-auth** cannot be used for the IKE PRF algorithm.

Default same-as-auth

Options md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, same-as-auth

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isakmp-lifetime *number*

Synopsis	Phase 1 lifetime for the IKE transform instance
Context	configure ipsec ike-transform <i>number isakmp-lifetime number</i>
Tree	isakmp-lifetime
Range	1200 to 31536000
Default	86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform [*id*] *number*

Synopsis	Enter the ipsec-transform list instance
Context	configure ipsec ipsec-transform <i>number</i>
Tree	ipsec-transform
Description	Commands in this context create an IPsec transform policy. IPsec transform policies can be shared. A change to the IPsec transform is allowed at any time. The change does not impact tunnels that have been established until they are renegotiated. If the change is required immediately, the tunnel must be cleared (reset) for force renegotiation.
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	IPsec transform policy ID
Context	configure ipsec ipsec-transform <i>number</i>
Tree	ipsec-transform
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp-auth-algorithm *keyword*

Synopsis	Encapsulating Security Payload (ESP) authentication
Context	configure ipsec ipsec-transform <i>number</i> esp-auth-algorithm <i>keyword</i>
Tree	esp-auth-algorithm
Description	This command specifies the hashing algorithm used for the authentication function. Both ends of a manually configured tunnel must share the same configuration for the IPsec tunnel to enter the operational state.
Default	sha-1
Options	null, md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp-encryption-algorithm *keyword*

Synopsis	Encryption algorithm for the IPsec transform session
Context	configure ipsec ipsec-transform <i>number</i> esp-encryption-algorithm <i>keyword</i>
Tree	esp-encryption-algorithm
Description	<p>This command specifies the encryption algorithm used for the IPsec session. Encryption applies only to ESP configurations. If encryption is not defined, ESP is not used.</p> <p>Both ends of a manually configured tunnel must share the same encryption algorithm for the IPsec tunnel to enter the operational state.</p> <p>When AES-GCM or AES-GMAC is configured:</p> <ul style="list-style-type: none"> the authentication encryption must be set to auth-encryption the system does not include the authentication algorithm in the ESP proposal of the SA payload IPsec transform cannot be used for manual keying
Default	aes-128
Options	null, des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm12, aes128-gcm16, aes192-gcm8, aes192-gcm12, aes192-gcm16, aes256-gcm8, aes256-gcm12, aes256-gcm16, null-aes128-gmac, null-aes192-gmac, null-aes256-gmac
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

extended-sequence-number *boolean*

Synopsis	Enable extended sequence numbering support
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Context	configure ipsec ipsec-transform <i>number</i> <i>extended-sequence-number</i> <i>boolean</i>
Tree	extended-sequence-number
Description	When configured to true , this command enables 64-bit extended sequence numbering support. This numbering is used for high throughput CHILD_SA to avoid frequent re-keying caused by sequence numbering wrap around. When configured to false , only 32-bit sequence numbering is supported.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-lifetime *number*

Synopsis	Phase 2 lifetime for the IPsec transform session
Context	configure ipsec ipsec-transform <i>number</i> ipsec-lifetime <i>number</i>
Tree	ipsec-lifetime
Description	This command configures the lifetime of the Phase 2 IKE key. When unconfigured, the value is inherited from the IPsec lifetime configured in the corresponding IKE policy configured for the same IPsec gateway or IPsec tunnel.
Range	1200 to 31536000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pfs-dh-group *keyword*

Synopsis	Diffie-Hellman group used for PFS compilation
Context	configure ipsec ipsec-transform <i>number</i> pfs-dh-group <i>keyword</i>
Tree	pfs-dh-group
Description	This command specifies the DH group used for Perfect Forward Secrecy (PFS) compilation during CHILD_SA rekeying. When unconfigured, the value is inherited from the DH group value from the IPsec gateway or IPsec tunnel.
Options	none, group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transport-mode-profile [[name](#)] *string*

Synopsis	Enter the ipsec-transport-mode-profile list instance
Context	configure ipsec ipsec-transport-mode-profile <i>string</i>
Tree	ipsec-transport-mode-profile
Description	Commands in this context configure IPsec-specific attributes that allow an IP tunnel (for example, GRE) to be protected by using IPsec transport mode.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	IPsec transport mode profile name string
Context	configure ipsec ipsec-transport-mode-profile <i>string</i>
Tree	ipsec-transport-mode-profile
Description	This command specifies the name of the IPsec transport mode profile.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure ipsec ipsec-transport-mode-profile <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key-exchange

Synopsis	Enter the key-exchange context
Context	configure ipsec ipsec-transport-mode-profile <i>string key-exchange</i>
Tree	key-exchange

Description	Commands in this context configure the key exchange used each time the Security Association (SA) key is renegotiated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic

Synopsis	Enter the dynamic context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic
Tree	dynamic
Description	Commands in this context configure dynamic keying for the transport mode profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert

Synopsis	Enter the cert context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert
Tree	cert
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cert-profile *reference*

Synopsis	Certificate profile name
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Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i>
Tree	cert-profile
Reference	configure ipsec cert-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

status-verify

Synopsis	Enter the status-verify context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify
Tree	status-verify
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary

Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crl
Options	crl, ocsp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default	none
Options	none, crl, ocsp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor-profile *reference*

Synopsis	Trust anchor profile name
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic cert trust-anchor-profile <i>reference</i>
Tree	trust-anchor-profile
Reference	configure ipsec trust-anchor-profile <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enter the id context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic id
Tree	id
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation.

The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fqdn string

Synopsis FQDN used as the local ID IKE type
 Context **configure ipsec ipsec-transport-mode-profile string key-exchange dynamic id fqdn string**
 Tree [fqdn](#)
 String Length 1 to 255
 Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 string

Synopsis IPv4 as the local ID type
 Context **configure ipsec ipsec-transport-mode-profile string key-exchange dynamic id ipv4 string**
 Tree [ipv4](#)
 Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis IPv6 used as the local IKE ID type
 Context **configure ipsec ipsec-transport-mode-profile string key-exchange dynamic id ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)**
 Tree [ipv6](#)
 Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike-policy *reference*

Synopsis	IKE policy ID
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pre-shared-key *string*

Synopsis	Pre-shared key for IKE authentication
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> key-exchange dynamic pre-shared-key <i>string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-history-key-records

Synopsis	Enter the max-history-key-records context
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> max-history-key-records
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esp *number*

Synopsis	Maximum number of recent records
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> max-history-key-records esp <i>number</i>
Tree	esp
Range	1 to 48
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ike *number*

Synopsis	Maximum number of historical IKE key records
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> max-history-key-records ike <i>number</i>
Tree	ike
Range	1 to 3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number*

Synopsis	Anti-replay window size
Context	configure ipsec ipsec-transport-mode-profile <i>string</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512

Units	packets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	configure ipsec radius
Tree	radius
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy [[name](#)] *string*

Synopsis	Enter the accounting-policy list instance
Context	configure ipsec radius accounting-policy <i>string</i>
Tree	accounting-policy
Description	Commands in this context configure RADIUS accounting policies to collect accounting statistics.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	RADIUS accounting policy name
Context	configure ipsec radius accounting-policy <i>string</i>
Tree	accounting-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis	Enter the include-radius-attribute context
Context	configure ipsec radius accounting-policy string include-radius-attribute
Tree	include-radius-attribute
Description	Commands in this context specify the RADIUS attributes that are to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

acct-stats *boolean*

Synopsis	Include accounting attributes in RADIUS packets
Context	configure ipsec radius accounting-policy string include-radius-attribute acct-stats boolean
Tree	acct-stats
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	configure ipsec radius accounting-policy string include-radius-attribute called-station-id boolean
Tree	called-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	configure ipsec radius accounting-policy string include-radius-attribute calling-station-id boolean
Tree	calling-station-id
Default	false

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ip-addr *boolean*

Synopsis Include the Framed-IP-Address attribute
Context **configure** [ipsec](#) [radius](#) [accounting-policy](#) *string* [include-radius-attribute](#) [framed-ip-addr](#) *boolean*
Tree [framed-ip-addr](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis Include the Framed-IPv6-Prefix attribute
Context **configure** [ipsec](#) [radius](#) [accounting-policy](#) *string* [include-radius-attribute](#) [framed-ipv6-prefix](#) *boolean*
Tree [framed-ipv6-prefix](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier *boolean*

Synopsis Include the NAS-Identifier attribute
Context **configure** [ipsec](#) [radius](#) [accounting-policy](#) *string* [include-radius-attribute](#) [nas-identifier](#) *boolean*
Tree [nas-identifier](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-addr *boolean*

Synopsis Include the NAS-IP-Address attribute

Context	configure ipsec radius accounting-policy <i>string</i> include-radius-attribute nas-ip-addr <i>boolean</i>
Tree	nas-ip-addr
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	configure ipsec radius accounting-policy <i>string</i> include-radius-attribute nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	configure ipsec radius accounting-policy <i>string</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

update-interval

Synopsis	Enter the update-interval context
Context	configure ipsec radius accounting-policy <i>string</i> update-interval
Tree	update-interval
Description	Commands in this context determine how RADIUS interim-update packets are sent for IKEv2 remote-access tunnels.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

jitter *number*

Synopsis	Jitter interval for sending each interim-update packet
Context	configure ipsec radius accounting-policy <i>string update-interval jitter number</i>
Tree	jitter
Description	This command specifies the jitter interval for the RADIUS interim-update packets. When unconfigured, the system uses 10% of the update interval value.
Range	0 to 3600
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Update interval of the RADIUS accounting data
Context	configure ipsec radius accounting-policy <i>string update-interval value number</i>
Tree	value
Description	This command configures the update interval of the RADIUS accounting data. If a value of 0 is configured, no intermediate updates are sent.
Range	0 5 to 259200
Default	10
Units	minutes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy [*name*] *string*

Synopsis	Enter the authentication-policy list instance
Context	configure ipsec radius authentication-policy <i>string</i>
Tree	authentication-policy
Description	Commands in this context configure the RADIUS authentication policy associated with the IPsec gateway.
Max. Instances	100
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS authentication policy name
Context **configure ipsec radius authentication-policy** *string*
Tree [authentication-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-radius-attribute

Synopsis Enter the **include-radius-attribute** context
Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute**
Tree [include-radius-attribute](#)
Description Commands in this context specify the RADIUS attributes to be included in the RADIUS Authentication-Request messages.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis Include the Called-Station-Id attribute
Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute called-station-id** *boolean*
Tree [called-station-id](#)
Default false
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

calling-station-id *boolean*

Synopsis Include the Calling-Station-Id attribute

Context	configure ipsec radius authentication-policy string include-radius-attribute calling-station-id boolean
Tree	calling-station-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

client-cert-subject-key-id boolean

Synopsis	Include the Subject Key Identifier
Context	configure ipsec radius authentication-policy string include-radius-attribute client-cert-subject-key-id boolean
Tree	client-cert-subject-key-id
Description	When configured to true , the Subject Key Identifier of the certificate of the peer is included in the RADIUS Access-Request packet as VSA: Alc-Subject-Key-Identifier. See the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR RADIUS Attributes Reference Guide</i> for more information.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-identifier boolean

Synopsis	Include the NAS-Identifier attribute
Context	configure ipsec radius authentication-policy string include-radius-attribute nas-identifier boolean
Tree	nas-identifier
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-ip-addr boolean

Synopsis	Include the NAS-IP-Address attribute
Context	configure ipsec radius authentication-policy string include-radius-attribute nas-ip-addr boolean
Tree	nas-ip-addr

Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nas-port-id *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	configure ipsec radius authentication-policy <i>string</i> include-radius-attribute nas-port-id <i>boolean</i>
Tree	nas-port-id
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	Password used in RADIUS access requests
Context	configure ipsec radius authentication-policy <i>string</i> password <i>string</i>
Tree	password
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy *reference*

Synopsis	Referenced RADIUS server policy
Context	configure ipsec radius authentication-policy <i>string</i> radius-server-policy <i>reference</i>
Tree	radius-server-policy
Reference	configure aaa radius server-policy <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

show-ipsec-keys *boolean*

Synopsis	Show IPsec IKE and ESP keys in the output
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Context	configure ipsec show-ipsec-keys <i>boolean</i>
Tree	show-ipsec-keys
Description	When configured to true , this command allows IPsec keys to be (optionally) included in the display output of certain debug and admin commands. When configured to false , the key display is disabled.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

static-sa [[name](#)] *string*

Synopsis	Enter the static-sa list instance
Context	configure ipsec static-sa <i>string</i>
Tree	static-sa
Max. Instances	1000
Introduced	16.0.R6
Platforms	All

[name] *string*

Synopsis	Static SA name
Context	configure ipsec static-sa <i>string</i>
Tree	static-sa
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R6
Platforms	All

authentication

Synopsis	Enable the authentication context
Context	configure ipsec static-sa <i>string authentication</i>
Tree	authentication
Introduced	16.0.R6

Platforms All

algorithm *keyword*

Synopsis Authentication algorithm used for an IPsec manual SA

Context **configure ipsec static-sa** *string authentication algorithm keyword*

Tree [algorithm](#)

Options md5, sha1

Notes This element is mandatory.

Introduced 16.0.R6

Platforms All

key *string*

Synopsis Key used for the authentication algorithm

Context **configure ipsec static-sa** *string authentication key string*

Tree [key](#)

String Length 1 to 54

Notes This element is mandatory.

Introduced 16.0.R6

Platforms All

description *string*

Synopsis Text description

Context **configure ipsec static-sa** *string description string*

Tree [description](#)

String Length 1 to 32

Introduced 16.0.R6

Platforms All

direction *keyword*

Synopsis Direction to which the static SA entry can be applied

Context **configure ipsec static-sa** *string direction keyword*

Tree	direction
Default	bidirectional
Options	inbound, outbound, bidirectional
Introduced	16.0.R6
Platforms	All

protocol *keyword*

Synopsis	IPsec protocol used with the static SA
Context	configure ipsec static-sa <i>string</i> protocol <i>keyword</i>
Tree	protocol
Default	esp
Options	ah, esp
Introduced	16.0.R6
Platforms	All

spi *number*

Synopsis	Security Parameter Index (SPI) for the static SA
Context	configure ipsec static-sa <i>string</i> spi <i>number</i>
Tree	spi
Description	<p>This command specifies the SPI for the static SA.</p> <p>When the direction command is set to inbound, the SPI is used to look up the instruction to verify and decrypt the incoming IPsec packets. When the direction command is set to outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.</p> <p>When unconfigured, the static SA cannot be used.</p>
Range	256 to 16383
Introduced	16.0.R6
Platforms	All

trust-anchor-profile [[name](#)] *string*

Synopsis	Enter the trust-anchor-profile list instance
Context	configure ipsec trust-anchor-profile <i>string</i>

Tree	trust-anchor-profile
Max. Instances	10128
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Trust anchor profile name for IPsec tunnel or gateway
Context	configure ipsec trust-anchor-profile <i>string</i>
Tree	trust-anchor-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

trust-anchor [[ca-profile](#)] *reference*

Synopsis	Add a list entry for trust-anchor
Context	configure ipsec trust-anchor-profile <i>string trust-anchor reference</i>
Tree	trust-anchor
Description	Commands in this context configure a CA profile as a trust anchor CA.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ca-profile] *reference*

Synopsis	Name of the CA profile as a trust anchor profile
Context	configure ipsec trust-anchor-profile <i>string trust-anchor reference</i>
Tree	trust-anchor
Reference	configure system security pki ca-profile <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ts-list [*name*] *string*

Synopsis Enter the **ts-list** list instance

Context **configure ipsec ts-list** *string*

Tree [ts-list](#)

Description Commands in this context configure Traffic Selector (TS) settings.

Max. Instances 32768

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Traffic Selector (TS) list name

Context **configure ipsec ts-list** *string*

Tree [ts-list](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis Enter the **local** context

Context **configure ipsec ts-list** *string* **local**

Tree [local](#)

Description Commands in this context configure a local TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure ipsec ts-list <i>string local entry number</i>
Tree	entry
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	TS list entry ID
Context	configure ipsec ts-list <i>string local entry number</i>
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enable the address context
Context	configure ipsec ts-list <i>string local entry number address</i>
Tree	address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	configure ipsec ts-list <i>string local entry number address prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
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Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> address range
Tree	range
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> address range begin (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	begin
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> address range end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enable the protocol context
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol
Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any

Synopsis	Match any protocol ID
Context	configure ipsec ts-list <i>string local entry number protocol any</i>
Tree	any
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enable the id context
Context	configure ipsec ts-list <i>string local entry number protocol id</i>
Tree	id
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure ipsec ts-list <i>string local entry number protocol id icmp</i>
Tree	icmp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id icmp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string local entry number protocol id icmp port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code number

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list string local entry number protocol id icmp port-range begin-icmp-code number
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type number

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list string local entry number protocol id icmp port-range begin-icmp-type number
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range end-icmp-code number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp port-range end-icmp-type number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6

Synopsis	Enter the icmp6 context
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6</i>
Tree	icmp6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6 opaque</i>

Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string local entry number protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code number

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list string local entry number protocol id icmp6 port-range begin-icmp-code number
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type number

Synopsis	Lower bound of the ICMP type range
Context	configure ipsec ts-list string local entry number protocol id icmp6 port-range begin-icmp-type number
Tree	begin-icmp-type
Range	0 to 255

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6 port-range end-icmp-code number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>string local entry number protocol id icmp6 port-range end-icmp-type number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mipv6

Synopsis	Enter the mipv6 context
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6</i>
Tree	mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 port-range begin number</i>
Tree	begin
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id mipv6 port-range end number</i>

Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-id-with-any-port (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol id protocol-id-with-any-port (<i>keyword</i> <i>number</i>)
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp

Synopsis	Enter the sctp context
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol id sctp
Tree	sctp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string</i> local entry <i>number</i> protocol id sctp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.

Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number</i> protocol id sctp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin number

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number</i> protocol id sctp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string local entry number</i> protocol id sctp port-range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure ipsec ts-list <i>string local entry number protocol id tcp</i>
Tree	tcp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id tcp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string local entry number protocol id tcp port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id tcp port-range begin number</i>
Tree	begin
Range	0 to 65535

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string local entry number protocol id tcp port-range end number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure ipsec ts-list <i>string local entry number protocol id udp</i>
Tree	udp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string local entry number protocol id udp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string local entry number protocol id udp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin number

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list string local entry number protocol id udp port-range begin number
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list string local entry number protocol id udp port-range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote

Synopsis	Enter the remote context
Context	configure ipsec ts-list string remote
Tree	remote

Description	Commands in this context configure a remote TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure ipsec ts-list <i>string remote entry number</i>
Tree	entry
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	TS list entry ID
Context	configure ipsec ts-list <i>string remote entry number</i>
Tree	entry
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis	Enable the address context
Context	configure ipsec ts-list <i>string remote entry number address</i>
Tree	address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	configure ipsec ts-list <i>string remote entry number address prefix (ipv4-prefix ipv6-prefix)</i>

Tree	prefix
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> address range
Tree	range
Notes	The following elements are part of a mandatory choice: prefix or range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> address range begin (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	begin
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> address range end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	end
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol

Synopsis	Enable the protocol context
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol</i>
Tree	protocol
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any

Synopsis	Match any protocol ID
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol any</i>
Tree	any
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

id

Synopsis	Enable the id context
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol id</i>
Tree	id
Notes	The following elements are part of a mandatory choice: any or id .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis	Enter the icmp context
Context	configure ipsec ts-list <i>string</i> <i>remote entry number protocol id icmp</i>
Tree	icmp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp port-range</i>
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp port-range begin-icmp-code number</i>
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis	Lower bound of the ICMP type range
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Context	configure ipsec ts-list <i>string remote entry number protocol id icmp port-range begin-icmp-type number</i>
Tree	begin-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis	Upper bound of the ICMP code range
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp port-range end-icmp-code number</i>
Tree	end-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis	Upper bound of the ICMP type range
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp port-range end-icmp-type number</i>
Tree	end-icmp-type
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6

Synopsis	Enter the icmp6 context
Context	configure ipsec ts-list <i>string remote entry number protocol id icmp6</i>
Tree	icmp6

Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list string remote entry number protocol id icmp6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string remote entry number protocol id icmp6 port-range
Tree	port-range
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	configure ipsec ts-list string remote entry number protocol id icmp6 port-range begin-icmp-code number
Tree	begin-icmp-code
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin-icmp-type *number*

Synopsis Lower bound of the ICMP type range

Context **configure ipsec ts-list** *string* **remote entry** *number* **protocol id icmp6 port-range begin-icmp-type** *number*

Tree [begin-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-code *number*

Synopsis Upper bound of the ICMP code range

Context **configure ipsec ts-list** *string* **remote entry** *number* **protocol id icmp6 port-range end-icmp-code** *number*

Tree [end-icmp-code](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end-icmp-type *number*

Synopsis Upper bound of the ICMP type range

Context **configure ipsec ts-list** *string* **remote entry** *number* **protocol id icmp6 port-range end-icmp-type** *number*

Tree [end-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mipv6

Synopsis	Enter the mipv6 context
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6
Tree	mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6 opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6 port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6 port-range begin <i>number</i>
Tree	begin

Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id mipv6 port-range end <i>number</i>
Tree	end
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

protocol-id-with-any-port (*keyword* | *number*)

Synopsis	Protocol ID that accepts any port value
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id protocol-id-with-any-port (<i>keyword</i> <i>number</i>)
Tree	protocol-id-with-any-port
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sctp

Synopsis	Enter the sctp context
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id sctp
Tree	sctp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mipv6 , protocol-id-with-any-port , sctp , tcp , or udp .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id sctp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id sctp port-range
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id sctp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list string remote entry number protocol id sctp port-range end number
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp

Synopsis	Enter the tcp context
Context	configure ipsec ts-list string remote entry number protocol id tcp
Tree	tcp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list string remote entry number protocol id tcp opaque
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list string remote entry number protocol id tcp port-range

Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id tcp port-range begin <i>number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id tcp port-range end <i>number</i>
Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	configure ipsec ts-list <i>string</i> remote entry <i>number</i> protocol id udp
Tree	udp
Notes	The following elements are part of a mandatory choice: icmp , icmp6 , mip6 , protocol-id-with-any-port , sctp , tcp , or udp .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

opaque

Synopsis	Support OPAQUE ports
Context	configure ipsec ts-list <i>string remote entry number protocol id udp opaque</i>
Tree	opaque
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-range

Synopsis	Enable the port-range context
Context	configure ipsec ts-list <i>string remote entry number protocol id udp port-range</i>
Tree	port-range
Notes	The following elements are part of a choice: opaque or port-range .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

begin *number*

Synopsis	Lower bound of the port range
Context	configure ipsec ts-list <i>string remote entry number protocol id udp port-range begin number</i>
Tree	begin
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the port range
Context	configure ipsec ts-list <i>string remote entry number protocol id udp port-range end number</i>

Tree	end
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-template [*id*] *number*

Synopsis	Enter the tunnel-template list instance
Context	configure ipsec tunnel-template <i>number</i>
Tree	tunnel-template
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	Tunnel template ID
Context	configure ipsec tunnel-template <i>number</i>
Tree	tunnel-template
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

clear-df-bit *boolean*

Synopsis	Clear the Do-not-Fragment (DF) bit
Context	configure ipsec tunnel-template <i>number</i> clear-df-bit <i>boolean</i>
Tree	clear-df-bit
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

copy-traffic-class-upon-decapsulation *boolean*

Synopsis	Enable traffic class copy upon decapsulation
Context	configure <i>ipsec tunnel-template number</i> copy-traffic-class-upon-decapsulation <i>boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). When configured to false , the system does not copy the traffic class from the outer IP packet to the payload IP packet header upon decapsulation.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>ipsec tunnel-template number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulated-ip-mtu *number*

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure <i>ipsec tunnel-template number</i> encapsulated-ip-mtu <i>number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-generation

Synopsis	Enter the icmp-generation context
Context	configure ipsec tunnel-template <i>number</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

frag-required

Synopsis	Enter the frag-required context
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of sending ICMP messages
Context	configure ipsec tunnel-template <i>number</i> icmp-generation frag-required admin-state <i>keyword</i>
Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval number

Synopsis	Interval for sending ICMP messages
Context	configure ipsec tunnel-template number icmp-generation frag-required interval number
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count number

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure ipsec tunnel-template number icmp-generation frag-required message-count number
Tree	message-count
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp6-generation

Synopsis	Enter the icmp6-generation context
Context	configure ipsec tunnel-template number icmp6-generation
Tree	icmp6-generation
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pkt-too-big

Synopsis	Enter the pkt-too-big context
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big
Tree	pkt-too-big
Description	Commands in this context configure values for the ICMPv6 Packet Too Big (PTB) messages. The system sends PTB messages if an IPv6 packet is received on the private side that is larger than 1280 bytes and also exceeds the private MTU of the tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Maximum interval during which PTB messages can be sent
Context	configure ipsec tunnel-template <i>number</i> icmp6-generation pkt-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-count *number*

Synopsis	Max ICMPv6 messages that can be sent during interval
----------	--

Context	configure ipsec tunnel-template number icmp6-generation pkt-too-big message-count number
Tree	message-count
Range	10 to 1000
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ignore-default-route *boolean*

Synopsis	Ignore any full range traffic selector in TSi
Context	configure ipsec tunnel-template number ignore-default-route boolean
Tree	ignore-default-route
Description	When configured to true , any full range traffic selector is ignored when creating a reverse route. When configured to false , no CHILD_SA is created if any full range traffic selector is included in TSi.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis	Maximum size of the IP MTU for the payload packets
Context	configure ipsec tunnel-template number ip-mtu number
Tree	ip-mtu
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-transform *reference*

Synopsis	IPsec transform ID for the tunnel template
Context	configure ipsec tunnel-template number ipsec-transform reference
Tree	ipsec-transform

Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pmtu-discovery-aging *number*

Synopsis	Aging out time of the learned path MTU
Context	configure ipsec tunnel-template <i>number</i> pmtu-discovery-aging <i>number</i>
Tree	pmtu-discovery-aging
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	New TCP MSS value on the private side
Context	configure ipsec tunnel-template <i>number</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the new (adjusted) TCP MSS value of TCP SYN packets on the private side. When unconfigured, the MSS value is derived from the received TCP SYN packet on the private side.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v4 *boolean*

Synopsis	Enable propagation of the path MTU to IPv4 hosts
----------	--

Context	configure ipsec tunnel-template <i>number</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

propagate-pmtu-v6 *boolean*

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure ipsec tunnel-template <i>number</i> propagate-pmtu-v6 <i>boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number* | *keyword*)

Synopsis	New TCP MSS value on the public side
Context	configure ipsec tunnel-template <i>number</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Description	This command specifies the new (adjusted) TCP MSS value for the TCP traffic in an IPsec tunnel which is sent from the public network to the private network. The system can use this value to adjust or insert the MSS option in the TCP SYN packet. When unconfigured, the MSS value is derived from the public MTU and IPsec overhead.
Range	512 to 9000
Units	octets
Options	auto
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replay-window *number*

Synopsis	Anti-replay window size for the tunnel template
Context	configure ipsec tunnel-template <i>number</i> replay-window <i>number</i>
Tree	replay-window
Range	32 64 128 256 512
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sp-reverse-route *keyword*

Synopsis	Reverse route creation method in private service
Context	configure ipsec tunnel-template <i>number</i> sp-reverse-route <i>keyword</i>
Tree	sp-reverse-route
Description	This command allows the system to automatically create a reverse route based on dynamic LAN-to-LAN tunnel's TSi in private service.
Default	none
Options	none, use-security-policy
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.21 isa commands

```

configure
- isa
  - application-assurance-group number
  - aa-sub-scale keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup
    - esa number vm number
    - isa string
  - description string
  - divert-fc keyword
  - failure-mode keyword
  - flow-attribute string
  - http-enrich-max-packet-size number
  - isa-capacity-cost-high-threshold number
  - isa-capacity-cost-low-threshold number
  - minimum-isa-generation number
  - overload-cut-through boolean
  - overload-sub-quarantine
    - admin-state keyword
  - primary
    - esa number vm number
    - isa string
  - qos
    - egress
      - from-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
      - to-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
    - shared-resources
      - gtp-tunnel-database number
      - tcp-advanced-functions number
      - url-filter-web-service-cache number
  - statistics
    - stats-type keyword
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
  - transit-prefix-limits
    - ipv4-entries number
    - ipv4-remote-entries number
    - ipv6-entries number
    - ipv6-remote-entries number

```

configure isa application-assurance-group vm-traffic-distribute-by-ip

- **vm-traffic-distribute-by-ip** *boolean*
- **vm-traffic-distribute-by-teid** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **lns-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **esa** *reference* **vm** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **mda** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **port-policy** *reference*
- **nat-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **esa** *reference* **vm** *reference*
 - **log**
 - **suppress-lsn-events** *boolean*
 - **suppress-lsn-sub-blocks-free** *boolean*
 - **mda** *string*
 - **radius-accounting-policy** *reference*
 - **redundancy**
 - **active-mda-limit** *number*
 - **inter-chassis**
 - **flow-timeout-on-switchover** *number*
 - **ip-mtu** *number*
 - **keepalive**
 - **dropcount** *number*
 - **interval** *number*
 - **local-ip-range-start** *string*
 - **monitor-oper-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
 - **monitor-port** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
 - **preferred** *boolean*
 - **remote-ip-range-start** *string*
 - **replication-threshold** *number*
 - **router-instance** *string*
 - **sync** *boolean*
 - **intra-chassis**
 - **active-active**
 - **failed-mda-limit** *number*
 - **active-standby**
 - **l2aware-bypass**
 - **scaling-profile** *keyword*
 - **session-limits**
 - **reserved** *number*
 - **upnp-mappings** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **tunnel-group** *number*

configure isa tunnel-group admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backup** *string*
- **description** *string*
- **ipsec-responder-only** *boolean*
- **isa-scale-mode** *keyword*
- **multi-active**
 - **active-isa-number** *number*
 - **esa** *reference* **vm** *reference*
 - **isa** *string*
 - **member-pool** *reference*
- **primary** *string*
- **reassembly**
 - **max-wait-time** *number*
- **stats-collection**
 - **isa-dp-cpu-usage** *boolean*
 - **strict-esp-sequence-number-ordering** *boolean*
- **tunnel-member-pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **esa** *reference* **vm** *reference*
 - **isa** *string*
- **video-group** *number*
 - **admin-state** *keyword*
 - **analyzer** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fcc-server** *boolean*
 - **local-rt-server** *boolean*
 - **mda** *string*
 - **resv-ret** *number*
 - **stream-selection** *boolean*
 - **vapp** *reference* **vapp-id** *reference*
 - **watermark**
 - **bandwidth**
 - **fcc** *number*
 - **ret** *number*
 - **total** *number*
 - **session**
 - **fcc** *number*
 - **ret** *number*
 - **total** *number*
- **wlan-gw-group** *number*
 - **active-iom-limit** *number*
 - **active-mdm-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **distributed-sub-mgmt**
 - **isa-aa-group** *reference*
 - **isa-aa-oversubscription-factor** *number*
 - **esa** *reference* **vm** *reference*
 - **iom** *reference*
 - **mda** *string*
 - **nat**
 - **log**
 - **suppress-lsn-events** *boolean*
 - **suppress-lsn-sub-blocks-free** *boolean*
 - **lsn** *boolean*
 - **radius-accounting-policy** *reference*

configure isa wlan-gw-group nat session-limits

- **session-limits**
 - **reserved** *number*
 - **upnp-mappings** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
- **port-policy** *reference*
- **redundancy** *keyword*
- **scaling-profile** *keyword*
- **tunnel-port-policy** *reference*
- **watermarks**
 - **mark** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **high** *number*
 - **low** *number*

3.21.1 isa command descriptions

isa

Synopsis	Enter the isa context
Context	configure isa
Tree	isa
Introduced	16.0.R1
Platforms	All

application-assurance-group [[aa-group-id](#)] *number*

Synopsis	Enter the application-assurance-group list instance
Context	configure isa application-assurance-group <i>number</i>
Tree	application-assurance-group
Max. Instances	7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[aa-group-id\]](#) *number*

Synopsis	AA group ID
Context	configure isa application-assurance-group <i>number</i>
Tree	application-assurance-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-scale *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AA group sub-scale
Context	configure isa application-assurance-group number aa-sub-scale keyword
Tree	aa-sub-scale
Default	residential
Options	residential, vpn, mobile-gateway, lightweight-internet, residential-8k, residential-16k, residential-32k, residential-64k, vpn-1k, vpn-2k, vpn-4k, vpn-8k, mobile-gateway-1m, mobile-gateway-2m, lightweight-internet-512k
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of this AA group
Context	configure isa application-assurance-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

backup

Synopsis	Enter the backup context
Context	configure isa application-assurance-group number backup
Tree	backup
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [esa-id] number vm number

Synopsis	Add a list entry for esa
Context	configure isa application-assurance-group number backup esa number vm number
Tree	esa
Max. Instances	1
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[esa-id] *number*

Synopsis ESA ID

Context **configure** isa application-assurance-group *number* backup esa *number* vm *number*

Tree [esa](#)

Range 1 to 16

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm *number*

Synopsis VM ID within the ESA

Context **configure** isa application-assurance-group *number* backup esa *number* vm *number*

Tree [esa](#)

Range 1 to 4

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa [[mda-id](#)] *string*

Synopsis Add a list entry for **isa**

Context **configure** isa application-assurance-group *number* backup isa *string*

Tree [isa](#)

Max. 1

Instances

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis MDA/ISA ID

Context	configure isa application-assurance-group number backup isa string
Tree	isa
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure isa application-assurance-group number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

divert-fc keyword

Synopsis	Diverted traffic forwarding class
Context	configure isa application-assurance-group number divert-fc keyword
Tree	divert-fc
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failure-mode keyword

Synopsis	Mode of operation when no ISA-AA cards are available
Context	configure isa application-assurance-group number failure-mode keyword
Tree	failure-mode
Options	fail-to-open
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-attribute [[flow-attribute-name](#)] *string*

Synopsis	Add a list entry for flow-attribute
Context	configure isa application-assurance-group number flow-attribute <i>string</i>
Tree	flow-attribute
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[flow-attribute-name] *string*

Synopsis	Flow attribute name
Context	configure isa application-assurance-group number flow-attribute <i>string</i>
Tree	flow-attribute
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

http-enrich-max-packet-size *number*

Synopsis	Maximum HTTP enriched packet size
Context	configure isa application-assurance-group number http-enrich-max-packet-size <i>number</i>
Tree	http-enrich-max-packet-size
Range	576 to 9212
Default	1500
Units	octets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-capacity-cost-high-threshold *number*

Synopsis	Capacity cost high threshold for the ISA-AA group
Context	configure isa application-assurance-group number isa-capacity-cost-high-threshold <i>number</i>
Tree	isa-capacity-cost-high-threshold
Range	0 to 4294967294

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-capacity-cost-low-threshold *number*

Synopsis Capacity cost low threshold for the ISA-AA group
Context **configure** [isa application-assurance-group number](#) [isa-capacity-cost-low-threshold number](#)
Tree [isa-capacity-cost-low-threshold](#)
Range 1 to 4294967295
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum-isa-generation *number*

Synopsis Minimum ISA generation for this AA group
Context **configure** [isa application-assurance-group number](#) [minimum-isa-generation number](#)
Tree [minimum-isa-generation](#)
Range 1 to 2
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-cut-through *boolean*

Synopsis Enable cut-through of traffic if ISA is in overload
Context **configure** [isa application-assurance-group number](#) [overload-cut-through boolean](#)
Tree [overload-cut-through](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overload-sub-quarantine

Synopsis Enter the **overload-sub-quarantine** context
Context **configure** [isa application-assurance-group number](#) [overload-sub-quarantine](#)
Tree [overload-sub-quarantine](#)

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of overload subscriber quarantine
Context	configure isa application-assurance-group number overload-sub-quarantine admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis	Enter the primary context
Context	configure isa application-assurance-group number primary
Tree	primary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [[esa-id](#)] *number vm number*

Synopsis	Add a list entry for esa
Context	configure isa application-assurance-group number primary esa number vm number
Tree	esa
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[esa-id] *number*

Synopsis	ESA ID
Context	configure isa application-assurance-group number primary esa number vm number
Tree	esa
Range	1 to 16

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm number

Synopsis	VM ID within the ESA
Context	configure isa application-assurance-group number primary esa number vm number
Tree	esa
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa [mda-id] string

Synopsis	Add a list entry for isa
Context	configure isa application-assurance-group number primary isa string
Tree	isa
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] string

Synopsis	MDA/ISA ID
Context	configure isa application-assurance-group number primary isa string
Tree	isa
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis	Enter the qos context
Context	configure isa application-assurance-group number qos

Tree	qos
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis	Enter the egress context
Context	configure isa application-assurance-group number qos egress
Tree	egress
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

from-subscriber

Synopsis	Enter the from-subscriber context
Context	configure isa application-assurance-group number qos egress from-subscriber
Tree	from-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-pool

Synopsis	Enter the buffer-pool context
Context	configure isa application-assurance-group number qos egress from-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group
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Context	configure isa application-assurance-group number qos egress from-subscriber buffer-pool name string
Tree	name
String Length	1 to 32
Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

resv-cbs number

Synopsis	Reserved CBS for this ISA group
Context	configure isa application-assurance-group number qos egress from-subscriber buffer-pool resv-cbs number
Tree	resv-cbs
Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slope-policy reference

Synopsis	Slope policy name
Context	configure isa application-assurance-group number qos egress from-subscriber buffer-pool slope-policy reference
Tree	slope-policy
Reference	configure qos slope-policy string
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy reference

Synopsis	Port scheduler policy name
Context	configure isa application-assurance-group number qos egress from-subscriber port-scheduler-policy reference
Tree	port-scheduler-policy
Reference	configure qos port-scheduler-policy string
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue-policy *reference*

Synopsis Queue policy name

Context **configure** isa application-assurance-group *number* qos egress from-subscriber queue-policy *reference*

Tree [queue-policy](#)

Reference **configure** qos network-queue *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-high-wmark (*number* | *keyword*)

Synopsis High watermark for weighted average utilization

Context **configure** isa application-assurance-group *number* qos egress from-subscriber wa-shared-high-wmark (*number* | *keyword*)

Tree [wa-shared-high-wmark](#)

Range 1 to 100

Default max

Units percent

Options max

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-low-wmark *number*

Synopsis Low watermark for the weighted average utilization

Context **configure** isa application-assurance-group *number* qos egress from-subscriber wa-shared-low-wmark *number*

Tree [wa-shared-low-wmark](#)

Range 0 to 99

Default 0

Units percent

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-subscriber

Synopsis	Enter the to-subscriber context
Context	configure isa application-assurance-group number qos egress to-subscriber
Tree	to-subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

buffer-pool

Synopsis	Enter the buffer-pool context
Context	configure isa application-assurance-group number qos egress to-subscriber buffer-pool
Tree	buffer-pool
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group
Context	configure isa application-assurance-group number qos egress to-subscriber buffer-pool name <i>string</i>
Tree	name
String Length	1 to 32
Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

resv-cbs *number*

Synopsis	Reserved CBS for this ISA group
Context	configure isa application-assurance-group number qos egress to-subscriber buffer-pool resv-cbs <i>number</i>
Tree	resv-cbs

Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool slope-policy reference
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis	Port scheduler policy name
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber port-scheduler-policy reference
Tree	port-scheduler-policy
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue-policy *reference*

Synopsis	Queue policy name
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-high-wmark (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber wa-shared-high-wmark (<i>number</i> <i>keyword</i>)
Tree	wa-shared-high-wmark
Range	1 to 100
Default	max
Units	percent
Options	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wa-shared-low-wmark *number*

Synopsis	Low watermark for the weighted average utilization
Context	configure isa application-assurance-group <i>number</i> qos egress to-subscriber wa-shared-low-wmark <i>number</i>
Tree	wa-shared-low-wmark
Range	0 to 99
Default	0
Units	percent
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

shared-resources

Synopsis	Enter the shared-resources context
Context	configure isa application-assurance-group <i>number</i> shared-resources
Tree	shared-resources
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gtp-tunnel-database *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Percentage of allocated memory resources
Context	configure isa application-assurance-group <i>number</i> shared-resources gtp-tunnel-database <i>number</i>
Tree	gtp-tunnel-database
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tcp-advanced-functions *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation of resources for TCP advanced functions
Context	configure isa application-assurance-group <i>number</i> shared-resources tcp-advanced-functions <i>number</i>
Tree	tcp-advanced-functions
Range	1 to 100
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-filter-web-service-cache *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of shared memory as a percentage
Context	configure isa application-assurance-group <i>number</i> shared-resources url-filter-web-service-cache <i>number</i>
Tree	url-filter-web-service-cache
Range	1 to 100

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

statistics

Synopsis Enter the **statistics** context
 Context **configure** isa application-assurance-group number statistics
 Tree [statistics](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stats-type [isa-aa-group-stats-type] keyword

Synopsis Enter the **stats-type** list instance
 Context **configure** isa application-assurance-group number statistics stats-type keyword
 Tree [stats-type](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[isa-aa-group-stats-type] keyword

Synopsis Group performance statistics type
 Context **configure** isa application-assurance-group number statistics stats-type keyword
 Tree [stats-type](#)
 Options aa-performance
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy reference

Synopsis Accounting policy ID used by AA
 Context **configure** isa application-assurance-group number statistics stats-type keyword
[accounting-policy](#) reference
 Tree [accounting-policy](#)

Reference	configure log accounting-policy <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis	Enable the collection of statistics
Context	configure isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transit-prefix-limits

Synopsis	Enter the transit-prefix-limits context
Context	configure isa application-assurance-group <i>number</i> transit-prefix-limits
Tree	transit-prefix-limits
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-entries *number*

Synopsis	Limit of transit prefix IPv4 entries per AA group
Context	configure isa application-assurance-group <i>number</i> transit-prefix-limits ipv4-entries <i>number</i>
Tree	ipv4-entries
Range	1 to 16383
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4-remote-entries *number*

Synopsis	Limit of transit prefix IPv4 remote entries per group
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Context	configure isa application-assurance-group number transit-prefix-limits ipv4-remote-entries number
Tree	ipv4-remote-entries
Range	1 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-entries number

Synopsis	Limit of transit prefix IPv6 entries per AA group
Context	configure isa application-assurance-group number transit-prefix-limits ipv6-entries number
Tree	ipv6-entries
Range	1 to 8191
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-remote-entries number

Synopsis	Limit of transit prefix IPv6 remote entries per group
Context	configure isa application-assurance-group number transit-prefix-limits ipv6-remote-entries number
Tree	ipv6-remote-entries
Range	1 to 1023
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm-traffic-distribute-by-ip boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow packet distribution by IP address for virtual AA
Context	configure isa application-assurance-group number vm-traffic-distribute-by-ip boolean
Tree	vm-traffic-distribute-by-ip
Default	false

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vm-traffic-distribute-by-teid *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable load balancing of the traffic using TEID
Context	configure isa application-assurance-group <i>number</i> vm-traffic-distribute-by-teid <i>boolean</i>
Tree	vm-traffic-distribute-by-teid
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group [*id*] *number*

Synopsis	Enter the Ins-group list instance
Context	configure isa Ins-group <i>number</i>
Tree	Ins-group
Description	Commands in this context configure the ISA L2TP Network Server (LNS) group.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	LNS group ID
Context	configure isa Ins-group <i>number</i>
Tree	Ins-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA LNS group
Context	configure <i>isa lns-group number admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>isa lns-group number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [[esa-id](#)] *reference vm reference*

Synopsis	Enter the esa list instance
Context	configure <i>isa lns-group number esa reference vm reference</i>
Tree	esa
Max. Instances	6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	ESA ID
Context	configure <i>isa lns-group number esa reference vm reference</i>
Tree	esa
Reference	configure <i>esa number</i>
Notes	This element is part of a list key.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm reference

Synopsis	VM ID
Context	configure isa lns-group number esa reference vm reference
Tree	esa
Reference	configure esa number vm number
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

drain boolean

Synopsis	Redirect subscribers to other ESA VMs
Context	configure isa lns-group number esa reference vm reference drain boolean
Tree	drain
Description	<p>When configured to true, the ESA VM redirects new subscribers to use other ESA VMs. The drain function gracefully redirects subscribers to other ESA VMs and does not allow new subscribers to use the ESA VM. As the existing subscribers terminate their sessions, the ESA VM no longer services any subscribers and can be decommissioned gracefully.</p> <p>When configured to false, the ESA VM is set to the normal working operational state and accepts new LNS subscribers.</p>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mda [mda-id] string

Synopsis	Enter the mda list instance
Context	configure isa lns-group number mda string
Tree	mda
Description	Commands in this context configure an ISA LNS group MDA.

Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis	MDA ID for the ISA LNS group
Context	configure <i>isa lns-group number mda string</i>
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	Prevent new L2TP sessions from associating with ISA
Context	configure <i>isa lns-group number mda string drain boolean</i>
Tree	drain
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-policy *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy for the ISA LNS group
Context	configure <i>isa lns-group number port-policy reference</i>
Tree	port-policy
Reference	configure <i>port-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [*id*] *number*

Synopsis	Enter the nat-group list instance
Context	configure isa nat-group number
Tree	nat-group
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	NAT group ID
Context	configure isa nat-group number
Tree	nat-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the NAT group
Context	configure isa nat-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure isa nat-group number description string
Tree	description

String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [**esa-id**] *reference vm reference*

Synopsis Add a list entry for **esa**
 Context **configure isa nat-group number esa reference vm reference**
 Tree **esa**
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis Provisioned ESA ID
 Context **configure isa nat-group number esa reference vm reference**
 Tree **esa**
 Reference **configure esa number**
 Notes This element is part of a list key.
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis VM ID for the provisioned BB ISA
 Context **configure isa nat-group number esa reference vm reference**
 Tree **esa**
 Reference **configure esa number vm number**
 Notes This element is part of a list key.
 Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

log

Synopsis Enter the **log** context

Context **configure isa nat-group number log**
Tree **log**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-events *boolean*

Synopsis Suppress LSN events when RADIUS accounting is enabled
Context **configure isa nat-group number log suppress-lsn-events boolean**
Tree **suppress-lsn-events**
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-sub-blocks-free *boolean*

Synopsis Suppress LSN Free block and NAT pool block notification
Context **configure isa nat-group number log suppress-lsn-sub-blocks-free boolean**
Tree **suppress-lsn-sub-blocks-free**
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mda [**mda-id**] *string*

Synopsis Add a list entry for **mda**
Context **configure isa nat-group number mda string**
Tree **mda**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[mda-id] *string*

Synopsis MDA ID for ISA NAT group
Context **configure isa nat-group number mda string**

Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	configure isa nat-group <i>number</i> radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy
Reference	configure aaa radius isa-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure isa nat-group <i>number</i> redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-mda-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of active MS-ISAs in the NAT group
Context	configure isa nat-group <i>number</i> redundancy active-mda-limit <i>number</i>
Tree	active-mda-limit
Range	1 to 14
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inter-chassis

Synopsis Enable the **inter-chassis** context

Context **configure isa nat-group number redundancy inter-chassis**

Tree [inter-chassis](#)

Notes The following elements are part of a choice: **inter-chassis** or **intra-chassis**.

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-timeout-on-switchover *number*

Synopsis Flow timeout immediately following a switchover

Context **configure isa nat-group number redundancy inter-chassis flow-timeout-on-switchover number**

Tree [flow-timeout-on-switchover](#)

Description This command configures the initial flow timeout on the newly active node for the NAT group after a switchover. The timeout is in effect only if there is no traffic present over the flow; otherwise, the first packet over the flow resets the flow timeout to the originally configured value (under the NAT policy configuration).

This command configuration restricts the flow timeout to a portion of the originally configured value.

Range 1 to 50

Default 50

Units percent

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU for ISA-to-ISA communication

Context **configure isa nat-group number redundancy inter-chassis ip-mtu number**

Tree [ip-mtu](#)

Description This command configures the IP MTU size used to transport flow synchronization records between the ISAs. Multiple flow synchronization events can be packed into a single frame up to the IP MTU size.

Range	512 to 9000
Default	1500
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
Context	configure isa nat-group number redundancy inter-chassis keepalive
Tree	keepalive
Description	Commands in this context configure keepalive messages between the CPMs residing on different chassis and are used to detect the presence of the peering node. If the redundant peer connectivity is lost beyond the limit defined by the keepalive messages, each node in the redundant pair transitions to standalone mode. Keepalive messages use UDP transport.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dropcount *number*

Synopsis	Threshold for lost consecutive keepalive messages
Context	configure isa nat-group number redundancy inter-chassis keepalive dropcount number
Tree	dropcount
Description	This command configures the threshold for the number of consecutive keepalive messages that are lost between the redundant nodes before the connection is declared down. When the peer is considered unreachable, each node transitions to standalone mode.
Range	2 to 20
Default	2
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	Interval between two consecutive keepalive messages
Context	configure isa nat-group number redundancy inter-chassis keepalive interval number
Tree	interval

Description	This command configures the interval at which the keepalive messages are periodically sent between the redundant nodes (CPMs) to verify the presence of the peer. If peer connectivity is lost, each node transitions to standalone mode.
Range	2 to 250
Default	30
Units	deciseconds
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-ip-range-start *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Starting IP address for ISAs in the NAT group
Context	configure isa nat-group <i>number</i> redundancy inter-chassis local-ip-range-start <i>string</i>
Tree	local-ip-range-start
Description	This command configures the initial IP address for the ISAs in the NAT group. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial IP address is sent to the initial IP address from the remote IP range.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group [*oper-group*] *reference*

Synopsis	Enter the monitor-oper-group list instance
Context	configure isa nat-group <i>number</i> redundancy inter-chassis monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	Commands in this context specify monitoring settings for objects in an operational group, such as SAPs, BFD sessions, or VRRP sessions, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of the objects in the operational group influences the health of a NAT node in a redundant configuration.

Max. Instances	4
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[oper-group] reference

Synopsis	Operational group name
Context	configure isa nat-group number redundancy inter-chassis monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

health-drop number

Synopsis	Overall health drop of the NAT group on a state change
Context	configure isa nat-group number redundancy inter-chassis monitor-oper-group reference health-drop number
Tree	health-drop
Range	1 to 255
Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-port [port-id] string

Synopsis	Enter the monitor-port list instance
Context	configure isa nat-group number redundancy inter-chassis monitor-port string
Tree	monitor-port
Description	Commands in this context specify monitoring settings for a port carrying NAT traffic, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of a monitored port influences the health of a NAT node in a redundant configuration.
Max. Instances	16

Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[port-id] *string*

Synopsis	Port ID
Context	configure isa nat-group number redundancy inter-chassis monitor-port string
Tree	monitor-port
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	configure isa nat-group number redundancy inter-chassis monitor-port string health-drop number
Tree	health-drop
Range	1 to 255
Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred *boolean*

Synopsis	Set the preferred activity status for the node
Context	configure isa nat-group number redundancy inter-chassis preferred boolean
Tree	preferred
Description	<p>When configured to true, the system designates the node in a redundant NAT system with the preferred activity status. The preferred status comes into consideration only when both redundant nodes have equal health values. If the peer traffic-serving node has an equal health value but does not have the preferred designation, a switch of activity occurs to route traffic to the preferred node. The switchover could cause a brief interruption in traffic flow.</p> <p>When configured to false, the preferred designation is not set for the node.</p>
Default	false
Introduced	20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-ip-range-start *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Starting IP address for ISAs on the remote node

Context **configure isa nat-group number redundancy inter-chassis remote-ip-range-start string**

Tree [remote-ip-range-start](#)

Description This command configures the initial IP address for the ISAs in the NAT group on the remote node. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial local IP address is sent to the initial IP address from the remote IP range.

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

replication-threshold *number*

Synopsis Minimum time to wait before a NAT flow is synchronized

Context **configure isa nat-group number redundancy inter-chassis replication-threshold number**

Tree [replication-threshold](#)

Description This command configures the minimum time to wait before a NAT flow is replicated (synchronized) to the standby node.

Range 0 to 300

Default 20

Units seconds

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router instance for the ISA-to-ISA communication
Context	configure isa nat-group number redundancy inter-chassis router-instance string
Tree	router-instance
Description	This command specifies the routing instance through which ISAs on redundant nodes communicate with each other and synchronize their flow state.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync *boolean*

Synopsis	Synchronize NAT flows between nodes
Context	configure isa nat-group number redundancy inter-chassis sync boolean
Tree	sync
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intra-chassis

Synopsis	Enter the intra-chassis context
Context	configure isa nat-group number redundancy intra-chassis
Tree	intra-chassis
Notes	The following elements are part of a choice: inter-chassis or intra-chassis .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-active

Synopsis	Enter the active-active context
Context	configure isa nat-group number redundancy intra-chassis active-active
Tree	active-active
Notes	The following elements are part of a choice: active-active , active-standby , or l2aware-bypass .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

failed-mda-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum failed MDAs allowed in ICR for the NAT group
Context	configure isa nat-group number redundancy intra-chassis active-active failed-mda-limit number
Tree	failed-mda-limit
Range	1 to 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-standby



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Active-standby intra-chassis NAT redundancy model
Context	configure isa nat-group number redundancy intra-chassis active-standby
Tree	active-standby

Notes	The following elements are part of a choice: active-active , active-standby , or l2aware-bypass .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2aware-bypass



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	L2-aware-bypass NAT redundancy model
Context	configure isa nat-group <i>number</i> redundancy intra-chassis l2aware-bypass
Tree	l2aware-bypass
Notes	The following elements are part of a choice: active-active , active-standby , or l2aware-bypass .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scaling-profile *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Scaling profile for the NAT group
Context	configure isa nat-group <i>number</i> scaling-profile <i>keyword</i>
Tree	scaling-profile
Description	This command determines profiles for NAT scaling. Lower profile numbers allocate less resources, thus supporting lower scaling. Contact your Nokia representative for more information about NAT scaling figures in each profile.
Default	profile1

Options	profile1, profile2, profile3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis	Enter the session-limits context
Context	configure isa nat-group number session-limits
Tree	session-limits
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved number

Synopsis	Number of sessions reserved for prioritized sessions
Context	configure isa nat-group number session-limits reserved number
Tree	reserved
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp-mappings number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	configure isa nat-group number session-limits upnp-mappings number
Tree	upnp-mappings
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context
Context **configure isa nat-group number session-limits watermarks**
Tree [watermarks](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis Session limit high watermark for each MDA in the group
Context **configure isa nat-group number session-limits watermarks high number**
Tree [high](#)
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Session limit low watermark for each MDA in the group
Context **configure isa nat-group number session-limits watermarks low number**
Tree [low](#)
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [*id*] *number*

Synopsis	Enter the tunnel-group list instance
Context	configure isa tunnel-group <i>number</i>
Tree	tunnel-group
Description	Commands in this context create or edit a tunnel group. A tunnel group is a set of one or more MS-ISAs that support the origination and termination of IPsec and IP/GRE tunnels. On a VSR, the isa-scale-mode command must be specified, which defines the maximum number of tunnels on each ISA.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	Tunnel group ID
Context	configure isa tunnel-group <i>number</i>
Tree	tunnel-group
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the ISA tunnel group
Context	configure isa tunnel-group <i>number admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

backup *string*

Synopsis	IPsec module configured in the slot to the IPsec group
Context	configure isa tunnel-group <i>number backup</i> <i>string</i>
Tree	backup

Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure isa tunnel-group number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipsec-responder-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Act as an IKE responder except upon MC-IPsec switchover
Context	configure isa tunnel-group number ipsec-responder-only boolean
Tree	ipsec-responder-only
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-scale-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel limit on each ISA for the tunnel group
Context	configure isa tunnel-group number isa-scale-mode keyword
Tree	isa-scale-mode
Options	tunnel-limit-2k, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-8, tunnel-limit-32

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-active

Synopsis	Enable the multi-active context
Context	configure isa tunnel-group number multi-active
Tree	multi-active
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-isa-number *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of active MS-ISAs in the tunnel group
Context	configure isa tunnel-group number multi-active active-isa-number number
Tree	active-isa-number
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [[esa-id](#)] *reference vm reference*

Synopsis	Add a list entry for esa
Context	configure isa tunnel-group number multi-active esa reference vm reference
Tree	esa
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] reference

Synopsis	ESA ID
Context	configure isa tunnel-group number multi-active esa reference vm reference
Tree	esa
Reference	configure esa number
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm reference

Synopsis	ESM-VM ID
Context	configure isa tunnel-group number multi-active esa reference vm reference
Tree	esa
Reference	configure esa number vm number
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

isa [isa-id] string

Synopsis	Add a list entry for isa
Context	configure isa tunnel-group number multi-active isa string
Tree	isa
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[isa-id] string

Synopsis	ISA ID associated with the tunnel member pool
Context	configure isa tunnel-group number multi-active isa string
Tree	isa

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

member-pool *reference*

Synopsis	Tunnel-member pool name
Context	configure isa tunnel-group <i>number</i> multi-active member-pool <i>reference</i>
Tree	member-pool
Reference	configure isa tunnel-member-pool <i>string</i>
Notes	The following elements are part of a choice: esa , isa , or member-pool .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis	Primary ISA IPsec module assigned for the tunnel group
Context	configure isa tunnel-group <i>number</i> primary <i>string</i>
Tree	primary
Notes	The following elements are part of a choice: multi-active or (backup and primary).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble

Synopsis	Enter the reassemble context
Context	configure isa tunnel-group <i>number</i> reassemble
Tree	reassemble
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-wait-time *number*

Synopsis	Maximum time to receive fragments for packet reassembly
Context	configure isa tunnel-group <i>number</i> reassemble max-wait-time <i>number</i>

Tree	max-wait-time
Range	1 to 5000
Units	milliseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stats-collection

Synopsis	Enter the stats-collection context
Context	configure isa tunnel-group number stats-collection
Tree	stats-collection
Description	Commands in this context configure the ISA statistics collection.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-dp-cpu-usage *boolean*

Synopsis	Collect statistics used to derive ISA DP CPU usage
Context	configure isa tunnel-group number stats-collection isa-dp-cpu-usage boolean
Tree	isa-dp-cpu-usage
Description	When configured to true , this command collects statistics used to derive ISA CPU DP usage and impacts the ISA performance. When configured to false , statistics are not collected.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

strict-esp-sequence-number-ordering *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict ESP sequence number ordering
Context	configure isa tunnel-group number strict-esp-sequence-number-ordering boolean
Tree	strict-esp-sequence-number-ordering

Description	When configured to true , the router enables strict ESP sequence number ordering. When ESP sequence number ordering is enabled, the outbound ESP sequence number of a CHILD_SA must be in the same order as when clear packets are received by the same CHILD_SA.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

tunnel-member-pool [[name](#)] *string*

Synopsis	Enter the tunnel-member-pool list instance
Context	configure isa tunnel-member-pool <i>string</i>
Tree	tunnel-member-pool
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	ISA tunnel-member pool name
Context	configure isa tunnel-member-pool <i>string</i>
Tree	tunnel-member-pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure isa tunnel-member-pool <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esa [[esa-id](#)] *reference vm reference*

Synopsis	Add a list entry for esa
Context	configure isa tunnel-member-pool <i>string</i> esa reference vm reference
Tree	esa
Description	Commands in this context add specified ESA-VMs to the pool.
Max. Instances	16
Notes	The following elements are part of a choice: esa or isa .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	ESA ID
Context	configure isa tunnel-member-pool <i>string</i> esa reference vm reference
Tree	esa
Reference	configure esa <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	ESM-VM ID
Context	configure isa tunnel-member-pool <i>string</i> esa reference vm reference
Tree	esa
Reference	configure esa <i>number</i> vm <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

isa [[isa-id](#)] *string*

Synopsis	Add a list entry for isa
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Context	configure isa tunnel-member-pool string isa string
Tree	isa
Max. Instances	16
Notes	The following elements are part of a choice: esa or isa .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[isa-id] string

Synopsis	ISA ID associated with the tunnel member pool
Context	configure isa tunnel-member-pool string isa string
Tree	isa
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

video-group [video-group-id] number

Synopsis	Enter the video-group list instance
Context	configure isa video-group number
Tree	video-group
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[video-group-id] number

Synopsis	Video group identifier
Context	configure isa video-group number
Tree	video-group
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis Administrative state of the video group

Context **configure** *isa video-group number admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable the analyzer for all streams on the video group

Context **configure** *isa video-group number analyzer boolean*

Tree [analyzer](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description

Context **configure** *isa video-group number description string*

Tree [description](#)

String Length 1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow FCC server capability for the group
Context	configure <i>isa video-group number fcc-server boolean</i>
Tree	<i>fcc-server</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the local RET server for the group
Context	configure <i>isa video-group number local-rt-server boolean</i>
Tree	<i>local-rt-server</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mda [*mda-id*] *string*

Synopsis	Add a list entry for mda
Context	configure isa video-group number mda string
Tree	mda
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mda-id] *string*

Synopsis	MDA identifier
Context	configure isa video-group number mda string
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

resv-ret *number*

Synopsis	Egress bandwidth reserved for retransmission
Context	configure isa video-group number resv-ret number
Tree	resv-ret
Range	0 to 10500
Units	megabps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow stream selection for the group
Context	configure isa video-group number stream-selection boolean
Tree	stream-selection
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vapp [esa-id] reference vapp-id reference

Synopsis	Add a list entry for vapp
Context	configure isa video-group number vapp reference vapp-id reference
Tree	vapp
Description	This command adds a list entry for the ESA and VM ID to the list of video group member ESA virtual applications.
Max. Instances	6
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[esa-id] reference

Synopsis	ESA ID
Context	configure isa video-group number vapp reference vapp-id reference
Tree	vapp
Reference	configure esa number
Notes	This element is part of a list key.
Introduced	21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vapp-id *reference*

Synopsis Virtual application ID

Context **configure** isa video-group number vapp reference vapp-id reference

Tree vapp

Reference **configure** esa number vm number

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

watermark

Synopsis Enter the **watermark** context

Context **configure** isa video-group number watermark

Tree watermark

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure** isa video-group number watermark bandwidth

Tree bandwidth

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc *number*

Synopsis FCC watermark parameters based on the bandwidth

Context **configure** isa video-group number watermark bandwidth fcc number

Tree fcc

Range 1 to 99

Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret number

Synopsis	RET watermark parameters based on the bandwidth
Context	configure isa video-group number watermark bandwidth ret number
Tree	ret
Range	1 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

total number

Synopsis	Total watermark parameters based on the bandwidth
Context	configure isa video-group number watermark bandwidth total number
Tree	total
Range	1 to 99
Default	90
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

session

Synopsis	Enter the session context
Context	configure isa video-group number watermark session
Tree	session
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc number

Synopsis FCC watermark parameters based on the session
 Context **configure isa video-group number watermark session fcc number**
 Tree **fcc**
 Range 1 to 99
 Default 90
 Units percent
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret number

Synopsis RET watermark parameters based on the session
 Context **configure isa video-group number watermark session ret number**
 Tree **ret**
 Range 1 to 99
 Default 90
 Units percent
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

total number

Synopsis Total watermark parameters based on the session
 Context **configure isa video-group number watermark session total number**
 Tree **total**
 Range 1 to 99
 Default 90
 Units percent
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

wlan-gw-group [*id*] *number*

Synopsis Enter the **wlan-gw-group** list instance
 Context **configure isa wlan-gw-group** *number*
 Tree [wlan-gw-group](#)
 Max. Instances 1
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis WLAN-GW ISA group ID
 Context **configure isa wlan-gw-group** *number*
 Tree [wlan-gw-group](#)
 Range 1 to 4
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-iom-limit *number*



WARNING:
 Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:
 Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of WLAN-GW IOMs used as active IOMs
 Context **configure isa wlan-gw-group** *number active-iom-limit* *number*
 Tree [active-iom-limit](#)
 Range 1 to 7
 Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active-mda-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum number of ISA MDAs in active use by the group
 Context **configure isa wlan-gw-group** *number active-mda-limit number*
 Tree [active-mda-limit](#)
 Range 1 to 14
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis Administrative state of the WLAN Gateway group
 Context **configure isa wlan-gw-group** *number admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure isa wlan-gw-group** *number description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

distributed-sub-mgmt

Synopsis	Enter the distributed-sub-mgmt context
Context	configure isa wlan-gw-group number distributed-sub-mgmt
Tree	distributed-sub-mgmt
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-aa-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA AA group for WLAN-GW DSM subscribers
Context	configure isa wlan-gw-group number distributed-sub-mgmt isa-aa-group reference
Tree	isa-aa-group
Reference	configure isa application-assurance-group number
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

isa-aa-oversubscription-factor *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of WLAN GW ISAs that a single ISA can serve
Context	configure isa wlan-gw-group number distributed-sub-mgmt isa-aa-oversubscription-factor number
Tree	isa-aa-oversubscription-factor
Range	1 to 10
Default	1
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

esa [[esa-id](#)] *reference* **vm** *reference*

Synopsis	Add a list entry for esa
Context	configure isa wlan-gw-group <i>number</i> esa <i>reference</i> vm <i>reference</i>
Tree	esa
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

[esa-id] *reference*

Synopsis	ESA ID
Context	configure isa wlan-gw-group <i>number</i> esa <i>reference</i> vm <i>reference</i>
Tree	esa
Reference	configure esa <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

vm *reference*

Synopsis	VM ID
Context	configure isa wlan-gw-group <i>number</i> esa <i>reference</i> vm <i>reference</i>
Tree	esa
Reference	configure esa <i>number</i> vm <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

iom [[slot-number](#)] *reference*

Synopsis	Add a list entry for iom
Context	configure isa wlan-gw-group <i>number</i> iom <i>reference</i>
Tree	iom
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[slot-number] reference

Synopsis	IOM slot to use in the WLAN-GW group
Context	configure isa wlan-gw-group number iom reference
Tree	iom
Reference	configure card number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mda [mda-id] string

Synopsis	Add a list entry for mda
Context	configure isa wlan-gw-group number mda string
Tree	mda
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

[mda-id] string

Synopsis	MDA slot value
Context	configure isa wlan-gw-group number mda string
Tree	mda
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

nat

Synopsis	Enter the nat context
Context	configure isa wlan-gw-group number nat
Tree	nat
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

log

Synopsis	Enter the log context
Context	configure isa wlan-gw-group number nat log
Tree	log
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-events *boolean*

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	configure isa wlan-gw-group number nat log suppress-lsn-events boolean
Tree	suppress-lsn-events
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

suppress-lsn-sub-blocks-free *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	configure isa wlan-gw-group number nat log suppress-lsn-sub-blocks-free boolean
Tree	suppress-lsn-sub-blocks-free
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lsn *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use Large Scale NAT
Context	configure isa wlan-gw-group number nat lsn boolean
Tree	lsn
Default	true

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis RADIUS accounting policy for ISA group
 Context **configure** [isa wlan-gw-group number nat radius-accounting-policy reference](#)
 Tree [radius-accounting-policy](#)
 Reference **configure** [aaa radius isa-policy string](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-limits

Synopsis Enter the **session-limits** context
 Context **configure** [isa wlan-gw-group number nat session-limits](#)
 Tree [session-limits](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved *number*

Synopsis Number of sessions reserved for prioritized sessions
 Context **configure** [isa wlan-gw-group number nat session-limits reserved number](#)
 Tree [reserved](#)
 Range 1 to 6291456
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upnp-mappings *number*



WARNING:
 Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	configure isa wlan-gw-group <i>number</i> nat session-limits upnp-mappings <i>number</i>
Tree	upnp-mappings
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure isa wlan-gw-group <i>number</i> nat session-limits watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	Session limit high watermark for each MDA in the group
Context	configure isa wlan-gw-group <i>number</i> nat session-limits watermarks high <i>number</i>
Tree	high
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Session limit low watermark for each MDA in the group
Context	configure isa wlan-gw-group <i>number</i> nat session-limits watermarks low <i>number</i>

Tree	low
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy used to configure ports for the ISA group
Context	configure isa wlan-gw-group <i>number</i> port-policy <i>reference</i>
Tree	port-policy
Reference	configure port-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hardware unit subject to redundancy
Context	configure isa wlan-gw-group <i>number</i> redundancy <i>keyword</i>
Tree	redundancy
Default	iom
Options	iom, mda
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

scaling-profile *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	ISA scaling profile identifier
Context	configure isa wlan-gw-group <i>number</i> scaling-profile <i>keyword</i>
Tree	scaling-profile
Default	profile1
Options	profile1, profile2, profile3
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

tunnel-port-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel port policy for per-tunnel QoS processing
Context	configure isa wlan-gw-group <i>number</i> tunnel-port-policy <i>reference</i>
Tree	tunnel-port-policy
Reference	configure port-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enter the watermarks context
Context	configure isa wlan-gw-group <i>number</i> watermarks
Tree	watermarks
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mark [*entity*] *keyword*

Synopsis	Enter the mark list instance
Context	configure <i>isa wlan-gw-group number watermarks mark keyword</i>
Tree	<i>mark</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entity] *keyword*

Synopsis	Entity to be monitored
Context	configure <i>isa wlan-gw-group number watermarks mark keyword</i>
Tree	<i>mark</i>
Options	user-equipment, bridge-domain, radius-proxy-client
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark for the WLAN-GW group
Context	configure <i>isa wlan-gw-group number watermarks mark keyword high number</i>
Tree	<i>high</i>
Range	1 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

low *number*

Synopsis	Low watermark for the WLAN-GW group
Context	configure <i>isa wlan-gw-group number watermarks mark keyword low number</i>
Tree	<i>low</i>
Range	0 to 99

Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.22 lag commands

```

configure
- lag string
  - access
    - adapt-qos
      - include-egr-hash-cfg boolean
      - mode keyword
    - bandwidth number
    - booking-factor number
    - per-fp-egr-queuing boolean
    - per-fp-ing-queuing boolean
    - per-fp-sap-instance boolean
  - adaptive-load-balancing
    - bandwidth-threshold number
    - interval number
    - tolerance number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - ipv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
    - ipv6
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
  - soft-reset-extension boolean
  - description string
  - dynamic-cost boolean
  - encap-type keyword
  - eth-cfm
    - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais
      - client-meg-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number

```

configure lag eth-cfm mep apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- ccm-tlv-ignore keyword
- collect-lmm-stats boolean
- csf
  - multiplier decimal-number
- description string
- eth-test
  - bit-error-threshold number
  - test-pattern
    - crc-tlv boolean
    - pattern keyword
- facility-fault boolean
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- vlan (number | keyword)
- hash-weight-threshold
  - action keyword
  - cost number
  - value number
- hold-time-down number
- lacp
  - administrative-key number
  - mode keyword
  - system-id string
  - system-priority number
- lacp-mux-control keyword
- lacp-xmit-interval keyword
- lacp-xmit-stdby boolean
- link-map-profile number
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - failure-mode keyword
  - link reference
  - apply-groups reference
  - apply-groups-exclude reference
  - port-type keyword
- mac-address string
- max-ports number
- mode keyword
- monitor-oper-group reference
- per-link-hash
  - weighted
    - auto-rebalance boolean
    - subscriber-hash-mode keyword
- port reference
  - apply-groups reference
  - apply-groups-exclude reference
  - hash-weight (number | keyword)
  - priority number

```

configure lag port sub-group

- **sub-group** (*number | keyword*)
- **port-threshold**
- **action** *keyword*
- **cost** *number*
- **value** *number*
- **port-type** *keyword*
- **selection-criteria**
- **mode** *keyword*
- **slave-to-partner** *boolean*
- **subgroup-hold-time** (*number | keyword*)
- **standby-signaling** *keyword*

3.22.1 lag command descriptions

lag [*lag-name*] *string*

Synopsis	Enter the lag list instance
Context	configure lag <i>string</i>
Tree	lag
Introduced	16.0.R1
Platforms	All

[lag-name] *string*

Synopsis	LAG name
Context	configure lag <i>string</i>
Tree	lag
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure lag <i>string</i> access
Tree	access
Introduced	16.0.R1
Platforms	All

adapt-qos

Synopsis	Enter the adapt-qos context
Context	configure lag <i>string</i> access adapt-qos
Tree	adapt-qos
Introduced	16.0.R1

Platforms All

include-egr-hash-cfg *boolean*

Synopsis Factor egress hashing into buffer and rate distribution
 Context **configure lag** *string* **access adapt-qos include-egr-hash-cfg** *boolean*
 Tree [include-egr-hash-cfg](#)
 Default false
 Introduced 16.0.R1
 Platforms All

mode *keyword*

Synopsis QoS adaptation mode
 Context **configure lag** *string* **access adapt-qos mode** *keyword*
 Tree [mode](#)
 Options link, distribute, port-fair
 Introduced 16.0.R1
 Platforms All

bandwidth *number*

Synopsis Administrative bandwidth applied to this LAG
 Context **configure lag** *string* **access bandwidth** *number*
 Tree [bandwidth](#)
 Range 1 to 6400000000
 Units bps
 Introduced 16.0.R1
 Platforms All

booking-factor *number*

Synopsis Booking factor against the administrative bandwidth
 Context **configure lag** *string* **access booking-factor** *number*
 Tree [booking-factor](#)

Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

per-fp-egr-queuing *boolean*

Synopsis	Per FP egress queuing
Context	configure lag <i>string</i> access per-fp-egr-queuing <i>boolean</i>
Tree	per-fp-egr-queuing
Default	false
Introduced	16.0.R1
Platforms	All

per-fp-ing-queuing *boolean*

Synopsis	Enable ingress queuing per forwarding port
Context	configure lag <i>string</i> access per-fp-ing-queuing <i>boolean</i>
Tree	per-fp-ing-queuing
Default	false
Introduced	16.0.R1
Platforms	All

per-fp-sap-instance *boolean*

Synopsis	SAP instance allocation on a LAG
Context	configure lag <i>string</i> access per-fp-sap-instance <i>boolean</i>
Tree	per-fp-sap-instance
Default	false
Introduced	16.0.R1
Platforms	All

adaptive-load-balancing

Synopsis	Enable the adaptive-load-balancing context
----------	---

Context	configure lag string adaptive-load-balancing
Tree	adaptive-load-balancing
Introduced	20.10.R1
Platforms	All

bandwidth-threshold *number*

Synopsis	Minimum bandwidth for adaptive load balancing
Context	configure lag string adaptive-load-balancing bandwidth-threshold <i>number</i>
Tree	bandwidth-threshold
Range	0 to 100
Units	percent
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	The statistics pooling interval for the LAG ports
Context	configure lag string adaptive-load-balancing interval <i>number</i>
Tree	interval
Range	15 30 60 120
Default	30
Units	seconds
Introduced	21.5.R1
Platforms	All

tolerance *number*

Synopsis	Threshold that triggers link utilization optimization
Context	configure lag string adaptive-load-balancing tolerance <i>number</i>
Tree	tolerance
Description	This command configures the threshold value that is based on the difference between the most-loaded and least-loaded links in a LAG. When the threshold value is exceeded, the adaptive load balancing operation attempts to optimize traffic distribution between LAG links.
Range	1 to 100

Default	20
Units	percent
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LAG
Context	configure lag <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure lag <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure lag <i>string</i> bfd-liveness ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	configure lag <i>string</i> bfd-liveness ipv4 admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-on-distributing-only *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	configure lag string bfd-liveness ipv4 bfd-on-distributing-only <i>boolean</i>
Tree	bfd-on-distributing-only
Default	false
Introduced	16.0.R1
Platforms	All

local-ip-address *string*

Synopsis	BFD source address
Context	configure lag string bfd-liveness ipv4 local-ip-address <i>string</i>
Tree	local-ip-address
Introduced	16.0.R1
Platforms	All

max-admin-down-time (*number* | *keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	configure lag string bfd-liveness ipv4 max-admin-down-time (<i>number</i> <i>keyword</i>)
Tree	max-admin-down-time
Range	0 to 3600
Default	0
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

max-setup-time (*number* | *keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	configure lag <i>string</i> bfd-liveness ipv4 max-setup-time (<i>number</i> <i>keyword</i>)
Tree	max-setup-time
Range	0 to 60000
Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	configure lag <i>string</i> bfd-liveness ipv4 multiplier <i>number</i>
Tree	multiplier
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv4 receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

remote-ip-address *string*

Synopsis	BFD destination address
Context	configure lag <i>string</i> bfd-liveness ipv4 remote-ip-address <i>string</i>
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv4 transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure lag <i>string</i> bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	configure lag <i>string</i> bfd-liveness ipv6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-on-distributing-only *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	configure lag string bfd-liveness ipv6 bfd-on-distributing-only boolean
Tree	bfd-on-distributing-only
Default	false
Introduced	16.0.R1
Platforms	All

local-ip-address *string*

Synopsis	BFD source address
Context	configure lag string bfd-liveness ipv6 local-ip-address string
Tree	local-ip-address
Introduced	16.0.R1
Platforms	All

max-admin-down-time (*number | keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	configure lag string bfd-liveness ipv6 max-admin-down-time (number keyword)
Tree	max-admin-down-time
Range	0 to 3600
Default	0
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

max-setup-time (*number | keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	configure lag string bfd-liveness ipv6 max-setup-time (number keyword)
Tree	max-setup-time
Range	0 to 60000

Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	configure lag <i>string</i> bfd-liveness ipv6 multiplier <i>number</i>
Tree	multiplier
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive-interval *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv6 receive-interval <i>number</i>
Tree	receive-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

remote-ip-address *string*

Synopsis	BFD destination address
Context	configure lag <i>string</i> bfd-liveness ipv6 remote-ip-address <i>string</i>
Tree	remote-ip-address
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	configure lag <i>string</i> bfd-liveness ipv6 transmit-interval <i>number</i>
Tree	transmit-interval
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

soft-reset-extension *boolean*

Synopsis	Extend BFD timers during soft reset
Context	configure lag <i>string</i> bfd-liveness soft-reset-extension <i>boolean</i>
Tree	soft-reset-extension
Default	true
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure lag <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dynamic-cost *boolean*

Synopsis	Allow LAG costing using operational aggregate bandwidth
Context	configure lag <i>string</i> dynamic-cost <i>boolean</i>
Tree	dynamic-cost
Default	false

Introduced 16.0.R1
 Platforms All

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Encapsulation type
 Context **configure lag** *string* **encap-type** *keyword*
 Tree **encap-type**
 Options null, dot1q, qinq
 Introduced 16.0.R1
 Platforms All

eth-cfm

Synopsis Enter the **eth-cfm** context
 Context **configure lag** *string* **eth-cfm**
 Tree **eth-cfm**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*

Synopsis Enter the **mep** list instance
 Context **configure lag** *string* **eth-cfm mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
 Tree **mep**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i> association <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i>
Tree	client-meg-level
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i>

Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	Transmission interval for AIS messages
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i>
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Priority of the AIS messages generated by the node
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i>
Tree	priority
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm boolean

Synopsis Generate CCM messages

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean**

Tree **ccm**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority number

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number**

Tree **ccm-ltm-priority**

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size number

Synopsis Number of octets of padding to insert in CCM packets

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number**

Tree **ccm-padding-size**

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis TLV to ignore on reception

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword*

Tree [ccm-tlv-ignore](#)

Description This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.

When unconfigured, the MEP processes all the recognized TLVs.

Options interface-status, port-status

Max. Instances 2

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-stats boolean*

Tree [collect-lmm-stats](#)

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis Enable the **csf** context

Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier decimal-number

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number
Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id number](#) [eth-test bit-error-threshold number](#)

Tree [bit-error-threshold](#)

Range 0 to 11840

Default 1

Units bit errors

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis Enter the **test-pattern** context

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id number](#) [eth-test test-pattern](#)

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis Generate a CRC checksum

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id number](#) [eth-test test-pattern](#) [crc-tlv boolean](#)

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> facility-fault <i>boolean</i>
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window number

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed boolean

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean

Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i>
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis	Enter the eth-vsm-grace context
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace
Tree	eth-vsm-grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i>
Tree	rx-eth-vsm-grace
Description	When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to false , the router disables the Nokia Grace function.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure lag <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
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Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan (*number* | *keyword*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	configure lag <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number vlan (number keyword)</i>
Tree	vlan
Range	1 to 4094
Default	none
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hash-weight-threshold

Synopsis	Enter the hash-weight-threshold context
Context	configure lag string hash-weight-threshold
Tree	hash-weight-threshold
Introduced	19.10.R1
Platforms	All

action keyword

Synopsis	Action when the sum of the hash weight is not exceeded
Context	configure lag string hash-weight-threshold action keyword
Tree	action
Default	down
Options	down, dynamic-cost, static-cost
Introduced	19.10.R1
Platforms	All

cost number

Synopsis	Static cost of the LAG
Context	configure lag string hash-weight-threshold cost number
Tree	cost
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

value number

Synopsis	Sum of the hash weight values of all active LAG ports
Context	configure lag string hash-weight-threshold value number
Tree	value
Range	1 to 6400000
Introduced	19.10.R1
Platforms	All

hold-time-down *number*

Synopsis	Delay time for reporting the LAG is down
Context	configure lag <i>string</i> hold-time-down <i>number</i>
Tree	hold-time-down
Range	1 to 2000
Units	deciseconds
Introduced	16.0.R1
Platforms	All

lACP

Synopsis	Enable the lACP context
Context	configure lag <i>string</i> lACP
Tree	lACP
Introduced	16.0.R1
Platforms	All

administrative-key *number*

Synopsis	Key to identify the channel group on each LACP port
Context	configure lag <i>string</i> lACP administrative-key <i>number</i>
Tree	administrative-key
Description	<p>This command configures the administrative key that identifies the channel group on each port configured to use LACP.</p> <p>In an MC-LAG configuration, both redundant nodes must be configured with the same key values. In any other case, the key is only locally significant.</p>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Mode in which LACP operates
----------	-----------------------------

Context	configure lag string lacp mode keyword
Tree	mode
Default	passive
Options	passive, active
Introduced	16.0.R1
Platforms	All

system-id *string*

Synopsis	System ID
Context	configure lag string lacp system-id string
Tree	system-id
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

system-priority *number*

Synopsis	System priority value
Context	configure lag string lacp system-priority number
Tree	system-priority
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

lacp-mux-control *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MUX machine control for LACP LAG in active/passive mode
Context	configure lag string lacp-mux-control keyword
Tree	lacp-mux-control
Default	coupled
Options	coupled, independent

Introduced 16.0.R1
Platforms All

lacp-xmit-interval *keyword*

Synopsis Time for periodic transmission
Context **configure lag** *string lacp-xmit-interval keyword*
Tree [lacp-xmit-interval](#)
Default fast
Options slow, fast
Introduced 16.0.R1
Platforms All

lacp-xmit-stdby *boolean*

Synopsis Allow LACP message transmission on standby links
Context **configure lag** *string lacp-xmit-stdby boolean*
Tree [lacp-xmit-stdby](#)
Default true
Introduced 16.0.R1
Platforms All

link-map-profile [[link-map-profile-id](#)] *number*

Synopsis Enter the **link-map-profile** list instance
Context **configure lag** *string link-map-profile number*
Tree [link-map-profile](#)
Introduced 16.0.R1
Platforms All

[link-map-profile-id] *number*

Synopsis Link map profile to control LAG ports
Context **configure lag** *string link-map-profile number*
Tree [link-map-profile](#)

Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure lag <i>string link-map-profile number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

failure-mode *keyword*

Synopsis	Failure mode of LAG link profile
Context	configure lag <i>string link-map-profile number failure-mode keyword</i>
Tree	failure-mode
Default	per-link-hash
Options	per-link-hash, discard
Introduced	16.0.R1
Platforms	All

link [[port-id](#)] *reference*

Synopsis	Enter the link list instance
Context	configure lag <i>string link-map-profile number link reference</i>
Tree	link
Introduced	16.0.R1
Platforms	All

[port-id] *reference*

Synopsis	Port associated with the link map profile
----------	---

Context	configure lag <i>string link-map-profile number link reference</i>
Tree	link
Reference	configure lag <i>string port reference</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

port-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the associated port for this entry
Context	configure lag <i>string link-map-profile number link reference port-type keyword</i>
Tree	port-type
Options	primary, secondary
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address of the LAG
Context	configure lag <i>string mac-address string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

max-ports *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ports allowed in the LAG
Context	configure lag <i>string</i> max-ports <i>number</i>
Tree	max-ports
Description	This command configures the maximum number of ports allowed in the LAG. This command must be configured to 64 when the LAG name is a numeric identifier in the range of 1 to 64. If the LAG name is a numeric identifier in the range of 65 to 800, this command must be configured to 32.
Range	32 64
Introduced	21.2.R1
Platforms	All

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operation mode of the LAG
Context	configure lag <i>string</i> mode <i>keyword</i>
Tree	mode
Default	network
Options	access, network, hybrid
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure lag <i>string</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Introduced	19.5.R1
Platforms	All

per-link-hash

Synopsis	Enable the per-link-hash context
Context	configure lag string per-link-hash
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

weighted

Synopsis	Enable the weighted context
Context	configure lag string per-link-hash weighted
Tree	weighted
Introduced	16.0.R1
Platforms	All

auto-rebalance *boolean*

Synopsis	Auto-rebalance SAPs, users, or interfaces for new links
Context	configure lag string per-link-hash weighted auto-rebalance <i>boolean</i>
Tree	auto-rebalance
Default	false
Introduced	16.0.R1
Platforms	All

subscriber-hash-mode *keyword*

Synopsis	Subscriber traffic load balance over LAG member links
Context	configure lag string per-link-hash weighted subscriber-hash-mode <i>keyword</i>
Tree	subscriber-hash-mode
Description	<p>This command configures weighted subscriber traffic to be load balanced over LAG member links. Traffic hashing can be performed based on SAPs or Vports.</p> <p>SAP-based hashing supports weights configured at the subscriber level in the subscriber profile. The SAP hashing mode supports only SAP to subscriber (1:1) deployment models.</p>

Vport-based load balancing supports SAP to subscriber (1:1) and SAP to service (N:1) deployment models.

Default	sap
Options	sap, vport
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port [[port-id](#)] *reference*

Synopsis	Enter the port list instance
Context	configure lag string port reference
Tree	port
Introduced	16.0.R1
Platforms	All

[port-id] *reference*

Synopsis	Identifier to uniquely identify the port in the LAG
Context	configure lag string port reference
Tree	port
Reference	configure port string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hash-weight (*number* | *keyword*)

Synopsis	Flow hashing distribution between LAG ports
Context	configure lag string port reference hash-weight (<i>number</i> <i>keyword</i>)
Tree	hash-weight
Range	1 to 100000
Options	port-speed
Introduced	19.5.R1
Platforms	All

priority *number*

Synopsis	Priority of the port in the LAG
Context	configure lag <i>string</i> port <i>reference</i> priority <i>number</i>
Tree	priority
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

sub-group (*number* | *keyword*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subgroup of the port in the LAG
Context	configure lag <i>string</i> port <i>reference</i> sub-group (<i>number</i> <i>keyword</i>)
Tree	sub-group
Range	1 to 8
Default	1
Options	auto-iom, auto-mda
Introduced	16.0.R1
Platforms	All

port-threshold

Synopsis	Enter the port-threshold context
Context	configure lag <i>string</i> port-threshold
Tree	port-threshold
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action when the active links are at or below threshold
Context	configure lag <i>string</i> port-threshold action <i>keyword</i>

Tree	action
Default	down
Options	down, dynamic-cost, static-cost
Introduced	16.0.R1
Platforms	All

cost *number*

Synopsis	Static cost of the LAG
Context	configure lag <i>string</i> port-threshold cost <i>number</i>
Tree	cost
Range	1 to 16777215
Introduced	16.0.R3
Platforms	All

value *number*

Synopsis	Active link threshold at which action is taken
Context	configure lag <i>string</i> port-threshold value <i>number</i>
Tree	value
Range	0 to 63
Introduced	16.0.R1
Platforms	All

port-type *keyword*

Synopsis	Port type of the LAG
Context	configure lag <i>string</i> port-type <i>keyword</i>
Tree	port-type
Default	standard
Options	standard, hs
Introduced	16.0.R1
Platforms	All

selection-criteria

Synopsis	Enter the selection-criteria context
Context	configure lag string selection-criteria
Tree	selection-criteria
Introduced	16.0.R1
Platforms	All

mode keyword

Synopsis	Criteria to select the active subgroup
Context	configure lag string selection-criteria mode keyword
Tree	mode
Default	highest-count
Options	highest-count, highest-weight, best-port
Introduced	16.0.R1
Platforms	All

slave-to-partner boolean

Synopsis	Use slave-to-partner for selection criteria
Context	configure lag string selection-criteria slave-to-partner boolean
Tree	slave-to-partner
Default	false
Introduced	16.0.R1
Platforms	All

subgroup-hold-time (number | keyword)

Synopsis	Delay time when switching to a new active subgroup
Context	configure lag string selection-criteria subgroup-hold-time (number keyword)
Tree	subgroup-hold-time
Range	0 to 2000
Default	0
Units	deciseconds
Options	infinite

Introduced	16.0.R1
Platforms	All

standby-signaling *keyword*

Synopsis	Way of signaling a member port to the remote side
Context	configure lag <i>string</i> standby-signaling <i>keyword</i>
Tree	standby-signaling
Default	lACP
Options	lACP, power-off
Introduced	16.0.R1
Platforms	All

3.23 li commands

```

li
- li-filter
- associations
  - li-ip-filter reference
  - ip-filter string
  - li-ipv6-filter reference
  - ipv6-filter string
  - li-mac-filter reference
  - mac-filter string
- li-ip-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
- li-ipv6-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - next-header (number | keyword)
  - src-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number

```

li li-filter li-ipv6-filter entry match src-port range

```

    - range
      - end number
      - start number
- li-mac-filter string
- description string
- entry number
  - description string
  - match
    - dst-mac
      - address string
      - mask string
    - frame-type keyword
    - src-mac
      - address string
      - mask string
- lock-filter keyword
- reserved-block string
- description string
- entry-range
  - end number
  - start number
- ip-filter string
- ipv6-filter string
- mac-filter string
- li-source string
- admin-state keyword
- li-ip-filter reference
  - entry reference
  - intercept-id number
  - session-id number
- li-ipv6-filter reference
  - entry reference
  - intercept-id number
  - session-id number
- li-mac-filter reference
  - entry reference
  - intercept-id number
  - session-id number
- nat
  - dslite string b4 string
  - intercept-id number
  - session-id number
  - ethernet-header
    - destination-address string
    - source-address string
    - type number
  - l2-aware string
  - intercept-id number
  - session-id number
  - nat44 string ip string
  - intercept-id number
  - session-id number
  - nat64 string ip string
  - intercept-id number
  - session-id number
- port string
  - egress boolean
  - ingress boolean
- sap string
  - egress boolean
  - ingress boolean
  - intercept-id number
  - session-id number
- subscriber string

```

li li-source subscriber egress

```

- egress boolean
- fc keyword
- host-type keyword
- ingress boolean
- intercept-id number
- ip-address string
- ip-family keyword
- mac-address string
- sap-id string
- session-id number
- sla-profile string
- wlan-gw-dsm-ue string
- intercept-id number
- session-id number
- log
- log-id string
- admin-state keyword
- description string
- destination
  - memory
    - max-entries number
  - netconf
    - max-entries number
  - snmp
    - max-entries number
- filter string
- netconf-stream string
- source
  - li boolean
  - time-format keyword
- mirror-dest-reservation
- end number
- start number
- mirror-dest-template string
- layer-3-encap
  - direction-bit boolean
  - encap-type keyword
  - ip-source string
  - router-instance string
  - udp
    - destination number
    - source number
- type keyword
- nat
- use-outside-ip-address boolean
- radius
- mirror-dest-template reference
- x-interfaces
- admin-state keyword
- correlation-id
  - ipoe keyword
  - pppoe keyword
- ine-identifier string
- lic string
  - authentication
    - password string
    - private-ki string
    - sequence-group string
  - description string
  - identifier string
  - ipv4
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - port number
  - router-instance string

```

li x-interfaces user-db

```
- user-db string
- x1
  - ipv4
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - lic-peer reference
  - local-tcp-port number
  - timeouts
    - message-timeout number
- x2
  - ipv4
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - lic-peer reference
  - timeouts
    - keep-alive number
    - request number
- x3
  - alarms
    - cpu-alarm
      - high-threshold number
      - low-threshold number
    - memory-alarm
      - high-threshold number
      - low-threshold number
    - throughput-alarm
      - high-threshold number
      - low-threshold number
  - ipv4
    - local-address-range
      - end string
      - start string
  - li-group number
  - lic-peers reference
  - session-limit number
  - timeouts
    - keep-alive number
    - request number
    - target-retry-wait number
```

3.23.1 li command descriptions

li

Synopsis	Configure lawful intercept
Context	li
Tree	li
Introduced	19.10.R1
Platforms	All

li-filter

Synopsis	Enter the li-filter context
Context	li li-filter
Tree	li-filter
Introduced	19.10.R1
Platforms	All

associations

Synopsis	Enter the associations context
Context	li li-filter associations
Tree	associations
Introduced	19.10.R1
Platforms	All

li-ip-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ip-filter list instance
Context	li li-filter associations li-ip-filter reference
Tree	li-ip-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] reference

Synopsis	Name of an existing LI IP filter
Context	li li-filter associations li-ip-filter reference <i>reference</i>
Tree	li-ip-filter
Reference	li li-filter li-ip-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ip-filter [filter-name] string

Synopsis	Add a list entry for ip-filter
Context	li li-filter associations li-ip-filter reference ip-filter <i>string</i>
Tree	ip-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[filter-name] string

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-ip-filter reference ip-filter <i>string</i>
Tree	ip-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-ipv6-filter [li-filter-name] reference

Synopsis	Enter the li-ipv6-filter list instance
Context	li li-filter associations li-ipv6-filter reference

Tree	li-ipv6-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	LI IPv6 filter name
Context	li li-filter associations li-ipv6-filter reference
Tree	li-ipv6-filter
Reference	li li-filter li-ipv6-filter string
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ipv6-filter
Context	li li-filter associations li-ipv6-filter reference ipv6-filter string
Tree	ipv6-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-ipv6-filter reference ipv6-filter string
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-mac-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-mac-filter list instance
Context	li li-filter associations li-mac-filter reference
Tree	li-mac-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	LI MAC filter name
Context	li li-filter associations li-mac-filter reference
Tree	li-mac-filter
Reference	li li-filter li-mac-filter string
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for mac-filter
Context	li li-filter associations li-mac-filter reference mac-filter string
Tree	mac-filter
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	li li-filter associations li-mac-filter reference mac-filter string
Tree	mac-filter

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-ip-filter [[li-filter-name](#)] *string*

Synopsis	Enter the li-ip-filter list instance
Context	li li-filter li-ip-filter <i>string</i>
Tree	li-ip-filter
Description	<p>Commands in this context create LI IPv4 filter lists, which can be used to create confidential IPv4 filter based LI source entries.</p> <p>The LI IPv4 filter entries are merged into normal IPv4 filters configured with the li li-filter associations and li li-filter reserved-block commands. The LI IPv4 filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

[li-filter-name] *string*

Synopsis	LI filter name
Context	li li-filter li-ip-filter <i>string</i>
Tree	li-ip-filter
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ip-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced	19.10.R1
Platforms	All

entry [*li-entry-id*] *number*

Synopsis	Enter the entry list instance
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i>
Tree	entry

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

[li-entry-id] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i>
Tree	entry

Range 1 to 65535

Notes This element is part of a list key.

Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> description <i>string</i>
Tree	description

String Length 1 to 80

Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match
Tree	match
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	19.10.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IP address to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Introduced	19.10.R1
Platforms	All

mask *string*

Synopsis	Mask that is applied as an AND to the IP address
----------	--

Context	li li-filter li-ip-filter <i>string entry number match dst-ip mask string</i>
Tree	mask
Introduced	19.10.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	li li-filter li-ip-filter <i>string entry number match dst-port</i>
Tree	dst-port
Introduced	19.10.R1
Platforms	All

eq number

Synopsis	Condition on equality to specified value
Context	li li-filter li-ip-filter <i>string entry number match dst-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

gt number

Synopsis	Condition on being greater than the specified value
Context	li li-filter li-ip-filter <i>string entry number match dst-port gt number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

lt number

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end number

Synopsis	Upper bound port to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start number

Synopsis	Lower bound port to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	20.2.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	li li-filter li-ip-filter <i>string</i> entry <i>number</i> match src-ip
Tree	src-ip
Introduced	19.10.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IP address to match
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Context	li li-filter li-ip-filter <i>string entry number match src-ip address (ipv4-prefix-with-host-bits ipv4-address)</i>
Tree	address
Introduced	19.10.R1
Platforms	All

mask string

Synopsis	Mask that is applied as an AND to the IP address
Context	li li-filter li-ip-filter <i>string entry number match src-ip mask string</i>
Tree	mask
Introduced	19.10.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	li li-filter li-ip-filter <i>string entry number match src-port</i>
Tree	src-port
Introduced	19.10.R1
Platforms	All

eq number

Synopsis	Condition on equality to specified value
Context	li li-filter li-ip-filter <i>string entry number match src-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

gt number

Synopsis	Condition on being greater than the specified value
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Context	li li-filter li-ip-filter <i>string entry number match src-port gt number</i>
Tree	gt
Range	0 to 65534
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ip-filter <i>string entry number match src-port lt number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ip-filter <i>string entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ip-filter <i>string entry number match src-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

start number

Synopsis Lower bound port to match

Context [li li-filter li-ip-filter](#) *string entry number match src-port range start number*

Tree [start](#)

Range 0 to 65534

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

li-ipv6-filter [[li-filter-name](#)] *string*

Synopsis Enter the **li-ipv6-filter** list instance

Context [li li-filter li-ipv6-filter](#) *string*

Tree [li-ipv6-filter](#)

Description Commands in this context create LI IPv6 filter lists, which can be used to create confidential IPv6 filter based LI source entries.

The LI IPv6 filter entries are merged into normal IPv6 filters configured with the **li li-filter associations** and **li li-filter reserved-block** commands. However, the LI IPv6 filter entries are visible only to users with LI permissions.

Introduced 19.10.R1

Platforms All

[li-filter-name] *string*

Synopsis LI filter name

Context [li li-filter li-ipv6-filter](#) *string*

Tree [li-ipv6-filter](#)

Description This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

description *string*

Synopsis	Text description
Context	li li-filter li-ipv6-filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry [[li-entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i>
Tree	entry
Description	<p>Commands in this context configure an entry for the LI filter.</p> <p>Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.</p> <p>The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.</p> <p>Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.</p>
Introduced	19.10.R1
Platforms	All

[[li-entry-id](#)] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description string

Synopsis	Text description
Context	li li-filter li-ipv6-filter <i>string entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	li li-filter li-ipv6-filter <i>string entry number match</i>
Tree	match
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	li li-filter li-ipv6-filter <i>string entry number match dst-ip</i>
Tree	dst-ip
Introduced	19.10.R1
Platforms	All

address (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IP address to match
Context	li li-filter li-ipv6-filter <i>string entry number match dst-ip address (ipv6-prefix-with-host-bits ipv6-address)</i>
Tree	address

Introduced 19.10.R1
 Platforms All

mask string

Synopsis Mask that is applied as an AND to the IPv6 address
 Context [li li-filter li-ipv6-filter string entry number match dst-ip mask string](#)
 Tree [mask](#)
 Introduced 19.10.R1
 Platforms All

dst-port

Synopsis Enter the **dst-port** context
 Context [li li-filter li-ipv6-filter string entry number match dst-port](#)
 Tree [dst-port](#)
 Introduced 19.10.R1
 Platforms All

eq number

Synopsis Condition on equality to specified value
 Context [li li-filter li-ipv6-filter string entry number match dst-port eq number](#)
 Tree [eq](#)
 Range 0 to 65535
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
 Introduced 19.10.R1
 Platforms All

gt number

Synopsis Condition on being greater than the specified value
 Context [li li-filter li-ipv6-filter string entry number match dst-port gt number](#)
 Tree [gt](#)
 Range 0 to 65534

Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

lt *number*

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ipv6-filter <i>string entry number match dst-port lt number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ipv6-filter <i>string entry number match dst-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound port to match
Context	li li-filter li-ipv6-filter <i>string entry number match dst-port range end number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start number

Synopsis	Lower bound port to match
Context	li li-filter li-ipv6-filter <i>string entry number match dst-port range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

next-header (*number | keyword*)

Synopsis	IP protocol to match
Context	li li-filter li-ipv6-filter <i>string entry number match next-header (number keyword)</i>
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	li li-filter li-ipv6-filter <i>string entry number match src-ip</i>
Tree	src-ip
Introduced	19.10.R1
Platforms	All

address (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IP address to match
Context	li li-filter li-ipv6-filter <i>string entry number match src-ip address (ipv6-prefix-with-host-bits ipv6-address)</i>
Tree	address
Introduced	19.10.R1

Platforms All

mask string

Synopsis Mask that is applied as an AND to the IPv6 address
 Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-ip mask string*
 Tree [mask](#)
 Introduced 19.10.R1
 Platforms All

src-port

Synopsis Enter the **src-port** context
 Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port*
 Tree [src-port](#)
 Introduced 19.10.R1
 Platforms All

eq number

Synopsis Condition on equality to specified value
 Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port eq number*
 Tree [eq](#)
 Range 0 to 65535
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
 Introduced 19.10.R1
 Platforms All

gt number

Synopsis Condition on being greater than the specified value
 Context [li](#) [li-filter](#) [li-ipv6-filter](#) *string entry number match src-port gt number*
 Tree [gt](#)
 Range 0 to 65534
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced	19.10.R1
Platforms	All

lt number

Synopsis	Condition on being less than the specified value
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	1 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

range

Synopsis	Enable the range context
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	19.10.R1
Platforms	All

end number

Synopsis	Upper bound port to match
Context	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i> match src-port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start number

Synopsis	Lower bound port to match
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Context	li li-filter li-ipv6-filter <i>string entry number match src-port range start number</i>
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

li-mac-filter [[li-filter-name](#)] *string*

Synopsis	Enter the li-mac-filter list instance
Context	li li-filter li-mac-filter <i>string</i>
Tree	li-mac-filter
Description	<p>Commands in this context configure LI MAC filter lists, which can be used to create confidential MAC filter based LI source entries.</p> <p>The LI MAC filter entries are merged into normal MAC filters as configured using the li-filter associations and li-filter reserved-block commands. The LI MAC filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

[li-filter-name] *string*

Synopsis	LI filter name
Context	li li-filter li-mac-filter <i>string</i>
Tree	li-mac-filter
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-mac-filter <i>string description string</i>

Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry [[li-entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	li li-filter li-mac-filter <i>string entry number</i>
Tree	entry

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

[li-entry-id] *number*

Synopsis	LI filter entry ID
Context	li li-filter li-mac-filter <i>string entry number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter li-mac-filter <i>string entry number description string</i>

Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match
Tree	match
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

dst-mac

Synopsis	Enable the dst-mac context
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match dst-mac
Tree	dst-mac
Introduced	19.10.R1
Platforms	All

address *string*

Synopsis	MAC address for filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match dst-mac address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

mask string

Synopsis	MAC address mask for filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match dst-mac mask <i>string</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

frame-type keyword

Synopsis	Frame type for MAC filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match frame-type <i>keyword</i>
Tree	frame-type
Description	This command specifies the frame type for MAC filter entry matching. A filter can be edited even if an LI source references an entry in the filter.
Default	802dot3
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	19.10.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match src-mac
Tree	src-mac
Introduced	19.10.R1
Platforms	All

address string

Synopsis	MAC address for filter match
Context	li li-filter li-mac-filter <i>string</i> entry <i>number</i> match src-mac address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

mask *string*

Synopsis MAC address mask for filter match
 Context [li](#) [li-filter](#) [li-mac-filter](#) *string entry number match src-mac mask string*
 Tree [mask](#)
 Default ff:ff:ff:ff:ff:ff
 Introduced 19.10.R1
 Platforms All

lock-filter *keyword*

Synopsis Lock state of LI filters
 Context [li](#) [li-filter](#) [lock-filter](#) *keyword*
 Tree [lock-filter](#)
 Default lock
 Options lock, unlock
 Introduced 19.10.R1
 Platforms All

reserved-block [[block-name](#)] *string*

Synopsis Enter the **reserved-block** list instance
 Context [li](#) [li-filter](#) [reserved-block](#) *string*
 Tree [reserved-block](#)
 Max. Instances 8
 Introduced 19.10.R1
 Platforms All

[block-name] *string*

Synopsis Object uniquely identifying an LI reserved block
 Context [li](#) [li-filter](#) [reserved-block](#) *string*
 Tree [reserved-block](#)

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li li-filter reserved-block <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

entry-range

Synopsis	Enable the entry-range context
Context	li li-filter reserved-block <i>string</i> entry-range
Tree	entry-range
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Upper bound of the range
Context	li li-filter reserved-block <i>string</i> entry-range end <i>number</i>
Tree	end
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	Lower bound of the range
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Context	li li-filter reserved-block <i>string</i> entry-range <i>start</i> <i>number</i>
Tree	start
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

ip-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ip-filter
Context	li li-filter reserved-block <i>string</i> ip-filter <i>string</i>
Tree	ip-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block <i>string</i> ip-filter <i>string</i>
Tree	ip-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for ipv6-filter
Context	li li-filter reserved-block <i>string</i> ipv6-filter <i>string</i>
Tree	ipv6-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block <i>string</i> ipv6-filter <i>string</i>
Tree	ipv6-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [[filter-name](#)] *string*

Synopsis	Add a list entry for mac-filter
Context	li li-filter reserved-block <i>string</i> mac-filter <i>string</i>
Tree	mac-filter
Introduced	19.10.R1
Platforms	All

[filter-name] *string*

Synopsis	IP filter ID for LI filter reserved block
Context	li li-filter reserved-block <i>string</i> mac-filter <i>string</i>
Tree	mac-filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

li-source [[service-name](#)] *string*

Synopsis	Enter the li-source list instance
Context	li li-source <i>string</i>
Tree	li-source
Introduced	19.10.R1
Platforms	All

[service-name] *string*

Synopsis	Administrative service name
Context	li li-source <i>string</i>
Tree	li-source
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of mirror service
Context	li li-source <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

li-ip-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ip-filter list instance
Context	li li-source <i>string</i> li-ip-filter <i>reference</i>
Tree	li-ip-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	A unique ID for an li-ip-filter
Context	li li-source <i>string</i> li-ip-filter <i>reference</i>
Tree	li-ip-filter
Reference	li li-filter li-ip-filter <i>string</i>
Notes	This element is part of a list key.

Introduced	19.10.R1
Platforms	All

entry [*li-entry-id*] *reference*

Synopsis	Enter the entry list instance
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[li-entry-id] *reference*

Synopsis	A unique ID for an li-ip-filter entry
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Reference	li li-filter li-ip-filter <i>string</i> entry <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i> intercept-id <i>number</i>
Tree	intercept-id
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the configure mirror mirror-dest encap layer-3-encap header-type command is configured with ip-udp-shim routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p>

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> li-ip-filter <i>reference</i> entry <i>reference</i> session-id <i>number</i>
Tree	session-id
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with ip-udp-shim routable encap under the configure mirror mirror-dest encap layer-3-encap header-type command. For all types of LI source entries, when the mirror service is configured with ip-udp-shim routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with ip-gre routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

li-ipv6-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-ipv6-filter list instance
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i>
Tree	li-ipv6-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] *reference*

Synopsis	A unique ID for an li-ipv6-filter
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Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i>
Tree	li-ipv6-filter
Reference	li li-filter li-ipv6-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [[li-entry-id](#)] *reference*

Synopsis	Enter the entry list instance
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[li-entry-id] *reference*

Synopsis	A unique ID for an li-ipv6-filter entry
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Reference	li li-filter li-ipv6-filter <i>string</i> entry <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i> entry <i>reference</i> intercept-id <i>number</i>
Tree	intercept-id
Description	This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> li-ipv6-filter <i>reference</i> entry <i>reference</i> session-id <i>number</i>
Tree	session-id
Description	This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

The session ID is only valid and used for mirror services that are configured with **ip-udp-shim** routable encap under the **configure mirror mirror-dest encap layer-3-encap header-type** command. For all types of LI source entries, when the mirror service is configured with **ip-udp-shim** routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

li-mac-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the li-mac-filter list instance
Context	li li-source <i>string</i> li-mac-filter <i>reference</i>
Tree	li-mac-filter
Introduced	19.10.R1
Platforms	All

[li-filter-name] reference

Synopsis	A unique ID for an li-mac-filter
Context	li li-source <i>string</i> li-mac-filter <i>reference</i>
Tree	li-mac-filter
Reference	li li-filter li-mac-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [li-entry-id] reference

Synopsis	Enter the entry list instance
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[li-entry-id] reference

Synopsis	A unique ID for an li-mac-filter entry
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i>
Tree	entry
Reference	li li-filter li-mac-filter <i>string</i> entry <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id number

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i> intercept-id <i>number</i>
Tree	intercept-id

Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the configure mirror mirror-dest encap layer-3-encap header-type command is configured with ip-udp-shim routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with ip-gre routable encap under the header-type command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> li-mac-filter <i>reference</i> entry <i>reference</i> session-id <i>number</i>
Tree	session-id
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with ip-udp-shim routable encap under the configure mirror mirror-dest encap layer-3-encap header-type command. For all types of LI source entries, when the mirror service is configured with ip-udp-shim routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with ip-gre routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

nat

Synopsis	Enter the nat context
Context	li li-source <i>string</i> nat

Tree [nat](#)
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dslite [[router-instance](#)] *string b4 string*

Synopsis Enter the **dslite** list instance
 Context [li li-source string nat dslite string b4 string](#)
 Tree [dslite](#)
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[router-instance] string

Synopsis Name of the service
 Context [li li-source string nat dslite string b4 string](#)
 Tree [dslite](#)
 String Length 1 to 64
 Notes This element is part of a list key.
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

b4 string

Synopsis B4 prefix of the subscriber
 Context [li li-source string nat dslite string b4 string](#)
 Tree [dslite](#)
 Notes This element is part of a list key.
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id number

Synopsis The intercept id of the traffic flow
 Context [li li-source string nat dslite string b4 string intercept-id number](#)

Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source <i>string</i> nat dslite <i>string</i> b4 <i>string</i> session-id <i>number</i>
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ethernet-header

Synopsis	Enter the ethernet-header context
Context	li li-source <i>string</i> nat ethernet-header
Tree	ethernet-header
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-address *string*

Synopsis	Destination MAC address field of Ethernet encapsulation
Context	li li-source <i>string</i> nat ethernet-header destination-address <i>string</i>
Tree	destination-address
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis	Source MAC address field of the Ethernet encapsulation
Context	li li-source <i>string</i> nat ethernet-header source-address <i>string</i>
Tree	source-address

Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Ethertype of the ethernet encapsulation
Context [li](#) [li-source](#) *string* [nat](#) [ethernet-header](#) [type](#) *number*
Tree [type](#)
Range 1536 to 65535
Default 1792
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware [[subscriber-id](#)] *string*

Synopsis Enter the **l2-aware** list instance
Context [li](#) [li-source](#) *string* [nat](#) [l2-aware](#) *string*
Tree [l2-aware](#)
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis The string identifying the subscribe
Context [li](#) [li-source](#) *string* [nat](#) [l2-aware](#) *string*
Tree [l2-aware](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis The intercept id of the traffic flow
Context [li](#) [li-source](#) *string* [nat](#) [l2-aware](#) *string* [intercept-id](#) *number*

Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source <i>string</i> nat l2-aware <i>string</i> session-id <i>number</i>
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44 [[router-instance](#)] *string ip string*

Synopsis	Enter the nat44 list instance
Context	li li-source <i>string</i> nat nat44 <i>string ip string</i>
Tree	nat44
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[router-instance] *string*

Synopsis	Name of the service
Context	li li-source <i>string</i> nat nat44 <i>string ip string</i>
Tree	nat44
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *string*

Synopsis	IP address of the subscriber
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Context	li li-source <i>string nat nat44</i> <i>string ip</i> <i>string</i>
Tree	nat44
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id *number*

Synopsis	The intercept id of the traffic flow
Context	li li-source <i>string nat nat44</i> <i>string ip</i> <i>string intercept-id</i> <i>number</i>
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id *number*

Synopsis	The session id of the traffic flow
Context	li li-source <i>string nat nat44</i> <i>string ip</i> <i>string session-id</i> <i>number</i>
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64 [[router-instance](#)] *string ip* *string*

Synopsis	Enter the nat64 list instance
Context	li li-source <i>string nat nat64</i> <i>string ip</i> <i>string</i>
Tree	nat64
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[router-instance] *string*

Synopsis	Name of the service
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Context	li li-source string nat nat64 string ip string
Tree	nat64
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip string

Synopsis	IP prefix of the subscriber
Context	li li-source string nat nat64 string ip string
Tree	nat64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

intercept-id number

Synopsis	The intercept id of the traffic flow
Context	li li-source string nat nat64 string ip string intercept-id number
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

session-id number

Synopsis	The session id of the traffic flow
Context	li li-source string nat nat64 string ip string session-id number
Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port [**port-id**] *string*

Synopsis	Enter the port list instance
Context	li li-source <i>string</i> port <i>string</i>
Tree	port
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[port-id] *string*

Synopsis	Port ID
Context	li li-source <i>string</i> port <i>string</i>
Tree	port
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source <i>string</i> port <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	li li-source <i>string</i> port <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.

Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sap [*sap-id*] *string*

Synopsis	Enter the sap list instance
Context	li li-source <i>string</i> sap <i>string</i>
Tree	sap
Description	Commands in this context create a service access point (SAP) within an LI configuration. The specified SAP must define a FastE, GigE, or XGigE, or XGigE access port with a dot1q, null, or q-in-q encapsulation type.
Introduced	19.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	li li-source <i>string</i> sap <i>string</i>
Tree	sap
Description	This command specifies the physical port identifier portion of the SAP definition.
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source <i>string</i> sap <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1

Platforms All

ingress *boolean*

Synopsis Perform lawful intercept on ingress traffic

Context [li](#) [li-source](#) *string* [sap](#) *string* [ingress](#) *boolean*

Tree [ingress](#)

Description When configured to **true**, the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.

Default false

Introduced 19.10.R1

Platforms All

intercept-id *number*

Synopsis Intercept ID of the traffic flow

Context [li](#) [li-source](#) *string* [sap](#) *string* [intercept-id](#) *number*

Tree [intercept-id](#)

Description This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.

For LI source entries, when the **configure mirror mirror-dest encap layer-3-encap header-type** command is configured with **ip-udp-shim** routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range 1 to 1073741823

Introduced 19.10.R1

Platforms All

session-id *number*

Synopsis Session ID of the traffic flow

Context [li](#) [li-source](#) *string* [sap](#) *string* [session-id](#) *number*

Tree	session-id
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with ip-udp-shim routable encap under the configure mirror mirror-dest encap layer-3-encap header-type command. For all types of LI source entries, when the mirror service is configured with ip-udp-shim routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with ip-gre routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

subscriber [[subscriber-id](#)] *string*

Synopsis	Enter the subscriber list instance
Context	li li-source <i>string</i> subscriber <i>string</i>
Tree	subscriber
Description	Commands in this context add hosts of a subscriber to a mirroring service.
Introduced	19.10.R1
Platforms	All

[subscriber-id] *string*

Synopsis	Subscriber ID
Context	li li-source <i>string</i> subscriber <i>string</i>
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress boolean

Synopsis	Perform lawful intercept on egress traffic
Context	li li-source <i>string</i> subscriber <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

fc keyword

Synopsis	Forwarding classes to be mirrored
Context	li li-source <i>string</i> subscriber <i>string</i> fc <i>keyword</i>
Tree	fc
Description	This command specifies the name of the forwarding class with which to associate LI traffic. The forwarding class name must already be defined within the system. If the FC name is not already defined, an error is returned and this command has no effect. If the FC name is defined, the forwarding class associated with the FC name overrides the default forwarding class.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

host-type keyword

Synopsis	Subscriber host type to be monitored
Context	li li-source <i>string</i> subscriber <i>string</i> host-type <i>keyword</i>
Tree	host-type
Description	This command specifies the host type for LI.
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Perform lawful intercept on ingress traffic
Context	li li-source <i>string</i> subscriber <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept ID of the traffic flow
Context	li li-source <i>string</i> subscriber <i>string</i> intercept-id <i>number</i>
Tree	intercept-id
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the configure mirror mirror-dest encap layer-3-encap header-type command is configured with ip-udp-shim routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with ip-gre routable encap under the header-type command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	IP address of the subscriber
Context	li li-source <i>string</i> subscriber <i>string</i> ip-address <i>string</i>
Tree	ip-address

Description	This command specifies the service IP address (system IP address) of the remote device sending LI traffic. If 0.0.0.0 is specified, any remote router is allowed to send to this service.
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

ip-family *keyword*

Synopsis	IP family for LI
Context	li li-source <i>string</i> subscriber <i>string</i> ip-family <i>keyword</i>
Tree	ip-family
Description	This command specifies the IP family for LI.
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

mac-address *string*

Synopsis	The source MAC address
Context	li li-source <i>string</i> subscriber <i>string</i> mac-address <i>string</i>
Tree	mac-address
Description	This command specifies a MAC address when defining a static host. Multiple static hosts may be configured with the same MAC address because each definition is distinguished by a unique IP address.
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

sap-id *string*

Synopsis	SAP ID
Context	li li-source <i>string</i> subscriber <i>string</i> sap-id <i>string</i>
Tree	sap-id

String Length	1 to 45
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session ID of the traffic flow
Context	li li-source <i>string</i> subscriber <i>string</i> session-id <i>number</i>
Tree	session-id
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with ip-udp-shim routable encap under the configure mirror mirror-dest encap layer-3-encap header-type command. For all types of LI source entries, when the mirror service is configured with ip-udp-shim routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with ip-gre routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

sla-profile *string*

Synopsis	SLA profile
Context	li li-source <i>string</i> subscriber <i>string</i> sla-profile <i>string</i>
Tree	sla-profile
Description	<p>This command specifies an SLA profile name.</p> <p>Each host of a subscriber can use a different SLA profile. This option allows interception of only the hosts using the specified SLA profile. In some deployments, SLA profiles are assigned per type of traffic. There can be, for example, a specific SLA profile for voice traffic (which could be used for all SIP hosts).</p>
String Length	1 to 32

Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

wlan-gw-dsm-ue [**mac**] *string*

Synopsis	Enter the wlan-gw-dsm-ue list instance
Context	li li-source <i>string</i> wlan-gw-dsm-ue <i>string</i>
Tree	wlan-gw-dsm-ue
Introduced	19.10.R1
Platforms	All

[mac] *string*

Synopsis	MAC address of the DSM UE
Context	li li-source <i>string</i> wlan-gw-dsm-ue <i>string</i>
Tree	wlan-gw-dsm-ue
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

intercept-id *number*

Synopsis	Intercept identifier
Context	li li-source <i>string</i> wlan-gw-dsm-ue <i>string</i> intercept-id <i>number</i>
Tree	intercept-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

session-id *number*

Synopsis	Session identifier
Context	li li-source <i>string</i> wlan-gw-dsm-ue <i>string</i> session-id <i>number</i>

Tree	session-id
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

log

Synopsis	Enter the log context
Context	li log
Tree	log
Introduced	19.10.R1
Platforms	All

log-id [[name](#)] *string*

Synopsis	Enter the log-id list instance
Context	li log log-id <i>string</i>
Tree	log-id
Max. Instances	30
Introduced	19.10.R1
Platforms	All

[\[name\]](#) *string*

Synopsis	Log ID
Context	li log log-id <i>string</i>
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	The administrative state of the log
Context	li log log-id string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	li log log-id string description string
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	li log log-id string destination
Tree	destination
Introduced	19.10.R1
Platforms	All

memory

Synopsis	Enable the memory context
Context	li log log-id string destination memory
Tree	memory
Notes	The following elements are part of a choice: memory , netconf , or snmp .
Introduced	19.10.R1
Platforms	All

max-entries *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	li log log-id string destination memory max-entries number
Tree	max-entries
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

netconf

Synopsis	Enable the netconf context
Context	li log log-id string destination netconf
Tree	netconf
Notes	The following elements are part of a choice: memory , netconf , or snmp .
Introduced	20.2.R1
Platforms	All

max-entries *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of events stored in the NETCONF log
Context	li log log-id string destination netconf max-entries number
Tree	max-entries
Description	This command configures the maximum number of events stored in the NETCONF log. If this setting needs to be modified, the log ID must be removed and re-created.
Range	50 to 1024
Default	100

Introduced	20.2.R1
Platforms	All

snmp

Synopsis	Enable the snmp context
Context	li log log-id string destination snmp
Tree	snmp
Notes	The following elements are part of a choice: memory , netconf , or snmp .
Introduced	19.10.R1
Platforms	All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this snmp log
Context	li log log-id string destination snmp max-entries number
Tree	max-entries
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

filter *string*

Synopsis	Event filter ID to associate with log ID configuration
Context	li log log-id string filter string
Tree	filter
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	li log log-id <i>string</i> netconf-stream <i>string</i>
Tree	netconf-stream
String Length	1 to 32
Introduced	20.2.R1
Platforms	All

source

Synopsis	Enter the source context
Context	li log log-id <i>string</i> source
Tree	source
Introduced	19.10.R1
Platforms	All

li *boolean*

Synopsis	Event stream for events configured for LI activities
Context	li log log-id <i>string</i> source li <i>boolean</i>
Tree	li
Default	false
Introduced	19.10.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone to display date and time
Context	li log log-id <i>string</i> time-format <i>keyword</i>
Tree	time-format
Default	utc
Options	utc, local
Introduced	19.10.R1
Platforms	All

mirror-dest-reservation

Synopsis	Enter the mirror-dest-reservation context
Context	li mirror-dest-reservation
Tree	mirror-dest-reservation
Introduced	19.10.R1
Platforms	All

end *number*

Synopsis	Last service id
Context	li mirror-dest-reservation end <i>number</i>
Tree	end
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

start *number*

Synopsis	First service id
Context	li mirror-dest-reservation start <i>number</i>
Tree	start
Range	1 to 2147483647
Introduced	19.10.R1
Platforms	All

mirror-dest-template [[name](#)] *string*

Synopsis	Enter the mirror-dest-template list instance
Context	li mirror-dest-template <i>string</i>
Tree	mirror-dest-template
Max. Instances	8
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Mirror destination template name
Context	li mirror-dest-template <i>string</i>
Tree	mirror-dest-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

layer-3-encap

Synopsis	Enter the layer-3-encap context
Context	li mirror-dest-template <i>string</i> layer-3-encap
Tree	layer-3-encap
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

direction-bit *boolean*

Synopsis	Use highest bit in interception ID for flow direction
Context	li mirror-dest-template <i>string</i> layer-3-encap direction-bit <i>boolean</i>
Tree	direction-bit
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encap-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The header type of the layer 3 encapsulation.
Context	li mirror-dest-template <i>string</i> layer-3-encap encap-type <i>keyword</i>
Tree	encap-type

Default	ip-udp-shim
Options	ip-udp-shim, ip-gre
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-source *string*

Synopsis	Source IPv4 address for Layer 3 encapsulation
Context	li mirror-dest-template <i>string</i> layer-3-encap ip-source <i>string</i>
Tree	ip-source
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Virtual router instance to inject mirrored packets
Context	li mirror-dest-template <i>string</i> layer-3-encap router-instance <i>string</i>
Tree	router-instance
String Length	1 to 64
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

Synopsis	Enter the udp context
Context	li mirror-dest-template <i>string</i> layer-3-encap udp
Tree	udp
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination *number*

Synopsis	Destination UDP port
Context	li mirror-dest-template <i>string</i> layer-3-encap udp destination <i>number</i>

Tree	destination
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source number

Synopsis	Source UDP port
Context	li mirror-dest-template <i>string layer-3-encap udp source number</i>
Tree	source
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encapsulation type supported by the mirror service
Context	li mirror-dest-template <i>string type keyword</i>
Tree	type
Default	ether
Options	ether, ip-only
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis	Enter the nat context
Context	li nat
Tree	nat
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-outside-ip-address *boolean*

Synopsis	Report outside IP address for L2-Aware NAT subscribers
Context	li nat use-outside-ip-address <i>boolean</i>
Tree	use-outside-ip-address
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius

Synopsis	Enter the radius context
Context	li radius
Tree	radius
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mirror-dest-template *reference*

Synopsis	RADIUS triggered mirror destination template
Context	li radius mirror-dest-template <i>reference</i>
Tree	mirror-dest-template
Reference	li mirror-dest-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

x-interfaces

Synopsis	Enter the x-interfaces context
Context	li x-interfaces
Tree	x-interfaces
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

admin-state *keyword*

Synopsis	Administrative state of the x-interfaces
Context	li x-interfaces admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

correlation-id

Synopsis	Enter the correlation-id context
Context	li x-interfaces correlation-id
Tree	correlation-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	li x-interfaces correlation-id ipoe keyword
Tree	ipoe
Default	radius-host-acct-id
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

pppoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	li x-interfaces correlation-id pppoe keyword
Tree	pppoe
Default	radius-host-acct-id
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Introduced	21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e

ine-identifier *string*

Synopsis Intercepting Network Element (INE) ID

Context [li x-interfaces ine-identifier string](#)

Tree [ine-identifier](#)

String Length 1 to 32

Introduced 21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e

lic [[name](#)] *string*

Synopsis Enter the **lic** list instance

Context [li x-interfaces lic string](#)

Tree [lic](#)

Max. 18

Instances

Introduced 21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e

[name] *string*

Synopsis LIC name

Context [li x-interfaces lic string](#)

Tree [lic](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e

authentication

Synopsis Enter the **authentication** context

Context [li x-interfaces lic string authentication](#)

Tree [authentication](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

password string

Synopsis Password for the X1 and X2 interfaces
Context [li x-interfaces lic string authentication password string](#)
Tree [password](#)
String Length 1 to 50
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

private-ki string

Synopsis Private Ki string for the X1 and X2 interfaces
Context [li x-interfaces lic string authentication private-ki string](#)
Tree [private-ki](#)
String Length 1 to 50
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

sequence-group string

Synopsis Sequence group for the X1 and X2 interfaces
Context [li x-interfaces lic string authentication sequence-group string](#)
Tree [sequence-group](#)
String Length 1 to 42
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

description string

Synopsis Text description
Context [li x-interfaces lic string description string](#)

Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

identifier string

Synopsis	LIC ID
Context	li x-interfaces lic string identifier string
Tree	identifier
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the ipv4 context
Context	li x-interfaces lic string ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the LIC
Context	li x-interfaces lic string ipv4 ip-address (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ip-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

port number

Synopsis	TCP port associated with the LIC
Context	li x-interfaces lic string port number
Tree	port

Range	0 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

router-instance *string*

Synopsis	Virtual router instance used by the X-interfaces
Context	li x-interfaces lic <i>string</i> router-instance <i>string</i>
Tree	router-instance
String Length	0 to 64
Default	
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

user-db *string*

Synopsis	Location of the data-trigger host for the LIC
Context	li x-interfaces user-db <i>string</i>
Tree	user-db
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x1

Synopsis	Enter the x1 context
Context	li x-interfaces x1
Tree	x1
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the ipv4 context
Context	li x-interfaces x1 ipv4

Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	X1 interface IP address
Context	li x-interfaces x1 ipv4 local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peer *reference*

Synopsis	Peer LIC for the X1 interface
Context	li x-interfaces x1 lic-peer <i>reference</i>
Tree	lic-peer
Reference	li x-interfaces lic <i>string</i>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-tcp-port *number*

Synopsis	Local TCP port used for the X1 interface
Context	li x-interfaces x1 local-tcp-port <i>number</i>
Tree	local-tcp-port
Range	1 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis	Enter the timeouts context
Context	li x-interfaces x1 timeouts
Tree	timeouts

Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

message-timeout *number*

Synopsis Maximum time for the LIC to reply to an X1 message
Context [li x-interfaces x1 timeouts message-timeout number](#)
Tree [message-timeout](#)
Range 180 to 300
Default 180
Units seconds
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

x2

Synopsis Enter the **x2** context
Context [li x-interfaces x2](#)
Tree [x2](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis Enter the **ipv4** context
Context [li x-interfaces x2 ipv4](#)
Tree [ipv4](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis X2 interface IP address
Context [li x-interfaces x2 ipv4 local-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)
Tree [local-address](#)

Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

lic-peer *reference*

Synopsis Peer LIC for the X2 interface
Context [li x-interfaces x2 lic-peer reference](#)
Tree [lic-peer](#)
Reference [li x-interfaces lic string](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis Enter the **timeouts** context
Context [li x-interfaces x2 timeouts](#)
Tree [timeouts](#)
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

keep-alive *number*

Synopsis Keep-alive timeout
Context [li x-interfaces x2 timeouts keep-alive number](#)
Tree [keep-alive](#)
Range 300 to 600
Default 300
Units seconds
Introduced 21.5.R1
Platforms 7750 SR-1, 7750 SR-7/12/12e

request *number*

Synopsis Tx2-normal timeout
Context [li x-interfaces x2 timeouts request number](#)

Tree	request
Range	5 to 30
Default	5
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

x3

Synopsis	Enter the x3 context
Context	li x-interfaces x3
Tree	x3
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

alarms

Synopsis	Enter the alarms context
Context	li x-interfaces x3 alarms
Tree	alarms
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

cpu-alarm

Synopsis	Enter the cpu-alarm context
Context	li x-interfaces x3 alarms cpu-alarm
Tree	cpu-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold value of the CPU usage alarm
Context	li x-interfaces x3 alarms cpu-alarm high-threshold <i>number</i>

Tree	high-threshold
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold value of the CPU usage alarm
Context	li x-interfaces x3 alarms cpu-alarm low-threshold <i>number</i>
Tree	low-threshold
Range	0 to 99
Default	0
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

memory-alarm

Synopsis	Enter the memory-alarm context
Context	li x-interfaces x3 alarms memory-alarm
Tree	memory-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold of the packet buffer memory usage alarm
Context	li x-interfaces x3 alarms memory-alarm high-threshold <i>number</i>
Tree	high-threshold
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold of the packet buffer memory usage alarm
Context	li x-interfaces x3 alarms memory-alarm low-threshold <i>number</i>
Tree	low-threshold
Range	0 to 99
Default	0
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

throughput-alarm

Synopsis	Enter the throughput-alarm context
Context	li x-interfaces x3 alarms throughput-alarm
Tree	throughput-alarm
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

high-threshold *number*

Synopsis	High threshold value of the throughput alarm
Context	li x-interfaces x3 alarms throughput-alarm high-threshold <i>number</i>
Tree	high-threshold
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

low-threshold *number*

Synopsis	Low threshold value of the throughput alarm
Context	li x-interfaces x3 alarms throughput-alarm low-threshold <i>number</i>
Tree	low-threshold
Range	1 to 4294967295

Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

ipv4

Synopsis	Enter the ipv4 context
Context	li x-interfaces x3 ipv4
Tree	ipv4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

local-address-range

Synopsis	Enter the local-address-range context
Context	li x-interfaces x3 ipv4 local-address-range
Tree	local-address-range
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

end string

Synopsis	Upper bound of the range
Context	li x-interfaces x3 ipv4 local-address-range end string
Tree	end
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

start string

Synopsis	Lower bound of the range
Context	li x-interfaces x3 ipv4 local-address-range start string
Tree	start
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

li-group *number*

Synopsis	ISA group of the X3 interface
Context	li x-interfaces x3 li-group <i>number</i>
Tree	li-group
Range	1 to 4
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

lic-peers [[name](#)] *reference*

Synopsis	Add a list entry for lic-peers
Context	li x-interfaces x3 lic-peers <i>reference</i>
Tree	lic-peers
Max. Instances	16
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

[name] *reference*

Synopsis	Peer LIC for the X3 interface
Context	li x-interfaces x3 lic-peers <i>reference</i>
Tree	lic-peers
Reference	li x-interfaces lic <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

session-limit *number*

Synopsis	Maximum number of X3 sessions initiated to the LIC
Context	li x-interfaces x3 session-limit <i>number</i>
Tree	session-limit
Range	1 to 32

Default	32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

timeouts

Synopsis	Enter the timeouts context
Context	li x-interfaces x3 timeouts
Tree	timeouts
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

keep-alive *number*

Synopsis	Keep-alive timeout
Context	li x-interfaces x3 timeouts keep-alive <i>number</i>
Tree	keep-alive
Range	300 to 600
Default	300
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

request *number*

Synopsis	Tx3-normal timeout
Context	li x-interfaces x3 timeouts request <i>number</i>
Tree	request
Range	5 to 30
Default	5
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

target-retry-wait *number*

Synopsis	Retry interval for target tunnel setup
Context	li x-interfaces x3 timeouts target-retry-wait <i>number</i>
Tree	target-retry-wait
Range	300 to 1200
Default	300
Units	seconds
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

3.24 log commands

```

configure
- log
- accounting-policy number
- admin-state keyword
- align boolean
- apply-groups reference
- apply-groups-exclude reference
- collection-interval number
- custom-record
- aa-specific
- aa-sub-attributes
- app-profile boolean
- app-service-options boolean
- aa-sub-counters
- long-duration-flow-count boolean
- medium-duration-flow-count boolean
- short-duration-flow-count boolean
- total-flow-duration boolean
- total-flows-completed-count boolean
- from-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- to-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- apply-groups reference
- apply-groups-exclude reference
- policer number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- exceed-profile-octets-discarded-count boolean
- exceed-profile-octets-forwarded-count boolean
- exceed-profile-octets-offered-count boolean
- exceed-profile-packets-discarded-count boolean
- exceed-profile-packets-forwarded-count boolean
- exceed-profile-packets-offered-count boolean
- in-plus-profile-octets-discarded-count boolean
- in-plus-profile-octets-forwarded-count boolean
- in-plus-profile-octets-offered-count boolean
- in-plus-profile-packets-discarded-count boolean

```

configure log accounting-policy custom-record policer e-counters in-plus-profile-packets-forwarded-count

```

- in-plus-profile-packets-forwarded-count boolean
- in-plus-profile-packets-offered-count boolean
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- i-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- queue number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- i-counters
- all-octets-offered-count boolean
- all-packets-offered-count boolean
- high-octets-discarded-count boolean
- high-octets-offered-count boolean
- high-packets-discarded-count boolean
- high-packets-offered-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-forwarded-count boolean
- low-octets-discarded-count boolean
- low-octets-offered-count boolean
- low-packets-discarded-count boolean
- low-packets-offered-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-forwarded-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- ref-aa-specific-counter
- any boolean
- ref-policer
- all

```

configure log accounting-policy custom-record ref-policer e-counters

```

- e-counters
  - exceed-profile-octets-discarded-count boolean
  - exceed-profile-octets-forwarded-count boolean
  - exceed-profile-octets-offered-count boolean
  - exceed-profile-packets-discarded-count boolean
  - exceed-profile-packets-forwarded-count boolean
  - exceed-profile-packets-offered-count boolean
  - in-plus-profile-octets-discarded-count boolean
  - in-plus-profile-octets-forwarded-count boolean
  - in-plus-profile-octets-offered-count boolean
  - in-plus-profile-packets-discarded-count boolean
  - in-plus-profile-packets-forwarded-count boolean
  - in-plus-profile-packets-offered-count boolean
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-octets-offered-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - in-profile-packets-offered-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-octets-offered-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - out-profile-packets-offered-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- i-counters
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-octets-offered-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - in-profile-packets-offered-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-octets-offered-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - out-profile-packets-offered-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- id reference
- ref-queue
  - all
  - e-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
  - i-counters
    - all-octets-offered-count boolean
    - all-packets-offered-count boolean
    - high-octets-discarded-count boolean
    - high-octets-offered-count boolean
    - high-packets-discarded-count boolean
    - high-packets-offered-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - low-octets-discarded-count boolean

```

configure log accounting-policy custom-record ref-queue i-counters low-octets-offered-count

```

    - low-octets-offered-count boolean
    - low-packets-discarded-count boolean
    - low-packets-offered-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - id reference
  - significant-change number
- default boolean
- description string
- destination
  - file reference
  - null
- include-system-info boolean
- record keyword
- app-route-notifications
  - cold-start-wait number
  - route-recovery-wait number
- apply-groups reference
- apply-groups-exclude reference
- encryption-key string
- event-damping boolean
- event-handling
  - handler string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - min-delay number
      - script-policy
        - name reference
        - owner reference
  - event-trigger
    - adp event keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - entry number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - debounce
          - time number
          - value number
        - description string
        - filter reference
        - handler reference
    - anysec event keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - entry number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - debounce

```

configure log event-trigger anysec entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- application-assurance event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- aps event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- auto-prov event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- bfd event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference

```

configure log event-trigger bfd entry handler

- **handler** *reference*
- **bgp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **bier event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **calltrace event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **cflowd event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **chassis event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger chassis apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **debug event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **dhcp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **dhcps event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **diameter event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*

configure log event-trigger diameter entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **dynsvc event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **efm-oam event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **elmi event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ering event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*

configure log event-trigger ering entry debounce value

- **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **eth-cfm event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **etun event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **filter event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **gsmp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*

configure log event-trigger igmp

- **igmp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **igmp-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ip event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ipsec event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **isis event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log event-trigger isis description

- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **l2tp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **lag event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ldap event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ldp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger ldp entry apply-groups-exclude

```

    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
  - li event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - lldp event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - logger event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - macsec event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number

```

configure log event-trigger macsec entry description

```

    - description string
    - filter reference
    - handler reference
- mc-redundancy event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- mcpath event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- mgmt-core event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- mirror event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- mld event keyword

```

configure log event-trigger mld admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mld-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mpls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **mpls-tp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **msdp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*

configure log event-trigger msdp entry

- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **nat event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ntp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **oam event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **openflow event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log event-trigger openflow entry debounce

- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **ospf event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pcap event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pcep event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pim event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*

configure log event-trigger pim entry filter

- **filter** *reference*
- **handler** *reference*
- **pim-snooping event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **port event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pppoe event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **pppoe-clnt event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ptp event** *keyword*
 - **admin-state** *keyword*

configure log event-trigger ptp apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **radius event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **rip event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **ripng event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **route-policy event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*

configure log event-trigger route-policy entry admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
 - **time** *number*
 - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **rpki event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **rsvp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **satellite event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **security event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**

configure log event-trigger security entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- sflow event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- snmp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- sr-mpls event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- srv6 event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference

```

configure log event-trigger srv6 entry handler

- **handler** *reference*
- **stp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **svcmgr event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **system event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **tls event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **tree-sid event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure log event-trigger tree-sid apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **user event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **video event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **vrrp event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **debounce**
 - **time** *number*
 - **value** *number*
 - **description** *string*
 - **filter** *reference*
 - **handler** *reference*
- **vrtr event** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **admin-state** *keyword*

configure log event-trigger vrtr entry apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
  - wlan-gw event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - wpp event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - file string
    - apply-groups reference
    - apply-groups-exclude reference
    - compact-flash-location
      - backup keyword
      - primary keyword
    - description string
    - retention number
    - rollover number
  - file-storage-control
    - accounting-files-total-size number
    - log-files-total-size number
  - filter string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action keyword
    - description string
    - named-entry string
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - match
      - application
        - eq keyword
        - neq keyword

```


configure log filter named-entry match event

```

- event
  - eq number
  - gt number
  - gte number
  - lt number
  - lte number
  - neq number
- message
  - eq string
  - neq string
  - regexp boolean
- severity
  - eq keyword
  - gt keyword
  - gte keyword
  - lt keyword
  - lte keyword
  - neq keyword
- subject
  - eq string
  - neq string
  - regexp boolean
- vrtr-name
  - eq string
  - neq string
  - regexp boolean
- log-events
- adp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- anysec event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- application-assurance event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- aps event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean

```

configure log log-events aps specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- auto-prov event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- bfd event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- bgp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- bier event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- calltrace event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- cflowd event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- chassis event keyword

```

configure log log-events chassis apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- debug event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dhcp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dhcps event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- diameter event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dotlx event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- dynsvc event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean

```

configure log log-events dynsvc severity

```

- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- efm-oam event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- elmi event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ering event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- eth-cfm event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- etun event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- filter event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number

```

configure log log-events filter throttle

- **throttle** *boolean*
- **gsmp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **igmp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **igmp-snooping event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ip event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ipsec event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **isis event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **l2tp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log log-events l2tp generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- lag event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ldap event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ldp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- li event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- lldp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- logger event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean

```

configure log log-events logger specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- macsec event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mc-redundancy event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mcpath event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mgmt-core event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mirror event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld-snooping event keyword

```

configure log log-events mld-snooping apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- mpls-tp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- msdp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- nat event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ntp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- oam event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean

```


configure log log-events oam severity

- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **openflow event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ospf event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **pcap event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **pcep event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **pfcp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **pim event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*

configure log log-events pim throttle

- **throttle** *boolean*
- **pim-snooping event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **port event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **pppoe event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **pppoe-clnt event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **ptp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **python event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **radius event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure log log-events radius generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- rip event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ripng event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- route-policy event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- rpki event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- rsvp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- satellite event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean

```

configure log log-events satellite specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- security event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sflow event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- snmp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sr-mps event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- srv6 event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- stp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- svcmgr event keyword

```

configure log log-events svcmgr apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- system event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- tls event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- tree-sid event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- user event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- video event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- vrrp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean

```

configure log log-events vrrp severity

- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **vrtr event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **wlan-gw event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **wpp event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **generate** *boolean*
 - **repeat** *boolean*
 - **severity** *keyword*
 - **specific-throttle** *boolean*
 - **specific-throttle-interval** *number*
 - **specific-throttle-limit** *number*
 - **throttle** *boolean*
- **log-id** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **destination**
 - **cli**
 - **max-entries** *number*
 - **console**
 - **file** *reference*
 - **memory**
 - **max-entries** *number*
 - **netconf**
 - **max-entries** *number*
 - **snmp**
 - **max-entries** *number*
 - **syslog** *reference*
 - **filter** *reference*
 - **netconf-stream** *string*
 - **python-policy** *reference*
 - **source**
 - **change** *boolean*
 - **debug** *boolean*
 - **main** *boolean*
 - **security** *boolean*
 - **time-format** *keyword*
- **route-preference**
 - **primary** *keyword*
 - **secondary** *keyword*

configure log services-all-events

- **services-all-events**
 - **service** *reference*
- **snmp-trap-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **trap-target** *string*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **notify-community** *string*
 - **port** *number*
 - **replay** *boolean*
 - **security-level** *keyword*
 - **version** *keyword*
- **syslog** *string*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **facility** *keyword*
 - **log-prefix** (*keyword* | *string*)
 - **port** *number*
 - **severity** *keyword*
 - **tls-client-profile** *reference*
- **throttle-rate**
 - **interval** *number*
 - **limit** *number*

3.24.1 log command descriptions

log

Synopsis	Enter the log context
Context	configure log
Tree	log
Introduced	16.0.R1
Platforms	All

accounting-policy [[policy-id](#)] *number*

Synopsis	Enter the accounting-policy list instance
Context	configure log accounting-policy <i>number</i>
Tree	accounting-policy
Introduced	16.0.R1
Platforms	All

[\[policy-id\]](#) *number*

Synopsis	Accounting policy unique ID
Context	configure log accounting-policy <i>number</i>
Tree	accounting-policy
Range	1 to 99
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the accounting policy
Context	configure log accounting-policy <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	This command controls the administrative state of the accounting policy.

When an accounting policy is disabled, no accounting data is written to the destination log ID. Counters in the billing data reflect totals, and not increments. When the policy is re-enabled, the counters include the data collected during the period the policy was administratively disabled.

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

align *boolean*

Synopsis	Align statistics collection interval to absolute time
Context	configure log accounting-policy <i>number</i> align <i>boolean</i>
Tree	align
Description	<p>When the align command is configured to true, statistics collection is aligned to the nearest interval within an hour. Statistics are generated when the absolute time can be divided by the collection-interval value, after which the collection interval continues. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:15, 15:30, 15:45, 16:00, 16:15, and so on. This supports synchronized statistics intervals and collection across multiple nodes in the network.</p> <p>When the align command is configured to false, statistics collection occurs immediately after the configuration has been committed. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:03, 15:18, 15:33, 15:48, 16:03, and so on.</p>
Default	false
Introduced	19.10.R1
Platforms	All

collection-interval *number*

Synopsis	Accounting collection interval
Context	configure log accounting-policy <i>number</i> collection-interval <i>number</i>
Tree	collection-interval
Range	1 to 120
Units	minutes
Introduced	16.0.R1
Platforms	All

custom-record

Synopsis	Enter the custom-record context
Context	configure log accounting-policy <i>number</i> custom-record
Tree	custom-record
Introduced	16.0.R1
Platforms	All

aa-specific

Synopsis	Enter the aa-specific context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific
Tree	aa-specific
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-attributes

Synopsis	Enter the aa-sub-attributes context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-attributes
Tree	aa-sub-attributes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-profile *boolean*

Synopsis	Include application profile to be exported
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-attributes app-profile <i>boolean</i>
Tree	app-profile
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

app-service-options *boolean*

Synopsis	Include application service options
Context	configure log accounting-policy number custom-record aa-specific aa-sub-attributes app-service-options <i>boolean</i>
Tree	app-service-options
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aa-sub-counters

Synopsis	Enter the aa-sub-counters context
Context	configure log accounting-policy number custom-record aa-specific aa-sub-counters
Tree	aa-sub-counters
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

long-duration-flow-count *boolean*

Synopsis	Include the long duration flow count
Context	configure log accounting-policy number custom-record aa-specific aa-sub-counters long-duration-flow-count <i>boolean</i>
Tree	long-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

medium-duration-flow-count *boolean*

Synopsis	Include the medium duration flow
Context	configure log accounting-policy number custom-record aa-specific aa-sub-counters medium-duration-flow-count <i>boolean</i>
Tree	medium-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

short-duration-flow-count *boolean*

Synopsis	Include the short duration flow count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-counters short-duration-flow-count <i>boolean</i>
Tree	short-duration-flow-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-flow-duration *boolean*

Synopsis	Include the total flow duration count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-counters total-flow-duration <i>boolean</i>
Tree	total-flow-duration
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

total-flows-completed-count *boolean*

Synopsis	Include the total of completed flows count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific aa-sub-counters total-flows-completed-count <i>boolean</i>
Tree	total-flows-completed-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

from-aa-sub-counters

Synopsis	Enter the from-aa-sub-counters context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters
Tree	from-aa-sub-counters

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-active-count *boolean*

Synopsis Include the active flows
Context **configure** [log accounting-policy](#) *number* [custom-record aa-specific from-aa-sub-counters flows-active-count](#) *boolean*
Tree [flows-active-count](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-admitted-count *boolean*

Synopsis Include the admitted flows
Context **configure** [log accounting-policy](#) *number* [custom-record aa-specific from-aa-sub-counters flows-admitted-count](#) *boolean*
Tree [flows-admitted-count](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-denied-count *boolean*

Synopsis Include the denied flows
Context **configure** [log accounting-policy](#) *number* [custom-record aa-specific from-aa-sub-counters flows-denied-count](#) *boolean*
Tree [flows-denied-count](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding-class *boolean*

Synopsis Include forwarding class

Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters forwarding-class <i>boolean</i>
Tree	forwarding-class
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-octet-count *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters max-throughput-octet-count <i>boolean</i>
Tree	max-throughput-octet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-packet-count *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters max-throughput-packet-count <i>boolean</i>
Tree	max-throughput-packet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-timestamp *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters max-throughput-timestamp <i>boolean</i>
Tree	max-throughput-timestamp
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-admitted-count *boolean*

Synopsis	Include the admitted octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters octets-admitted-count <i>boolean</i>
Tree	octets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-denied-count *boolean*

Synopsis	Include the denied octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters octets-denied-count <i>boolean</i>
Tree	octets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-admitted-count *boolean*

Synopsis	Include the admitted packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters packets-admitted-count <i>boolean</i>
Tree	packets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-denied-count *boolean*

Synopsis	Include the denied packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific from-aa-sub-counters packets-denied-count <i>boolean</i>
Tree	packets-denied-count

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-aa-sub-counters

Synopsis	Enter the to-aa-sub-counters context
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters
Tree	to-aa-sub-counters
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-active-count *boolean*

Synopsis	Include the active flows
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters flows-active-count <i>boolean</i>
Tree	flows-active-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-admitted-count *boolean*

Synopsis	Include the admitted flows
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters flows-admitted-count <i>boolean</i>
Tree	flows-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flows-denied-count *boolean*

Synopsis	Include the denied flows
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Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters flows-denied-count <i>boolean</i>
Tree	flows-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

forwarding-class *boolean*

Synopsis	Include forwarding class
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters forwarding-class <i>boolean</i>
Tree	forwarding-class
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-octet-count *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters max-throughput-octet-count <i>boolean</i>
Tree	max-throughput-octet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-packet-count *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters max-throughput-packet-count <i>boolean</i>
Tree	max-throughput-packet-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-throughput-timestamp *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters max-throughput-timestamp <i>boolean</i>
Tree	max-throughput-timestamp
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-admitted-count *boolean*

Synopsis	Include the admitted octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters octets-admitted-count <i>boolean</i>
Tree	octets-admitted-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

octets-denied-count *boolean*

Synopsis	Include the denied octets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters octets-denied-count <i>boolean</i>
Tree	octets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-admitted-count *boolean*

Synopsis	Include the admitted packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters packets-admitted-count <i>boolean</i>
Tree	packets-admitted-count

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packets-denied-count *boolean*

Synopsis	Include the denied packets count
Context	configure log accounting-policy <i>number</i> custom-record aa-specific to-aa-sub-counters packets-denied-count <i>boolean</i>
Tree	packets-denied-count
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer [*id*] *number*

Synopsis	Enter the policer list instance
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Tree	policer
Introduced	19.10.R1
Platforms	All

[id] *number*

Synopsis	Policer ID
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
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Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters
Tree	e-counters
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-discarded-count <i>boolean</i>
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-forwarded-count <i>boolean</i>
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-octets-offered-count <i>boolean</i>
Tree	exceed-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-discarded-count <i>boolean</i>
Tree	exceed-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-forwarded-count <i>boolean</i>
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters exceed-profile-packets-offered-count <i>boolean</i>
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-octets-discarded-count <i>boolean</i>
Tree	in-plus-profile-octets-discarded-count
Default	false

Introduced 19.10.R1
Platforms All

in-plus-profile-octets-forwarded-count *boolean*

Synopsis Include the in-plus profile octets forwarded count
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-forwarded-count](#) *boolean*
Tree [in-plus-profile-octets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-octets-offered-count *boolean*

Synopsis Include the in-plus profile octets offered count
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-offered-count](#) *boolean*
Tree [in-plus-profile-octets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-packets-discarded-count *boolean*

Synopsis Include the in-plus profile packets discarded count
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-packets-discarded-count](#) *boolean*
Tree [in-plus-profile-packets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-packets-forwarded-count *boolean*

Synopsis Include the in-plus profile packets forwarded count

Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-offered-count *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-plus-profile-packets-offered-count <i>boolean</i>
Tree	in-plus-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count

Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncoloured octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> e-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false

Introduced 19.10.R1
 Platforms All

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncoloured packets offered count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [uncoloured-packets-offered-count](#) *boolean*
 Tree [uncoloured-packets-offered-count](#)
 Default false
 Introduced 19.10.R1
 Platforms All

i-counters

Synopsis Enter the **i-counters** context
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#)
 Tree [i-counters](#)
 Introduced 19.10.R1
 Platforms All

in-profile-octets-discarded-count *boolean*

Synopsis Include the in profile octets discarded count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-discarded-count](#) *boolean*
 Tree [in-profile-octets-discarded-count](#)
 Default false
 Introduced 19.10.R1
 Platforms All

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in profile octets forwarded count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-forwarded-count](#) *boolean*

Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false

Introduced 19.10.R1
Platforms All

out-profile-packets-discarded-count *boolean*

Synopsis Include the out profile packets discarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-discarded-count](#) *boolean*
Tree [out-profile-packets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

out-profile-packets-forwarded-count *boolean*

Synopsis Include the out profile packets forwarded count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-forwarded-count](#) *boolean*
Tree [out-profile-packets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

out-profile-packets-offered-count *boolean*

Synopsis Include the out profile packets offered count
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-offered-count](#) *boolean*
Tree [out-profile-packets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncoloured octets offered count

Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncoloured packets offered count
Context	configure log accounting-policy <i>number</i> custom-record policer <i>number</i> i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

queue [*id*] *number*

Synopsis	Enter the queue list instance
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	All

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
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Context	configure log accounting-policy number custom-record queue number i-counters all-packets-offered-count <i>boolean</i>
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure log accounting-policy number custom-record queue number i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	configure log accounting-policy number custom-record queue number i-counters high-octets-offered-count <i>boolean</i>
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	configure log accounting-policy number custom-record queue number i-counters high-packets-discarded-count <i>boolean</i>
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters high-packets-offered-count <i>boolean</i>
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	All

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncolored octets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncolored packets offered count
Context	configure log accounting-policy <i>number</i> custom-record queue <i>number</i> i-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false

Introduced 16.0.R1
 Platforms All

ref-aa-specific-counter

Synopsis Enter the **ref-aa-specific-counter** context
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#)
 Tree [ref-aa-specific-counter](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

any *boolean*

Synopsis Report a change to any counter
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#) [any](#) *boolean*
 Tree [any](#)
 Default false
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ref-policer

Synopsis Enter the **ref-policer** context
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#)
 Tree [ref-policer](#)
 Introduced 19.10.R1
 Platforms All

all

Synopsis Apply significant change to counters for all policers
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [all](#)
 Tree [all](#)
 Notes The following elements are part of a choice: **all** or **id**.

Introduced	19.10.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters
Tree	e-counters
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-discarded-count *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-octets-discarded-count <i>boolean</i>
Tree	exceed-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-forwarded-count *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-octets-forwarded-count <i>boolean</i>
Tree	exceed-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-octets-offered-count *boolean*

Synopsis	Include the exceed profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-octets-offered-count <i>boolean</i>

Tree	exceed-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-discarded-count *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-discarded-count <i>boolean</i>
Tree	exceed-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-forwarded-count *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-forwarded-count <i>boolean</i>
Tree	exceed-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

exceed-profile-packets-offered-count *boolean*

Synopsis	Include the exceed profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters exceed-profile-packets-offered-count <i>boolean</i>
Tree	exceed-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-discarded-count *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-discarded-count <i>boolean</i>
Tree	in-plus-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-forwarded-count <i>boolean</i>
Tree	in-plus-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-octets-offered-count *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-octets-offered-count <i>boolean</i>
Tree	in-plus-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-plus-profile-packets-discarded-count *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-plus-profile-packets-discarded-count <i>boolean</i>
Tree	in-plus-profile-packets-discarded-count
Default	false

Introduced 19.10.R1
Platforms All

in-plus-profile-packets-forwarded-count *boolean*

Synopsis Include the in-plus profile packets forwarded count
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-forwarded-count](#) *boolean*
Tree [in-plus-profile-packets-forwarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-plus-profile-packets-offered-count *boolean*

Synopsis Include the in-plus profile packets offered count
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-offered-count](#) *boolean*
Tree [in-plus-profile-packets-offered-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-profile-octets-discarded-count *boolean*

Synopsis Include the in profile octets discarded count
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-profile-octets-discarded-count](#) *boolean*
Tree [in-profile-octets-discarded-count](#)
Default false
Introduced 19.10.R1
Platforms All

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in profile octets forwarded count

Context	configure log accounting-policy number custom-record ref-policer e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy number custom-record ref-policer e-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy number custom-record ref-policer e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy number custom-record ref-policer e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count

Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy number custom-record ref-policer e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy number custom-record ref-policer e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy number custom-record ref-policer e-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-octets-offered-count *boolean*

Synopsis	Include the uncoloured octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters uncoloured-octets-offered-count <i>boolean</i>
Tree	uncoloured-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

uncoloured-packets-offered-count *boolean*

Synopsis	Include the uncoloured packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer e-counters uncoloured-packets-offered-count <i>boolean</i>
Tree	uncoloured-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters
Tree	i-counters
Introduced	19.10.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-octets-offered-count *boolean*

Synopsis	Include the in profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-octets-offered-count <i>boolean</i>
Tree	in-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count

Default	false
Introduced	19.10.R1
Platforms	All

in-profile-packets-offered-count *boolean*

Synopsis	Include the in profile packets offered count
Context	configure log accounting-policy number custom-record ref-policer i-counters in-profile-packets-offered-count <i>boolean</i>
Tree	in-profile-packets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out profile octets discarded count
Context	configure log accounting-policy number custom-record ref-policer i-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out profile octets forwarded count
Context	configure log accounting-policy number custom-record ref-policer i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-octets-offered-count *boolean*

Synopsis	Include the out profile octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-octets-offered-count <i>boolean</i>
Tree	out-profile-octets-offered-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	19.10.R1
Platforms	All

out-profile-packets-offered-count *boolean*

Synopsis	Include the out profile packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-policer i-counters out-profile-packets-offered-count <i>boolean</i>
Tree	out-profile-packets-offered-count
Default	false

Introduced 19.10.R1
 Platforms All

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncoloured octets offered count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)
[uncoloured-octets-offered-count](#) *boolean*
 Tree [uncoloured-octets-offered-count](#)
 Default false
 Introduced 19.10.R1
 Platforms All

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncoloured packets offered count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)
[uncoloured-packets-offered-count](#) *boolean*
 Tree [uncoloured-packets-offered-count](#)
 Default false
 Introduced 19.10.R1
 Platforms All

id *reference*

Synopsis Policer ID
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [id](#) *reference*
 Tree [id](#)
 Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number*
 Notes The following elements are part of a choice: **all** or **id**.
 Introduced 19.10.R1
 Platforms All

ref-queue

Synopsis Enter the **ref-queue** context

Context	configure log accounting-policy number custom-record ref-queue
Tree	ref-queue
Description	Commands in this context configure reference queue counters for significant change only reporting. The custom record is only generated when the change in the sum of all queue and policer reference counters equals or exceeds the configured (non-zero) significant change value.
Introduced	16.0.R1
Platforms	All

all

Synopsis	Apply significant change to counters for all queues
Context	configure log accounting-policy number custom-record ref-queue all
Tree	all
Notes	The following elements are part of a choice: all or id .
Introduced	16.0.R1
Platforms	All

e-counters

Synopsis	Enter the e-counters context
Context	configure log accounting-policy number custom-record ref-queue e-counters
Tree	e-counters
Introduced	16.0.R1
Platforms	All

in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	configure log accounting-policy number custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i>
Tree	in-profile-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-packets-discarded-count <i>boolean</i>
Tree	in-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-discarded-count *boolean*

Synopsis	Include the out-profile octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-octets-discarded-count <i>boolean</i>
Tree	out-profile-octets-discarded-count

Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-discarded-count *boolean*

Synopsis	Include the out-profile packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-packets-discarded-count <i>boolean</i>
Tree	out-profile-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue e-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

i-counters

Synopsis	Enter the i-counters context
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters
Tree	i-counters
Introduced	16.0.R1
Platforms	All

all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters all-octets-offered-count <i>boolean</i>
Tree	all-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters all-packets-offered-count <i>boolean</i>
Tree	all-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-octets-discarded-count <i>boolean</i>
Tree	high-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-octets-offered-count *boolean*

Synopsis	Include the high octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-octets-offered-count <i>boolean</i>
Tree	high-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-discarded-count *boolean*

Synopsis	Include the high packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-packets-discarded-count <i>boolean</i>
Tree	high-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters high-packets-offered-count <i>boolean</i>
Tree	high-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters in-profile-octets-forwarded-count <i>boolean</i>
Tree	in-profile-octets-forwarded-count

Default	false
Introduced	16.0.R1
Platforms	All

in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters in-profile-packets-forwarded-count <i>boolean</i>
Tree	in-profile-packets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-octets-discarded-count <i>boolean</i>
Tree	low-octets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-octets-offered-count *boolean*

Synopsis	Include the low octets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-octets-offered-count <i>boolean</i>
Tree	low-octets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-discarded-count *boolean*

Synopsis	Include the low packets discarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-packets-discarded-count <i>boolean</i>
Tree	low-packets-discarded-count
Default	false
Introduced	16.0.R1
Platforms	All

low-packets-offered-count *boolean*

Synopsis	Include the low packets offered count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters low-packets-offered-count <i>boolean</i>
Tree	low-packets-offered-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-octets-forwarded-count *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters out-profile-octets-forwarded-count <i>boolean</i>
Tree	out-profile-octets-forwarded-count
Default	false
Introduced	16.0.R1
Platforms	All

out-profile-packets-forwarded-count *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	configure log accounting-policy <i>number</i> custom-record ref-queue i-counters out-profile-packets-forwarded-count <i>boolean</i>
Tree	out-profile-packets-forwarded-count
Default	false

Introduced 16.0.R1
 Platforms All

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncolored octets offered count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)
[uncoloured-octets-offered-count](#) *boolean*
 Tree [uncoloured-octets-offered-count](#)
 Default false
 Introduced 16.0.R1
 Platforms All

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncolored packets offered count
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)
[uncoloured-packets-offered-count](#) *boolean*
 Tree [uncoloured-packets-offered-count](#)
 Default false
 Introduced 16.0.R1
 Platforms All

id *reference*

Synopsis Queue ID
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [id](#) *reference*
 Tree [id](#)
 Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [queue](#) *number*
 Notes The following elements are part of a choice: **all** or **id**.
 Introduced 16.0.R1
 Platforms All

significant-change *number*

Synopsis Significant change required to generate the record

Context	configure log accounting-policy number custom-record significant-change number
Tree	significant-change
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

default *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default accounting policy for all objects that do not have an accounting policy
Context	configure log accounting-policy number default boolean
Tree	default
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log accounting-policy number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	configure log accounting-policy number destination
Tree	destination
Introduced	16.0.R1
Platforms	All

file reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique file identifier when creating a log or accounting file
Context	configure log accounting-policy <i>number destination file reference</i>
Tree	file
Reference	configure log file <i>string</i>
Notes	The following elements are part of a choice: file or null .
Introduced	16.0.R1
Platforms	All

null

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Indicate no destination for accounting policy records
Context	configure log accounting-policy <i>number destination null</i>
Tree	null
Notes	The following elements are part of a choice: file or null .
Introduced	16.0.R1
Platforms	All

include-system-info *boolean*

Synopsis	Include system information in accounting policy records
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Context	configure log accounting-policy <i>number</i> include-system-info <i>boolean</i>
Tree	include-system-info
Default	false
Introduced	16.0.R1
Platforms	All

record *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting policy record type
Context	configure log accounting-policy <i>number</i> record <i>keyword</i>
Tree	record
Description	<p>This command adds the accounting record type to the accounting policy that is forwarded to the configured accounting file. A record name can only be used in one accounting policy. To obtain a list of all record types that can be configured, use the show log accounting-records command.</p> <p>To configure an accounting policy for access ports, select a service record (for example, service-ingress-octets). To change the record name to another service record, configure the new record name with this command.</p> <p>When configuring an accounting policy for network ports, select a network record. To change the record name to another network record, configure the new record name with this command.</p> <p>Note: AA, video, and subscriber records are not applicable to the 7950 XRS.</p>
Options	<p>service-ingress-octets, service-egress-octets, service-ingress-packets, service-egress-packets, network-ingress-octets, network-egress-octets, network-ingress-packets, network-egress-packets, compact-service-ingress-octets, combined-service-ingress, combined-network-ing-egr-octets, combined-service-ing-egr-octets, complete-service-ingress-egress, combined-sdp-ingress-egress, complete-sdp-ingress-egress, complete-subscriber-ingress-egress, aa-protocol, aa-application, aa-app-group, aa-subscriber-protocol, aa-subscriber-application, custom-record-subscriber, custom-record-service, custom-record-aa-sub, queue-group-octets, queue-group-packets, combined-queue-group, combined-mpls-lsp-ingress, combined-mpls-lsp-egress, combined-ldp-lsp-egress, saa, video, aa-performance, complete-ethernet-port, extended-service-ingress-egress, complete-network-ing-egr, aa-partition, complete-pm, aa-admit-deny, network-interface-ingress-octets,</p>

network-interface-egress-octets, network-interface-ingress-packets, network-interface-egress-packets, combined-network-interface-ingress, combined-network-interface-egress, complete-network-interface-ing-egr, access-egress-octets, access-egress-packets, combined-access-egress, combined-network-egress, complete-service-activation-test, combined-mpls-srte-egress

Introduced 16.0.R1

Platforms All

app-route-notifications

Synopsis Enter the **app-route-notifications** context

Context **configure** [log app-route-notifications](#)

Tree [app-route-notifications](#)

Introduced 16.0.R1

Platforms All

cold-start-wait *number*

Synopsis Time delay before notifying specific CPM applications for available route

Context **configure** [log app-route-notifications cold-start-wait *number*](#)

Tree [cold-start-wait](#)

Range 1 to 300

Introduced 16.0.R1

Platforms All

route-recovery-wait *number*

Synopsis Time delay before notifying specific CPM applications after route recovery or change

Context **configure** [log app-route-notifications route-recovery-wait *number*](#)

Tree [route-recovery-wait](#)

Range 1 to 100

Introduced 16.0.R1

Platforms All

encryption-key *string*

Synopsis Secret key for the encryption of log files

Context	configure log encryption-key <i>string</i>
Tree	encryption-key
Description	This command specifies the encryption key used by AES-256-CTR for log file encryption. The encryption key is used for all local log files on the system.
String Length	1 to 71
Introduced	22.7.R1
Platforms	All

event-damping *boolean*

Synopsis	Allow event damping algorithm to suppress QoS or filter change events
Context	configure log event-damping <i>boolean</i>
Tree	event-damping
Default	true
Introduced	16.0.R1
Platforms	All

event-handling

Synopsis	Enter the event-handling context
Context	configure log event-handling
Tree	event-handling
Introduced	16.0.R1
Platforms	All

handler [[name](#)] *string*

Synopsis	Enter the handler list instance
Context	configure log event-handling handler <i>string</i>
Tree	handler
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	EHS handler name
Context	configure log event-handling handler <i>string</i>
Tree	handler
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS handler
Context	configure log event-handling handler <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-handling handler <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-handling handler <i>string</i> entry <i>number</i>
Tree	entry
Max. Instances	1500

Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis EHS handler entry ID
 Context **configure log event-handling handler** *string entry number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS handler entry
 Context **configure log event-handling handler** *string entry number admin-state keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure log event-handling handler** *string entry number description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

min-delay *number*

Synopsis Minimum delay between subsequent executions of the script policy

Context	configure log event-handling handler <i>string</i> entry <i>number</i> min-delay <i>number</i>
Tree	min-delay
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

script-policy

Synopsis	Enable the script-policy context
Context	configure log event-handling handler <i>string</i> entry <i>number</i> script-policy
Tree	script-policy
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Script policy name
Context	configure log event-handling handler <i>string</i> entry <i>number</i> script-policy <i>name</i> <i>reference</i>
Tree	name
Reference	configure system script-control script-policy <i>string</i> owner <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

owner *reference*

Synopsis	Script policy owner
Context	configure log event-handling handler <i>string</i> entry <i>number</i> script-policy owner <i>reference</i>
Tree	owner
Default	TIMOS CLI
Reference	configure system script-control script-policy <i>string</i> owner <i>string</i>
Introduced	16.0.R1
Platforms	All

event-trigger

Synopsis	Enter the event-trigger context
Context	configure log event-trigger
Tree	event-trigger
Introduced	16.0.R1
Platforms	All

adp event keyword

Synopsis	Enter the adp list instance
Context	configure log event-trigger adp event keyword
Tree	adp
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger adp event keyword
Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger adp event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure log event-trigger adp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger adp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger adp event](#) *keyword* [entry number](#) [debounce](#)

Tree [debounce](#)

Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger adp event](#) *keyword* [entry number](#) [debounce](#) [time](#) *number*

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

value *number*

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** [log event-trigger adp event](#) *keyword* [entry number](#) [debounce](#) [value](#) *number*

Tree [value](#)

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

description *string*

Synopsis Text description

Context **configure** [log event-trigger adp event](#) *keyword* [entry number](#) [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger adp event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger adp event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

anysec event *keyword*

Synopsis Enter the **anysec** list instance
 Context **configure** [log event-trigger anysec event](#) *keyword*
 Tree [anysec](#)
 Introduced 23.3.R1
 Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

event *keyword*

Synopsis Events for ANYSec module.
 Context **configure** [log event-trigger anysec event](#) *keyword*
 Tree [anysec](#)

Options	tmnxAnySecMkaPskRollover, tmnxAnySecMkaOperStateChanged
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger anysec event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

description *string*

Synopsis	Text description
Context	configure log event-trigger anysec event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger anysec event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger anysec event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger anysec event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger anysec event keyword entry number debounce
Tree	debounce
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger anysec event keyword entry number debounce time number
Tree	time
Range	1 to 604800

Units	seconds
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger anysec event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

description string

Synopsis	Text description
Context	configure log event-trigger anysec event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger anysec event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger anysec event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

application-assurance [event](#) *keyword*

Synopsis	Enter the application-assurance list instance
Context	configure log event-trigger application-assurance event <i>keyword</i>
Tree	application-assurance
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger application-assurance event <i>keyword</i>
Tree	application-assurance
Options	tmnxBsxIlsaAaGrpFailureV2, tmnxBsxIlsaAaGrpFailureClearV2, tmnxBsxIlsaAaGrpNonRedundantV2, tmnxBsxIlsaAaGrpSwitchover, tmnxBsxIlsaAaGrpFlowFull, tmnxBsxIlsaAaGrpFlowFullClear, tmnxBsxIlsaAaSubLoadBalance, tmnxBsxIlsaAaGrpCapCostThres, tmnxBsxIlsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIlsaAaGrpFlowSetup, tmnxBsxIlsaAaGrpFlowSetupClear, tmnxBsxIlsaAaGrpPacketRate, tmnxBsxIlsaAaGrpPacketRateClear, tmnxBsxIlsaAaGrpBitRate, tmnxBsxIlsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIlsaAaGrpFmSbWaSBufOvld, tmnxBsxIlsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIlsaAaGrpToSbWaSBufOvld, tmnxBsxIlsaAaGrpToSbWaSBufOvldClr, tmnxBsxIlsaAaGrpOvldCutthru, tmnxBsxIlsaAaGrpOvldCutthruClr, tmnxBsxTransIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged, tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure,

tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIlsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear, tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFitrWebServOprStateChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger application-assurance event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger application-assurance event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
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Context	configure log event-trigger application-assurance event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger application-assurance event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger application-assurance event <i>keyword entry number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger application-assurance event <i>keyword entry number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger application-assurance event <i>keyword</i> entry number filter reference
Tree	filter

Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger application-assurance event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aps event keyword

Synopsis	Enter the aps list instance
Context	configure log event-trigger aps event <i>keyword</i>
Tree	aps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger aps event <i>keyword</i>
Tree	aps
Options	apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear, tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger aps event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	configure log event-trigger aps event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure log event-trigger aps event keyword entry number admin-state keyword**
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

debounce

Synopsis Enter the **debounce** context
 Context **configure log event-trigger aps event keyword entry number debounce**
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure log event-trigger aps event keyword entry number debounce time number**
 Tree [time](#)
 Range 1 to 604800
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure log event-trigger aps event keyword entry number debounce value number**
 Tree [value](#)

Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger aps event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

auto-prov [event](#) *keyword*

Synopsis	Enter the auto-prov list instance
Context	configure log event-trigger auto-prov event <i>keyword</i>

Tree	auto-prov
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger auto-prov event keyword
Tree	auto-prov
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger auto-prov event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger auto-prov event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger auto-prov event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger auto-prov event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger auto-prov event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger auto-prov event <i>keyword</i> entry number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger auto-prov event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>

Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

bfd event *keyword*

Synopsis Enter the **bfd** list instance
 Context **configure** [log event-trigger bfd event](#) *keyword*
 Tree [bfd](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger bfd event](#) *keyword*
 Tree [bfd](#)
 Options tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bfd event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bfd event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger bfd event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger bfd event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger bfd event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger bfd event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger bfd event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger bfd event](#) *keyword* [entry number](#) [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger bfd event](#) *keyword* [entry number](#) [filter](#) *reference*
Tree [filter](#)
Reference **configure** [log filter](#) *string*
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger bfd event](#) *keyword* [entry number](#) [handler](#) *reference*
Tree [handler](#)
Reference **configure** [log event-handling handler](#) *string*
Introduced 16.0.R1
Platforms All

bgp event *keyword*

Synopsis Enter the **bgp** list instance
Context **configure** [log event-trigger bgp event](#) *keyword*
Tree [bgp](#)
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [bgp event](#) *keyword*

Tree [bgp](#)

Options sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [bgp event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [bgp event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [id] *number*

Synopsis Enter the **entry** list instance
 Context **configure log event-trigger bgp event keyword entry number**
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure log event-trigger bgp event keyword entry number**
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure log event-trigger bgp event keyword entry number admin-state keyword**
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context

Context	configure log event-trigger bgp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger bgp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger bgp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger bgp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger bgp event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger bgp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

bier event keyword

Synopsis	Enter the bier list instance
Context	configure log event-trigger bier event <i>keyword</i>
Tree	bier
Introduced	19.5.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger bier event <i>keyword</i>
Tree	bier
Options	vRtrBierBfrldCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger bier event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bier event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger bier event <i>keyword entry number</i>
Tree	entry
Introduced	19.5.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger bier event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	19.5.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger bier event keyword entry number admin-state keyword](#)
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 19.5.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log event-trigger bier event keyword entry number debounce](#)
 Tree [debounce](#)
 Introduced 19.5.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure** [log event-trigger bier event keyword entry number debounce time number](#)
 Tree [time](#)
 Range 1 to 604800
 Units seconds
 Introduced 19.5.R1
 Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure** [log event-trigger bier event keyword entry number debounce value number](#)
 Tree [value](#)

Range	2 to 15
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger bier event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger bier event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	19.5.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger bier event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	19.5.R1
Platforms	All

calltrace [event](#) *keyword*

Synopsis	Enter the calltrace list instance
Context	configure log event-trigger calltrace event <i>keyword</i>

Tree	calltrace
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger calltrace event keyword
Tree	calltrace
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger calltrace event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger calltrace event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger calltrace event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger calltrace event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger calltrace event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger calltrace event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger calltrace event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger calltrace event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger calltrace event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger calltrace event keyword entry number filter reference
Tree	filter
Reference	configure log filter string

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger](#) [calltrace event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling](#) [handler](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd [event](#) *keyword*

Synopsis Enter the **cflowd** list instance
 Context **configure** [log event-trigger](#) [cflowd](#) [event](#) *keyword*
 Tree [cflowd](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger](#) [cflowd](#) [event](#) *keyword*
 Tree [cflowd](#)
 Options [tmnCflowdCreateFailure](#), [tmnCflowdStateChange](#), [tmnCflowdFlowCreateFailure](#), [tmnCflowdPacketTxFailure](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger](#) [cflowd](#) [event](#) *keyword* [admin-state](#) *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger cflowd event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger cflowd event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger cflowd event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger cflowd event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger cflowd event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger cflowd event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger cflowd event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger cflowd event <i>keyword</i> entry number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger cflowd event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger cflowd event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

chassis [event](#) *keyword*

Synopsis	Enter the chassis list instance
Context	configure log event-trigger chassis event <i>keyword</i>
Tree	chassis
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger chassis event keyword
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm, tmnxEqSynclftimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclftimingRef1Quality, tmnxEqSynclftimingRef2Quality, tmnxEqSynclftimingBITSQuality, tmnxEqSynclftimingBITS2Quality, tmnxEqSynclftimingRefSwitch, tmnxEqSynclftimingBITS2Alarm, tmnxEqSynclftimingBITS2AlarmClr, tmnxEqSynclftimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclftimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclftimingPTPQuality, tmnxEqSynclftimingPTPAlarm, tmnxEqSynclftimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxlomResHighLimitReached, tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow, tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdaIngrXplError, tmnxSynclftimBITS2048khzUnsup, tmnxSynclftimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,

tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,
tmnxEqPhysChassPowerSupOutFailClr, tmnxEqPhysChassisFanFailure,
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,
tmnxPhysChassisPCMIInputFeed, tmnxPhysChassisPCMIInputFeedClr,
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,
tmnxEsaFirmwareUpgradeStarted, tmnxPlyAcctPlyPoolExcResource,
tmnxPlyAcctPlyPoolLowResource, tChassisAirflowDirMismatch,
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,

tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,
 tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,
 tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,
 tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,
 tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,
 tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,
 tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,
 tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,
 tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,
 tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,
 tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,
 tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,
 tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,
 tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged,
 tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged,
 tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached,
 tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered,
 tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr,
 tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscrbdClr,
 tmnxInterChassisCommsDown, tmnxInterChassisCommsUp,
 tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted,
 tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort,
 tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure,
 CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError,
 CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure,
 tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp,
 tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure,
 SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError,
 SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure,
 tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear,
 tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr,
 tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown,
 tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch,
 tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log** **event-trigger** **chassis** **event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger chassis event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger chassis event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger chassis event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger chassis event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger chassis event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger chassis event keyword entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger chassis event keyword entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
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Context	configure log event-trigger chassis event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger chassis event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger chassis event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

debug event keyword

Synopsis	Enter the debug list instance
Context	configure log event-trigger debug event keyword
Tree	debug
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger debug event keyword
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger debug event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger debug event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger debug event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger debug event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger debug event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger debug event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger debug event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure** [log event-trigger debug event keyword entry number debounce value number](#)
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger debug event keyword entry number description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger debug event keyword entry number filter reference](#)
 Tree [filter](#)
 Reference **configure** [log filter string](#)
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger debug event keyword entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler string](#)

Introduced	16.0.R1
Platforms	All

dhcp event *keyword*

Synopsis	Enter the dhcp list instance
Context	configure log event-trigger dhcp event keyword
Tree	dhcp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger dhcp event keyword
Tree	dhcp
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dhcp event keyword admin-state keyword
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger dhcp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dhcp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dhcp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dhcp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dhcp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger dhcp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger dhcp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger dhcp event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

dhcps [event](#) *keyword*

Synopsis	Enter the dhcps list instance
Context	configure log event-trigger dhcps event keyword
Tree	dhcps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger dhcps event keyword
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPITHTooLowV6, tmnxDhcpSvrPITHDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger dhcps event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger dhcps event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure log event-trigger dhcp event** *keyword entry number*

Tree [entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure log event-trigger dhcp event** *keyword entry number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure log event-trigger dhcp event** *keyword entry number admin-state keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis Enter the **debounce** context

Context **configure log event-trigger dhcp event** *keyword entry number debounce*

Tree [debounce](#)

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis Time window for events for EHS to trigger a response
 Context **configure log event-trigger dhcp event keyword entry number debounce time number**
 Tree [time](#)
 Range 1 to 604800
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure log event-trigger dhcp event keyword entry number debounce value number**
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description
 Context **configure log event-trigger dhcp event keyword entry number description string**
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis Log filter for EHS event trigger entry
 Context **configure log event-trigger dhcp event keyword entry number filter reference**

Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger dhcps event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter event *keyword*

Synopsis	Enter the diameter list instance
Context	configure log event-trigger diameter event <i>keyword</i>
Tree	diameter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger diameter event <i>keyword</i>
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger diameter event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger diameter event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger diameter event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger diameter event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger diameter event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger diameter event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger](#) [diameter event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling](#) [handler](#) *string*
 Introduced 16.0.R1
 Platforms All

dynsvc [event](#) *keyword*

Synopsis Enter the **dynsvc** list instance
 Context **configure** [log event-trigger](#) [dynsvc event](#) *keyword*
 Tree [dynsvc](#)

Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger](#) [dynsvc event](#) *keyword*
 Tree [dynsvc](#)
 Options tmnxDynSvcSapFailed
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger](#) [dynsvc event](#) *keyword* [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger](#) [dynsvc event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger dynsvc event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger dynsvc event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger dynsvc event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger dynsvc event keyword entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler string](#)
 Introduced 16.0.R1
 Platforms All

efm-oam event keyword

Synopsis Enter the **efm-oam** list instance
 Context **configure** [log event-trigger efm-oam event keyword](#)
 Tree [efm-oam](#)
 Introduced 16.0.R1
 Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger efm-oam event keyword](#)
 Tree [efm-oam](#)
 Options tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state keyword

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger efm-oam event keyword admin-state keyword](#)

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger efm-oam event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number debounce <i>time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger efm-oam event <i>keyword</i> entry number debounce <i>value number</i>
Tree	value
Range	2 to 15

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling](#) [handler](#) *string*
 Introduced 16.0.R1
 Platforms All

elmi [event](#) *keyword*

Synopsis Enter the **elmi** list instance
 Context **configure** [log event-trigger elmi event](#) *keyword*
 Tree [elmi](#)

Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log event-trigger elmi event](#) *keyword*
Tree [elmi](#)
Options tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger elmi event](#) *keyword* [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger elmi event](#) *keyword* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context	configure log event-trigger elmi event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger elmi event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger elmi event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger elmi event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger elmi event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger elmi event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ering event *keyword*

Synopsis	Enter the ering list instance
Context	configure log event-trigger ering event <i>keyword</i>
Tree	ering
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ering event <i>keyword</i>
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ering event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ering event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ering event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ering event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ering event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ering event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ering event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ering event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
----------	------------------

Context	configure log event-trigger ering event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ering event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ering event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

eth-cfm [event](#) *keyword*

Synopsis	Enter the eth-cfm list instance
Context	configure log event-trigger eth-cfm event <i>keyword</i>
Tree	eth-cfm
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
----------	---

Context	configure log event-trigger eth-cfm event <i>keyword</i>
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger eth-cfm event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger eth-cfm event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry <i>number</i>
Tree	entry

Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure log event-trigger eth-cfm event keyword entry number**
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure log event-trigger eth-cfm event keyword entry number admin-state keyword**
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure log event-trigger eth-cfm event keyword entry number debounce**
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure log event-trigger eth-cfm event keyword entry number debounce time number**

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger eth-cfm event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger eth-cfm event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger eth-cfm event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger eth-cfm event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

etun [event](#) *keyword*

Synopsis	Enter the etun list instance
Context	configure log event-trigger etun event <i>keyword</i>
Tree	etun
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger etun event <i>keyword</i>
Tree	etun
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger etun event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger etun event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger etun event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger etun event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger etun event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger etun event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
----------	------------------

Context	configure log event-trigger etun event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger etun event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

filter event keyword

Synopsis	Enter the filter list instance
Context	configure log event-trigger filter event keyword
Tree	filter
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
----------	---

Context	configure log event-trigger filter event <i>keyword</i>
Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger filter event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger filter event <i>keyword description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger filter event <i>keyword entry</i> <i>number</i>
Tree	entry

Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number* **admin-state** *keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number* **debounce**
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* [entry](#) *number* **debounce** [time](#) *number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger filter event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

gsmp event *keyword*

Synopsis	Enter the gsmp list instance
Context	configure log event-trigger gsmp event <i>keyword</i>
Tree	gsmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger gsmp event <i>keyword</i>
Tree	gsmp
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger gsmp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger gsmp event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger gsmp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger gsmp event <i>keyword entry number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger gsmp event <i>keyword entry number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger gsmp event <i>keyword entry number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
----------	------------------

Context	configure log event-trigger gsm event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger gsm event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger gsm event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

igmp event keyword

Synopsis	Enter the igmp list instance
Context	configure log event-trigger igmp event <i>keyword</i>
Tree	igmp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
----------	---

Context	configure log event-trigger igmp event <i>keyword</i>
Tree	igmp
Options	vRtrIgmplfRxQueryVerMismatch, vRtrIgmplfCModeRxQueryMismatch, vRtrIgmplfMaxGrpsLimitExceeded, vRtrIgmplfMcacPlcyDropped, vRtrIgmplfHostInstantiationFail, vRtrIgmplfHostMaxGrpsLimitExceeded, vRtrIgmplfHostMcacPlcyDropped, vRtrIgmplfHostCModeRxQueryMismatch, vRtrIgmplfHostRxQueryVerMismatch, vRtrIgmplfHostMaxSrcsLimitExceeded, vRtrIgmplfMaxSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpsLimExceed, vRtrIgmplfGrpIfSapMaxSrcsLimExceed, vRtrIgmplfGrpIfSapMcacPlcyDropped, vRtrIgmplfGrpIfSapCModeRxQueryMism, vRtrIgmplfGrpIfSapRxQueryVerMism, vRtrIgmplfHostMaxGrpSrcsLimitExcd, vRtrIgmplfMaxGrpSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpSrcLimExcd, vRtrIgmplfHostQryIntervalConflict, vRtrIgmplfNotifyNumOfIPseclfLowWm, vRtrIgmplfNotifyNumOfIPseclfHighWm, vRtrIgmplfNotifyNumOfIPseclfMaxRch, vRtrIgmplfSlaProflnstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger igmp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger igmp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger igmp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger igmp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger igmp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger igmp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger igmp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger igmp event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

igmp-snooping [event](#) *keyword*

Synopsis Enter the **igmp-snooping** list instance
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword*
 Tree [igmp-snooping](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword*
 Tree [igmp-snooping](#)
 Options saplgmpSnpGGrpLimitExceeded, saplgmpSnpGMcacPlcyDropped, sdpBndlgmpSnpGGrpLimitExceeded, sdpBndlgmpSnpGMcacPlcyDropped, saplgmpSnpGMcsFailure, saplgmpSnpGSrcLimitExceeded, sdpBndlgmpSnpGSrcLimitExceeded, sdpBndlgmpSnpGGrpSrcLimitExceed, saplgmpSnpGGrpSrcLimitExceeded, eMplslgmpSnpGMfibFailure
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context	configure log event-trigger igmp-snooping event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger igmp-snooping event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger igmp-snooping event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger igmp-snooping event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger igmp-snooping event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger igmp-snooping event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger igmp-snooping event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword entry number* [description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword entry number* [filter reference](#)
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword entry number* [handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

ip event *keyword*

Synopsis Enter the **ip** list instance
 Context **configure** [log event-trigger ip event](#) *keyword*

Tree	ip
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ip event keyword
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ip event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ip event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ip event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ip event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ip event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ip event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ip event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger ip event keyword entry number handler reference](#)

Tree [handler](#)

Reference **configure** [log event-handling handler string](#)

Introduced 16.0.R1

Platforms All

ipsec event *keyword*

Synopsis Enter the **ipsec** list instance

Context **configure** [log event-trigger ipsec event keyword](#)

Tree [ipsec](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger ipsec event keyword](#)

Tree [ipsec](#)

Options tIPsecRUTnIFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlyFailure, tIPsecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnIFailToCreate, tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnIRemoved, tIPsecTunnelProtocolFailed

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context	configure log event-trigger ipsec event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger ipsec event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ipsec event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ipsec event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ipsec event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger ipsec event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ipsec event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis event *keyword*

Synopsis	Enter the isis list instance
Context	configure log event-trigger isis event <i>keyword</i>
Tree	isis
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger isis event keyword
Tree	isis
Options	vRtrIIsisSpbNbrMultAdjExists, vRtrIIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIIsisDatabaseOverload, tmnxIIsisManualAddressDrops, tmnxIIsisCorruptedLSPDetected, tmnxIIsisMaxSeqExceedAttempt, tmnxIIsisIDLenMismatch, tmnxIIsisMaxAreaAdrsMismatch, tmnxIIsisOwnLSPPurge, tmnxIIsisSequenceNumberSkip, tmnxIIsisAutTypeFail, tmnxIIsisAuthFail, tmnxIIsisVersionSkew, tmnxIIsisAreaMismatch, tmnxIIsisRejectedAdjacency, tmnxIIsisLSPTooLargeToPropagate, tmnxIIsisOrigLSPBufSizeMismatch, tmnxIIsisProtoSuppMismatch, tmnxIIsisAdjacencyChange, tmnxIIsisCircIdExhausted, tmnxIIsisAdjRestartStatusChange, tmnxIIsisLdpSyncTimerStarted, tmnxIIsisLdpSyncExit, tmnxIIsisExportLimitReached, tmnxIIsisExportLimitWarning, tmnxIIsisRoutesExpLmtDropped, tmnxIIsisFailureDisabled, tmnxIIsisSidError, tmnxIIsisSidNotInLabelRange, tmnxIIsisRejectedAdjacencySid, tmnxIIsisLSPPurge, tmnxIIsisPfxLimitOverloadWarning, tmnxIIsisAdjBfdSessionSetupFail, tmnxIIsisSrgbBadLabelRange, tmnxIIsisCircMtuTooLow, tmnxIIsisRejectedAdjacencySet, tmnxIIsisCorruptRemainingLifetime, tmnxIIsisSidStatsIndexAlloc, tmnxIIsisFaOperParticipationDown, tmnxIIsisRejectedEndXSid, tmnxIIsisRejectedPgld, tmnxIIsisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger isis event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger isis event keyword description string

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger isis event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger isis event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger isis event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger isis event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger isis event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

I2tp event keyword

Synopsis	Enter the I2tp list instance
Context	configure log event-trigger I2tp event <i>keyword</i>
Tree	I2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger I2tp event <i>keyword</i>
Tree	I2tp
Options	tmnxL2tpPeerUnreachable, tmnxL2tpIsmMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger l2tp event](#) *keyword* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger l2tp event](#) *keyword* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger l2tp event](#) *keyword* **entry** *number*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger l2tp event](#) *keyword* **entry** *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger l2tp event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger l2tp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger l2tp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger l2tp event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger l2tp event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger l2tp event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger l2tp event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag event keyword

Synopsis	Enter the lag list instance
Context	configure log event-trigger lag event keyword
Tree	lag
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger lag event keyword
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger lag event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger lag event keyword description string
Tree	description
String Length	1 to 80

Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log event-trigger lag event](#) *keyword* [entry](#) *number* [debounce](#)

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger lag event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lag event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger lag event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
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Context	configure log event-trigger lag event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lag event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ldap event *keyword*

Synopsis	Enter the ldap list instance
Context	configure log event-trigger ldap event <i>keyword</i>
Tree	ldap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ldap event <i>keyword</i>
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ldap event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ldap event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ldap event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ldap event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ldap event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ldap event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ldap event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger ldap event](#) *keyword entry number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger ldap event](#) *keyword entry number* [filter](#) *reference*

Tree [filter](#)

Reference **configure** [log filter](#) *string*

Introduced 16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger ldap event](#) *keyword entry number* [handler](#) *reference*

Tree [handler](#)

Reference **configure** [log event-handling handler](#) *string*

Introduced 16.0.R1

Platforms All

ldap event *keyword*

Synopsis Enter the **ldap** list instance

Context **configure** [log event-trigger ldap event](#) *keyword*

Tree [ldap](#)

Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger ldp event keyword](#)

Tree [ldp](#)

Options vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger ldp event keyword admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger ldp event keyword description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ldp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ldp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ldp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ldp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ldp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler reference

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger ldp event keyword entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler string](#)
 Introduced 16.0.R1
 Platforms All

li event keyword

Synopsis Enter the **li** list instance
 Context **configure** [log event-trigger li event keyword](#)
 Tree [li](#)
 Introduced 16.0.R1
 Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger li event keyword](#)
 Tree [li](#)
 Options sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIftWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXIfLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts,

host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger li event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger li event](#) *keyword* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger li event](#) *keyword* **entry** *number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger li event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger li event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger li event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger li event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds

Introduced 16.0.R1
 Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure log event-trigger li event** *keyword entry number debounce value number*
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure log event-trigger li event** *keyword entry number description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure log event-trigger li event** *keyword entry number filter reference*
 Tree [filter](#)
 Reference **configure log filter** *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure log event-trigger li event** *keyword entry number handler reference*
 Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

lldp event *keyword*

Synopsis	Enter the lldp list instance
Context	configure log event-trigger lldp event <i>keyword</i>
Tree	lldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger lldp event <i>keyword</i>
Tree	lldp
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger lldp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger lldp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger lldp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger lldp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger lldp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger lldp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger lldp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger lldp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger lldp event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

logger event keyword

Synopsis	Enter the logger list instance
Context	configure log event-trigger logger event keyword
Tree	logger
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger logger event keyword
Tree	logger
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger logger event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger logger event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i>

Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger logger event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger logger event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger logger event <i>keyword</i> entry number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger logger event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

macsec event keyword

Synopsis	Enter the macsec list instance
Context	configure log event-trigger macsec event keyword
Tree	macsec
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger macsec event keyword
Tree	macsec
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger macsec event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger macsec event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger macsec event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger macsec event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger macsec event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger macsec event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger macsec event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger macsec event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger macsec event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

mc-redundancy [event](#) *keyword*

Synopsis Enter the **mc-redundancy** list instance
 Context **configure** [log event-trigger mc-redundancy event](#) *keyword*
 Tree [mc-redundancy](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger mc-redundancy event](#) *keyword*
 Tree [mc-redundancy](#)
 Options tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared,

tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared,
 tmnxSrrpInstanceldMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch,
 tmnxSrrpRedlIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged,
 tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged,
 tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd,
 tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared,
 tmnxSrrpDuplicateSublIfAddress, tmnxMcPeerRingsOperStateChanged,
 tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded,
 tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen,
 tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp,
 tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp,
 tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled,
 tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg,
 tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh,
 tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear,
 tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg,
 tMcIpssecDomainProtStatusChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mc-redundancy event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mc-redundancy event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mc-redundancy event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mc-redundancy event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mc-redundancy event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mc-redundancy event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1

Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger mc-redundancy event](#) *keyword* [entry](#) *number* [debounce](#) [time](#) *number*

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** [log event-trigger mc-redundancy event](#) *keyword* [entry](#) *number* [debounce](#) [value](#) *number*

Tree [value](#)

Range 2 to 15

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger mc-redundancy event](#) *keyword* [entry](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mc-redundancy event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

mcpath [event](#) *keyword*

Synopsis	Enter the mcpath list instance
Context	configure log event-trigger mcpath event <i>keyword</i>
Tree	mcpath
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mcpath event <i>keyword</i>
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mcpath event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mcpath event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mcpath event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mcpath event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mcpath event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mcpath event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mcpath event keyword entry number debounce value number
Tree	value
Range	2 to 15

Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [log event-trigger mcpath event keyword entry number description string](#)
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
Context **configure** [log event-trigger mcpath event keyword entry number filter reference](#)
Tree [filter](#)
Reference **configure** [log filter string](#)
Introduced 16.0.R1
Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
Context **configure** [log event-trigger mcpath event keyword entry number handler reference](#)
Tree [handler](#)
Reference **configure** [log event-handling handler string](#)
Introduced 16.0.R1
Platforms All

mgmt-core [event keyword](#)

Synopsis Enter the **mgmt-core** list instance
Context **configure** [log event-trigger mgmt-core event keyword](#)
Tree [mgmt-core](#)

Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mgmt-core event <i>keyword</i>
Tree	mgmt-core
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mgmt-core event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mgmt-core event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mgmt-core event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter string

Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger mgmt-core event](#) *keyword* [entry number](#) [handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

mirror event *keyword*

Synopsis Enter the **mirror** list instance
 Context **configure** [log event-trigger mirror event](#) *keyword*
 Tree [mirror](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger mirror event](#) *keyword*
 Tree [mirror](#)
 Options sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpV6FilterChange
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger mirror event](#) *keyword* [admin-state](#) *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mirror event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mirror event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mirror event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mirror event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mirror event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mirror event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

mld event *keyword*

Synopsis	Enter the mld list instance
Context	configure log event-trigger mld event <i>keyword</i>
Tree	mld
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mld event <i>keyword</i>
Tree	mld
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mld event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mld event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mld event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mld event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mld event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mld event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mld event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger](#) [mld event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling](#) [handler](#) *string*
 Introduced 16.0.R1
 Platforms All

mld-snooping [event](#) *keyword*

Synopsis Enter the **mld-snooping** list instance
 Context **configure** [log event-trigger](#) [mld-snooping](#) [event](#) *keyword*
 Tree [mld-snooping](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger](#) [mld-snooping](#) [event](#) *keyword*
 Tree [mld-snooping](#)
 Options [sapMldSnpgGrpLimitExceeded](#), [sdpBndMldSnpgGrpLimitExceeded](#),
[sapMldSnpgMcsFailure](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger](#) [mld-snooping](#) [event](#) *keyword* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mld-snooping event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger mld-snooping event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mld-snooping event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mld-snooping event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mld-snooping event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mld-snooping event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mld-snooping event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

mpls event keyword

Synopsis	Enter the mpls list instance
Context	configure log event-trigger mpls event <i>keyword</i>
Tree	mpls
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mpls event <i>keyword</i>
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResignaled, vRtrMplsP2mplInstanceUp, vRtrMplsP2mplInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResignaled, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mplInstanceResignaled, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInIgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted, vRtrMplsNodeInIgpOverloadIpv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mpls event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mpls event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure log event-trigger mpls event** *keyword* **entry** *number*
 Tree **entry**
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure log event-trigger mpls event** *keyword* **entry** *number*
 Tree **entry**
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure log event-trigger mpls event** *keyword* **entry** *number* **admin-state** *keyword*
 Tree **admin-state**
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure log event-trigger mpls event** *keyword* **entry** *number* **debounce**

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mpls event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mpls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger mpls event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
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Context	configure log event-trigger mpls event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger mpls event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

mpls-tp event *keyword*

Synopsis	Enter the mpls-tp list instance
Context	configure log event-trigger mpls-tp event <i>keyword</i>
Tree	mpls-tp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger mpls-tp event <i>keyword</i>
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger mpls-tp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger mpls-tp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger mpls-tp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger mpls-tp event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger mpls-tp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger mpls-tp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger mpls-tp event keyword entry number debounce value number
Tree	value
Range	2 to 15

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger mpls-tp event keyword entry number description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger mpls-tp event keyword entry number filter reference](#)
 Tree [filter](#)
 Reference **configure** [log filter string](#)
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger mpls-tp event keyword entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler string](#)
 Introduced 16.0.R1
 Platforms All

msdp event *keyword*

Synopsis Enter the **msdp** list instance
 Context **configure** [log event-trigger msdp event keyword](#)
 Tree [msdp](#)

Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger msdp event <i>keyword</i>
Tree	msdp
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger msdp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger msdp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger msdp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger msdp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger msdp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger msdp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger msdp event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger msdp event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger msdp event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger msdp event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger msdp event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

nat [event](#) *keyword*

Synopsis Enter the **nat** list instance
 Context **configure** [log event-trigger nat event](#) *keyword*
 Tree [nat](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger nat event](#) *keyword*
 Tree [nat](#)
 Options tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr,

tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged,
tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh,
tmnxNatPIMemberExtBlockUsageHigh

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger nat event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger nat event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger nat event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure** [log event-trigger nat event](#) *keyword* [entry](#) *number* [debounce](#) [value](#) *number*
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [log event-trigger nat event](#) *keyword* [entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger nat event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger nat event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ntp event *keyword*

Synopsis	Enter the ntp list instance
Context	configure log event-trigger ntp event <i>keyword</i>
Tree	ntp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ntp event <i>keyword</i>
Tree	ntp
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ntp event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
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Context	configure log event-trigger ntp event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] number

Synopsis	Enter the entry list instance
Context	configure log event-trigger ntp event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ntp event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ntp event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ntp event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ntp event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ntp event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

oam event keyword

Synopsis	Enter the oam list instance
Context	configure log event-trigger oam event <i>keyword</i>
Tree	oam
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger oam event <i>keyword</i>
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcIdInvalid, svcIdWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate,

tmnxOamSaaThreshold, tmnxOamDiagTestCompleted,
 tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded,
 tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded,
 tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout,
 tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted,
 tmnxOamSathSvcStrmCompleted

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger oam event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger oam event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger oam event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger oam event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger oam event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger oam event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds

Introduced 16.0.R1
 Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure log event-trigger oam event** *keyword entry number debounce value number*
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure log event-trigger oam event** *keyword entry number description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure log event-trigger oam event** *keyword entry number filter reference*
 Tree [filter](#)
 Reference **configure log filter** *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure log event-trigger oam event** *keyword entry number handler reference*
 Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

openflow event *keyword*

Synopsis	Enter the openflow list instance
Context	configure log event-trigger openflow event <i>keyword</i>
Tree	openflow
Introduced	16.0.R2
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger openflow event <i>keyword</i>
Tree	openflow
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger openflow event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R2
Platforms	All

description *string*

Synopsis	Text description
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Context	configure log event-trigger openflow event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

entry [id] number

Synopsis	Enter the entry list instance
Context	configure log event-trigger openflow event keyword entry number
Tree	entry
Introduced	16.0.R2
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger openflow event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger openflow event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R2
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger openflow event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R2
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger openflow event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R2
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger openflow event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R2
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger openflow event <i>keyword</i> entry number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R2

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger](#) [openflow event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R2
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger](#) [openflow event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling](#) [handler](#) *string*
 Introduced 16.0.R2
 Platforms All

ospf [event](#) *keyword*

Synopsis Enter the **ospf** list instance
 Context **configure** [log event-trigger](#) [ospf event](#) *keyword*
 Tree [ospf](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger](#) [ospf event](#) *keyword*
 Tree [ospf](#)
 Options `tmnxOspfVirtIfStateChange`, `tmnxOspfVirtNbrStateChange`,
`tmnxOspfVirtIfConfigError`, `tmnxOspfVirtIfAuthFailure`, `tmnxOspfVirtIfRxBadPacket`,
`tmnxOspfAreaOriginateLsa`, `tmnxOspfAreaMaxAgeLsa`, `tmnxOspfLsdbOverflow`,

tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger ospf event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger ospf event](#) *keyword* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ospf event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ospf event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ospf event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ospf event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ospf event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ospf event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ospf event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger ospf event keyword entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler string](#)
 Introduced 16.0.R1
 Platforms All

pcap event *keyword*

Synopsis Enter the **pcap** list instance
 Context **configure** [log event-trigger pcap event keyword](#)
 Tree [pcap](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger pcap event keyword](#)
 Tree [pcap](#)
 Options tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger pcap event keyword admin-state keyword](#)
 Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pcap event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pcap event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger pcap event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pcap event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pcap event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pcap event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pcap event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pcap event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pcap event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

pcep event *keyword*

Synopsis	Enter the pcep list instance
Context	configure log event-trigger pcep event keyword
Tree	pcep
Introduced	22.2.R1
Platforms	All

event keyword

Synopsis	PCEP module events
Context	configure log event-trigger pcep event keyword
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pcep event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.2.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger pcep event keyword description string
Tree	description
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

entry [id] number

Synopsis	Enter the entry list instance
Context	configure log event-trigger pcep event keyword entry number
Tree	entry
Introduced	22.2.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pcep event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pcep event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.2.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pcep event keyword entry number debounce
Tree	debounce
Introduced	22.2.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pcep event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds

Introduced 22.2.R1
 Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure** [log event-trigger pcep event keyword entry number debounce value number](#)
 Tree [value](#)
 Range 2 to 15
 Introduced 22.2.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger pcep event keyword entry number description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 22.2.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger pcep event keyword entry number filter reference](#)
 Tree [filter](#)
 Reference **configure** [log filter string](#)
 Introduced 22.2.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger pcep event keyword entry number handler reference](#)
 Tree [handler](#)

Reference	configure log event-handling handler <i>string</i>
Introduced	22.2.R1
Platforms	All

pim event *keyword*

Synopsis	Enter the pim list instance
Context	configure log event-trigger pim event <i>keyword</i>
Tree	pim
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pim event <i>keyword</i>
Tree	pim
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlcyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrld, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pim event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger pim event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger pim event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger pim event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger pim event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pim event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pim event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pim event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
----------	------------------

Context	configure log event-trigger pim event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger pim event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

pim-snooping event keyword

Synopsis	Enter the pim-snooping list instance
Context	configure log event-trigger pim-snooping event <i>keyword</i>
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
----------	---

Context	configure log event-trigger pim-snooping event <i>keyword</i>
Tree	pim-snooping
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pim-snooping event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger pim-snooping event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pim-snooping event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pim-snooping event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800

Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger pim-snooping event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

port [event](#) *keyword*

Synopsis	Enter the port list instance
Context	configure log event-trigger port event <i>keyword</i>
Tree	port
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger port event <i>keyword</i>
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset,

tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger port event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger port event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger port event keyword entry number
Tree	entry
Introduced	16.0.R1

Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger port event keyword entry number](#)
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger port event keyword entry number admin-state keyword](#)
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log event-trigger port event keyword entry number debounce](#)
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure** [log event-trigger port event keyword entry number debounce time number](#)
 Tree [time](#)

Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> debounce <i>value</i> <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger port event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger port event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

pppoe event *keyword*

Synopsis	Enter the pppoe list instance
Context	configure log event-trigger pppoe event keyword
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger pppoe event keyword
Tree	pppoe
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pppoe event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger pppoe event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pppoe event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pppoe event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pppoe event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis Enter the **debounce** context

Context **configure** log event-trigger pppoe event keyword entry number **debounce**

Tree **debounce**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis Time window for events for EHS to trigger a response

Context **configure** log event-trigger pppoe event keyword entry number **debounce** time number

Tree **time**

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** log event-trigger pppoe event keyword entry number **debounce** value number

Tree **value**

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure** log event-trigger pppoe event keyword entry number **description** string

Tree **description**

String Length 1 to 80

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis Log filter for EHS event trigger entry
 Context **configure log event-trigger pppoe event** *keyword entry number filter reference*
 Tree [filter](#)
 Reference **configure log filter** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler reference

Synopsis Event handler for EHS event trigger entry
 Context **configure log event-trigger pppoe event** *keyword entry number handler reference*
 Tree [handler](#)
 Reference **configure log event-handling handler** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-clnt event keyword

Synopsis Enter the **pppoe-clnt** list instance
 Context **configure log event-trigger pppoe-clnt event** *keyword*
 Tree [pppoe-clnt](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure log event-trigger pppoe-clnt event** *keyword*
 Tree [pppoe-clnt](#)

Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger pppoe-clnt event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure log event-trigger pppoe-clnt event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger pppoe-clnt event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger pppoe-clnt event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger pppoe-clnt event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger pppoe-clnt event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger pppoe-clnt event keyword entry number debounce time number
Tree	time
Range	1 to 604800

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger pppoe-clnt event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure log event-trigger pppoe-clnt event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger pppoe-clnt event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handler reference

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger pppoe-clnt event <i>keyword</i> entry <i>number</i> handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ptp event *keyword*

Synopsis	Enter the ptp list instance
Context	configure log event-trigger ptp event <i>keyword</i>
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ptp event <i>keyword</i>
Tree	ptp
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ptp event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger](#) [ptp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ptp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ptp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ptp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
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Context	configure log event-trigger ptp event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ptp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius event *keyword*

Synopsis	Enter the radius list instance
Context	configure log event-trigger radius event <i>keyword</i>
Tree	radius
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger radius event keyword
Tree	radius
Options	tmnxRadSrvPlycSrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger radius event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger radius event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] number

Synopsis	Enter the entry list instance
Context	configure log event-trigger radius event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger radius event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger radius event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger radius event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger radius event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure** [log event-trigger radius event keyword entry number debounce value number](#)
 Tree [value](#)
 Range 2 to 15
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger radius event keyword entry number description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger radius event keyword entry number filter reference](#)
 Tree [filter](#)
 Reference **configure** [log filter string](#)
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger radius event keyword entry number handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler string](#)

Introduced	16.0.R1
Platforms	All

rip event *keyword*

Synopsis	Enter the rip list instance
Context	configure log event-trigger rip event <i>keyword</i>
Tree	rip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rip event <i>keyword</i>
Tree	rip
Options	ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rip event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rip event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rip event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rip event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rip event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger rip event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger rip event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

ripng event keyword

Synopsis	Enter the ripng list instance
Context	configure log event-trigger ripng event <i>keyword</i>
Tree	ripng
Introduced	16.0.R3
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger ripng event <i>keyword</i>
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.

Introduced	16.0.R3
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger ripng event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R3
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger ripng event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R3
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i>
Tree	entry

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R3
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R3
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger ripng event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R3
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger ripng event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R3
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger ripng event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R3
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger ripng event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R3
Platforms	All

route-policy event keyword

Synopsis	Enter the route-policy list instance
Context	configure log event-trigger route-policy event keyword
Tree	route-policy
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger route-policy event keyword
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger route-policy event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger route-policy event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger](#) [route-policy event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger](#) [route-policy event](#) *keyword* [entry](#) *number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger](#) [route-policy event](#) *keyword* [entry](#) *number* **admin-state** *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger](#) [route-policy event](#) *keyword* [entry](#) *number* **debounce**

Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger route-policy event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger route-policy event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger route-policy event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger route-policy event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

rpki event keyword

Synopsis	Enter the rpki list instance
Context	configure log event-trigger rpki event <i>keyword</i>
Tree	rpki
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rpki event <i>keyword</i>
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rpki event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rpki event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger rpki event keyword entry number admin-state keyword](#)
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log event-trigger rpki event keyword entry number debounce](#)
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure** [log event-trigger rpki event keyword entry number debounce time number](#)
 Tree [time](#)
 Range 1 to 604800
 Units seconds
 Introduced 16.0.R1
 Platforms All

value *number*

Synopsis Occurrences in time interval to trigger EHS response
 Context **configure** [log event-trigger rpki event keyword entry number debounce value number](#)
 Tree [value](#)

Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger rpki event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

rsvp [event](#) *keyword*

Synopsis	Enter the rsvp list instance
Context	configure log event-trigger rsvp event <i>keyword</i>

Tree	rsvp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger rsvp event keyword
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger rsvp event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger rsvp event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger rsvp event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger rsvp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger rsvp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger rsvp event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger rsvp event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger rsvp event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

satellite [event](#) *keyword*

Synopsis Enter the **satellite** list instance
 Context **configure** [log event-trigger satellite event](#) *keyword*
 Tree [satellite](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger satellite event](#) *keyword*
 Tree [satellite](#)
 Options tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger satellite event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger satellite event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger satellite event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger satellite event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger satellite event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger satellite event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger satellite event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger satellite event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** [log event-trigger satellite event](#) *keyword* [entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger satellite event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger satellite event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

security event *keyword*

Synopsis Enter the **security** list instance
 Context **configure** [log event-trigger security event](#) *keyword*
 Tree [security](#)

Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger security event <i>keyword</i>
Tree	security
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAPProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAPProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAPProfRevokeChkWarning, tmnxCAPProfUpDueToRevokeChkCrlOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed,

tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess,
 tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrlsFail,
 tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime,
 tmnxUshrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,
 tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid,
 tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login,
 grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts,
 netconf_user_login, netconf_user_logout, netconf_user_login_failed,
 netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify,
 tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid,
 tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io,
 md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired,
 netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen,
 tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved,
 tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged,
 tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed,
 tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished,
 tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger security event keyword admin-state keyword](#)

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger security event keyword description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger security event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger security event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger security event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger security event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger security event <i>keyword</i> entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger security event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger security event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger security event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>

Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger security event](#) *keyword* [entry number](#) [handler reference](#)
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

sflow event *keyword*

Synopsis Enter the **sflow** list instance
 Context **configure** [log event-trigger sflow event](#) *keyword*
 Tree [sflow](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger sflow event](#) *keyword*
 Tree [sflow](#)
 Options none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger sflow event](#) *keyword* [admin-state](#) *keyword*
 Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger sflow event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger sflow event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger sflow event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger sflow event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger sflow event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger sflow event <i>keyword entry number debounce time number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger sflow event <i>keyword entry number debounce value number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure log event-trigger sflow event <i>keyword entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger sflow event <i>keyword entry number filter reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger sflow event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

snmp event *keyword*

Synopsis	Enter the snmp list instance
Context	configure log event-trigger snmp event <i>keyword</i>
Tree	snmp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger snmp event keyword
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger snmp event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger snmp event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [id] number

Synopsis	Enter the entry list instance
Context	configure log event-trigger snmp event keyword entry number
Tree	entry
Introduced	16.0.R1

Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger snmp event](#) *keyword entry number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger snmp event](#) *keyword entry number admin-state keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log event-trigger snmp event](#) *keyword entry number debounce*
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure** [log event-trigger snmp event](#) *keyword entry number debounce time number*
 Tree [time](#)

Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger snmp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	configure log event-trigger snmp event <i>keyword entry number handler reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

sr-mpls event *keyword*

Synopsis	Enter the sr-mpls list instance
Context	configure log event-trigger sr-mpls event <i>keyword</i>
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

event *keyword*

Synopsis	SR MPLS event
Context	configure log event-trigger sr-mpls event <i>keyword</i>
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger sr-mpls event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger sr-mpls event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	21.10.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger sr-mpls event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger sr-mpls event keyword entry number debounce
Tree	debounce
Introduced	21.10.R1
Platforms	All

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger sr-mpls event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	21.10.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger sr-mpls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	21.10.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger sr-mpls event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	21.10.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger sr-mpls event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 21.10.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger sr-mpls event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 21.10.R1
 Platforms All

srv6 [event](#) *keyword*

Synopsis Enter the **srv6** list instance
 Context **configure** [log event-trigger srv6 event](#) *keyword*
 Tree [srv6](#)
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger srv6 event](#) *keyword*
 Tree [srv6](#)
 Options vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
 Notes This element is part of a list key.

Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
Context **configure** [log event-trigger srv6 event](#) *keyword* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis Text description
Context **configure** [log event-trigger srv6 event](#) *keyword* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

entry [*id*] *number*

Synopsis Enter the **entry** list instance
Context **configure** [log event-trigger srv6 event](#) *keyword* **entry** *number*
Tree [entry](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[id] *number*

Synopsis ID of the EHS event trigger entry
Context **configure** [log event-trigger srv6 event](#) *keyword* **entry** *number*
Tree [entry](#)

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

description string

Synopsis	Text description
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger srv6 event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

stp event keyword

Synopsis	Enter the stp list instance
Context	configure log event-trigger stp event keyword
Tree	stp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger stp event keyword
Tree	stp
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger stp event keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger stp event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger stp event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger stp event](#) *keyword* [entry](#) *number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger stp event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default enable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger stp event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger stp event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger stp event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger stp event keyword entry number description string

Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger stp event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger stp event <i>keyword</i> entry number handler reference
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

svcmgr event *keyword*

Synopsis	Enter the svcmgr list instance
Context	configure log event-trigger svcmgr event <i>keyword</i>
Tree	svcmgr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger svcmgr event <i>keyword</i>

Tree	svcmgr
Options	<p> svcTlsMacPinningViolation, tmnxSubSlaacOverride, svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd, svcArpHostOverride, svcEvpnMHESviDFStateChgd, svcEvpnMHESlsidDFStateChgd, svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAdrsDetected, svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr, svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr, svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared, svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet, iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr, svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet, svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr, svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac, svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTblFullAlarmRaised, svcTlsMrpAttrTblFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd, svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd, svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd, svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd, svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, sapStatusChanged, sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared, hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac, sapTlsMacMoveExceeded, sapPortStateChangeProcessed, sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear, msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock, sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapLpMtuTooSmall, tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop, sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged, sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure, sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised, sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged, sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged, sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked, sdpBindInsufficientBandwidth, dynamicSdpConfigChanged, dynamicSdpBindConfigChanged, dynamicSdpCreationFailed, dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged, sdpBindPipeCelpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped, sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAdrsDetected, svcBgpEvpnDupMacAdrsCleared, svcTlsVTEPHiUsageAlarmRaised, svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet, svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet, svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised, svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg, svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect, svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet, svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised, svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet, svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet, svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet, svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet, </p>

svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,
 svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,
 sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,
 svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,
 tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,
 tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,
 tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,
 svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,
 tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,
 tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,
 tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,
 svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,
 svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,
 svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,
 sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,
 svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,
 tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,
 svcTlsGroupOperStatusChanged, sapTunnelStateChange,
 tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig,
 svcOperGrpOperStatusChanged, sapIpceCelpAddrChange,
 svcMSPwRetryExpiredNotif, svcVIIISiteDesigFwdrChg, tmnxSubSlaacSetupFailure,
 tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,
 tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,
 tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,
 tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange,
 tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,
 tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,
 tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,
 tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,
 tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError,
 tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,
 tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected,
 aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError,
 tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,
 tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd,
 svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed,
 tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd,
 tmnxSubInfoEgrAggRateLimitLowReq, tmnxSublpoeWppRegistrationFailed,
 svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr,
 svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict,
 svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr,
 svclFSubForwardingStatsDisNotify, svclFSubForwardingStatsEnNotify,
 svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet,
 svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger svcmgr event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger svcmgr event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger svcmgr event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger svcmgr event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger svcmgr event](#) *keyword* [entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry
 Context **configure** [log event-trigger svcmgr event](#) *keyword* [entry](#) *number* [filter](#) *reference*
 Tree [filter](#)
 Reference **configure** [log filter](#) *string*
 Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger svcmgr event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

system event *keyword*

Synopsis Enter the **system** list instance
 Context **configure** [log event-trigger system event](#) *keyword*
 Tree [system](#)

Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger system event <i>keyword</i>
Tree	system
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSsiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
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Context	configure log event-trigger system event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger system event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger system event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger system event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger system event <i>keyword</i> entry number admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger system event <i>keyword</i> entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger system event <i>keyword</i> entry number debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger system event <i>keyword</i> entry number debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [log event-trigger system event keyword entry number description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

filter *reference*

Synopsis Log filter for EHS event trigger entry

Context **configure** [log event-trigger system event keyword entry number filter reference](#)

Tree [filter](#)

Reference **configure** [log filter string](#)

Introduced 16.0.R1

Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry

Context **configure** [log event-trigger system event keyword entry number handler reference](#)

Tree [handler](#)

Reference **configure** [log event-handling handler string](#)

Introduced 16.0.R1

Platforms All

tls event *keyword*

Synopsis Enter the **tls** list instance

Context **configure** [log event-trigger tls event keyword](#)

Tree [tls](#)

Introduced 20.5.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger](#) [tls event](#) *keyword*
 Tree [tls](#)
 Options tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
 Notes This element is part of a list key.
 Introduced 20.5.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 20.5.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 20.5.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number*

Tree	entry
Introduced	20.5.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> debounce
Tree	debounce
Introduced	20.5.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
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Context	configure log event-trigger tls event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	20.5.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger tls event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	20.5.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger tls event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger tls event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	20.5.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger tls event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	20.5.R1
Platforms	All

tree-sid [event](#) *keyword*

Synopsis	Enter the tree-sid list instance
Context	configure log event-trigger tree-sid event <i>keyword</i>
Tree	tree-sid
Introduced	20.10.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger tree-sid event <i>keyword</i>
Tree	tree-sid
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeldAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger tree-sid event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 20.10.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log event-trigger tree-sid event keyword](#) [description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 20.10.R1
 Platforms All

entry [*id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [log event-trigger tree-sid event keyword](#) [entry number](#)
 Tree [entry](#)
 Introduced 20.10.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger tree-sid event keyword](#) [entry number](#)
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 20.10.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger tree-sid event keyword](#) [entry number](#) [admin-state keyword](#)
 Tree [admin-state](#)

Default	enable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger tree-sid event keyword entry number debounce
Tree	debounce
Introduced	20.10.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger tree-sid event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger tree-sid event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
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Context	configure log event-trigger tree-sid event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger tree-sid event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	20.10.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger tree-sid event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	20.10.R1
Platforms	All

user event keyword

Synopsis	Enter the user list instance
Context	configure log event-trigger user event keyword
Tree	user
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	configure log event-trigger user event <i>keyword</i>
Tree	user
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger user event <i>keyword admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger user event <i>keyword description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger user event <i>keyword entry</i> <i>number</i>
Tree	entry

Introduced 16.0.R1
 Platforms All

[id] *number*

Synopsis ID of the EHS event trigger entry
 Context **configure** [log event-trigger user event](#) *keyword entry number*
 Tree [entry](#)
 Range 1 to 1500
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger entry
 Context **configure** [log event-trigger user event](#) *keyword entry number admin-state keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

debounce

Synopsis Enter the **debounce** context
 Context **configure** [log event-trigger user event](#) *keyword entry number debounce*
 Tree [debounce](#)
 Introduced 16.0.R1
 Platforms All

time *number*

Synopsis Time window for events for EHS to trigger a response
 Context **configure** [log event-trigger user event](#) *keyword entry number debounce time number*

Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger user event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger user event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger user event keyword entry number filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger user event keyword entry number handler reference
Tree	handler
Reference	configure log event-handling handler string
Introduced	16.0.R1
Platforms	All

video event keyword

Synopsis	Enter the video list instance
Context	configure log event-trigger video event keyword
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger video event keyword
Tree	video
Options	tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceeded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSeLmtExceeded, tmnxVdoVappFccRetTotSeLmtCleared

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger video event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure log event-trigger video event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger video event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[id] number

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger video event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

admin-state keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger video event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger video event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

time number

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger video event keyword entry number debounce time number
Tree	time
Range	1 to 604800

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger video event <i>keyword</i> entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description string

Synopsis	Text description
Context	configure log event-trigger video event <i>keyword</i> entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter reference

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger video event <i>keyword</i> entry number filter reference
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

handler reference

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger video event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vrrp event keyword

Synopsis	Enter the vrrp list instance
Context	configure log event-trigger vrrp event <i>keyword</i>
Tree	vrrp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger vrrp event <i>keyword</i>
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
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Context	configure log event-trigger vrrp event <i>keyword admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger vrrp event <i>keyword description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger vrrp event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger vrrp event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger vrrp event <i>keyword entry number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger vrrp event <i>keyword entry number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger vrrp event <i>keyword entry number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger vrrp event <i>keyword entry number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger vrrp event <i>keyword</i> entry <i>number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

vrtr [event](#) *keyword*

Synopsis	Enter the vrtr list instance
Context	configure log event-trigger vrtr event <i>keyword</i>
Tree	vrtr
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger vrtr event <i>keyword</i>
Tree	vrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCISStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CISStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvSlot, tmnxVRtrFibVPNOccupancyThreshold, tmnxVRtrBfdMultiHopFpMismatch, vRtrBgplInstanceError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger vrtr event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger vrtr event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger vrtr event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	configure log event-trigger vrtr event keyword entry number admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger vrtr event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger vrtr event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger vrtr event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger vrtr event <i>keyword</i> entry number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry number filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger vrtr event <i>keyword</i> entry number handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

wlan-gw [event](#) *keyword*

Synopsis	Enter the wlan-gw list instance
Context	configure log event-trigger wlan-gw event <i>keyword</i>
Tree	wlan-gw
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log event-trigger wlan-gw event <i>keyword</i>
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwLomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	configure log event-trigger wlan-gw event <i>keyword</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure log event-trigger wlan-gw event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [*id*] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger wlan-gw event <i>keyword entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword entry number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword entry number admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger wlan-gw event <i>keyword entry number debounce</i>
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger wlan-gw event <i>keyword</i> entry <i>number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>

Introduced 16.0.R1
 Platforms All

handler *reference*

Synopsis Event handler for EHS event trigger entry
 Context **configure** [log event-trigger wlan-gw event](#) *keyword* [entry](#) *number* [handler](#) *reference*
 Tree [handler](#)
 Reference **configure** [log event-handling handler](#) *string*
 Introduced 16.0.R1
 Platforms All

wpp event *keyword*

Synopsis Enter the **wpp** list instance
 Context **configure** [log event-trigger wpp event](#) *keyword*
 Tree [wpp](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log event-trigger wpp event](#) *keyword*
 Tree [wpp](#)
 Options tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the EHS event trigger
 Context **configure** [log event-trigger wpp event](#) *keyword* [admin-state](#) *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger wpp event <i>keyword</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	ID of the EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword</i> entry <i>number</i>
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword entry number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

debounce

Synopsis	Enter the debounce context
Context	configure log event-trigger wpp event <i>keyword entry number</i> debounce
Tree	debounce
Introduced	16.0.R1
Platforms	All

time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	configure log event-trigger wpp event <i>keyword entry number</i> debounce time <i>number</i>
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	configure log event-trigger wpp event <i>keyword entry number</i> debounce value <i>number</i>
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log event-trigger wpp event <i>keyword entry number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Log filter for EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword entry number</i> filter <i>reference</i>
Tree	filter
Reference	configure log filter <i>string</i>
Introduced	16.0.R1
Platforms	All

handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	configure log event-trigger wpp event <i>keyword entry number</i> handler <i>reference</i>
Tree	handler
Reference	configure log event-handling handler <i>string</i>
Introduced	16.0.R1
Platforms	All

file [[file-policy-name](#)] *string*

Synopsis	Enter the file list instance
Context	configure log file <i>string</i>
Tree	file
Max. Instances	99
Introduced	16.0.R1

Platforms All

[file-policy-name] *string*

Synopsis File ID for a log or accounting file

Context **configure** [log file](#) *string*

Tree [file](#)

Description This command specifies the identification name or number for a log or accounting file. If the name begins with a numerical digit (from 1 to 9), the name must be a number from 1 to 99.

String Length 1 to 64

Notes This element is part of a list key.

Introduced 22.2.R1

Platforms All

compact-flash-location

Synopsis Enter the **compact-flash-location** context

Context **configure** [log file](#) *string* [compact-flash-location](#)

Tree [compact-flash-location](#)

Introduced 16.0.R1

Platforms All

backup *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Log file location

Context **configure** [log file](#) *string* [compact-flash-location](#) **backup** *keyword*

Tree [backup](#)

Default cf-unspecified

Options cf-unspecified, cf1, cf2, cf3, cf4

Introduced 16.0.R1

Platforms All

primary *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	configure log file <i>string</i> compact-flash-location primary <i>keyword</i>
Tree	primary
Default	cf-unspecified
Options	cf-unspecified, cf1, cf2, cf3, cf4
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log file <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

retention *number*

Synopsis	Minimum time that a file is retained on the media
Context	configure log file <i>string</i> retention <i>number</i>
Tree	retention
Range	1 to 500
Default	12
Units	hours
Introduced	16.0.R1
Platforms	All

rollover *number*

Synopsis	Frequency at which a new log or accounting file is created
Context	configure log file <i>string</i> rollover <i>number</i>
Tree	rollover
Range	5 to 10080
Default	1440
Units	minutes
Introduced	16.0.R1
Platforms	All

file-storage-control

Synopsis	Enter the file-storage-control context
Context	configure log file-storage-control
Tree	file-storage-control
Introduced	23.3.R1
Platforms	All

accounting-files-total-size *number*

Synopsis	Per CF total accounting file storage limit
Context	configure log file-storage-control accounting-files-total-size <i>number</i>
Tree	accounting-files-total-size
Description	<p>This command configures the limit for the total space that all accounting files can occupy on each storage device on the active CPM.</p> <p>When this threshold is reached, new accounting files are no longer created in the \act-collect directory of the storage device until SR OS removes older accounting files from the \act directory and the occupancy is below the limit. Currently open, in-progress accounting files in the \act-collect directory are not affected by this limit and are completed.</p> <p>When unconfigured, there is no specific limit for the total size of all accounting files.</p> <p>Only accounting files in the \act directory with system generated names (including no file extension) are applicable toward the total size limit.</p> <p>If a user manually adds or deletes accounting files from the \act directory, the size of the files is not taken into account for up to 1 hour.</p> <p>The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed compact flash (CF) device, the limit is never reached.</p>

Range	50 to 4194304
Units	megabytes
Introduced	23.3.R1
Platforms	All

log-files-total-size *number*

Synopsis	Per CF total log file storage limit
Context	configure log file-storage-control log-files-total-size <i>number</i>
Tree	log-files-total-size
Description	<p>This command configures the limit for the total space that all log files can occupy on each storage device on the active CPM.</p> <p>When this threshold is reached, log events are no longer written to the files in the \log directory until SR OS removes older log files and the occupancy is below the limit.</p> <p>When unconfigured, there is no specific limit for the total size of all log files.</p> <p>Only log files in the \log directory with system generated names (including no file extension) are applicable toward the total size limit.</p> <p>If a user manually adds or deletes log files from the \log directory, the size of the files is not taken into account for up to 1 hour.</p> <p>The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed CF device, the limit is never reached.</p>
Range	50 to 4194304
Units	megabytes
Introduced	23.3.R1
Platforms	All

filter [[filter-name](#)] *string*

Synopsis	Enter the filter list instance
Context	configure log filter <i>string</i>
Tree	filter
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

[filter-name] *string*

Synopsis	Filter name
Context	configure log filter <i>string</i>
Tree	filter
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

default-action *keyword*

Synopsis	Default action for the event filter
Context	configure log filter <i>string</i> default-action <i>keyword</i>
Tree	default-action
Options	drop, forward
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log filter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

named-entry [[entry-name](#)] *string*

Synopsis	Enter the named-entry list instance
Context	configure log filter <i>string</i> named-entry <i>string</i>
Tree	named-entry
Description	Commands in this context create or edit an event filter entry.
Max. Instances	999

Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

[entry-name] *string*

Synopsis	Entry name
Context	configure log filter <i>string</i> named-entry <i>string</i>
Tree	named-entry
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

action *keyword*

Synopsis	Action for this event filter entry
Context	configure log filter <i>string</i> named-entry <i>string</i> action <i>keyword</i>
Tree	action
Options	drop, forward
Introduced	21.2.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log filter <i>string</i> named-entry <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

match

Synopsis	Enter the match context
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Context	configure log filter <i>string</i> named-entry <i>string</i> match
Tree	match
Introduced	21.2.R1
Platforms	All

application

Synopsis	Enter the application context
Context	configure log filter <i>string</i> named-entry <i>string</i> match application
Tree	application
Introduced	21.2.R1
Platforms	All

eq keyword

Synopsis	Application to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match application eq <i>keyword</i>
Tree	eq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfcps, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq keyword

Synopsis	Application to be filtered out
Context	configure log filter <i>string</i> named-entry <i>string</i> match application neq <i>keyword</i>
Tree	neq
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls,

msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec

Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

event

Synopsis	Enter the event context
Context	configure log filter <i>string</i> named-entry <i>string</i> match event
Tree	event
Introduced	21.2.R1
Platforms	All

eq number

Synopsis	Log event message to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event eq number
Tree	eq
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

gt number

Synopsis	Number of the log event to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event gt number
Tree	gt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

gte number

Synopsis	Number of the log event to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event <i>gte number</i>
Tree	gte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lt number

Synopsis	Number of the log event to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event <i>lt number</i>
Tree	lt
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

lte number

Synopsis	Number of the log event to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match event <i>lte number</i>
Tree	lte
Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

neq number

Synopsis	Log event message to filter out
Context	configure log filter <i>string</i> named-entry <i>string</i> match event <i>neq number</i>
Tree	neq

Range	1 to 4294967295
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

message

Synopsis	Enter the message context
Context	configure log filter string named-entry string match message
Tree	message
Introduced	21.2.R1
Platforms	All

eq string

Synopsis	Log event message to match
Context	configure log filter string named-entry string match message eq string
Tree	eq
String Length	1 to 400
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq string

Synopsis	Log event message to be filtered out
Context	configure log filter string named-entry string match message neq string
Tree	neq
String Length	1 to 400
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

regexp boolean

Synopsis	String comparison to determine if the log event matches the value of pattern
Context	configure log filter <i>string</i> named-entry <i>string</i> match message regexp boolean
Tree	regexp
Default	false
Introduced	21.2.R1
Platforms	All

severity

Synopsis	Enter the severity context
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity
Tree	severity
Introduced	21.2.R1
Platforms	All

eq keyword

Synopsis	Log event severity level to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity eq keyword
Tree	eq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

gt keyword

Synopsis	Log event severity level
Context	configure log filter <i>string</i> named-entry <i>string</i> match severity gt keyword
Tree	gt
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1

Platforms All

gte keyword

Synopsis Log event severity level

Context **configure log filter** *string* **named-entry** *string* **match severity** **gte** *keyword*

Tree **gte**

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 21.2.R1

Platforms All

lt keyword

Synopsis Log event severity level

Context **configure log filter** *string* **named-entry** *string* **match severity** **lt** *keyword*

Tree **lt**

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 21.2.R1

Platforms All

lte keyword

Synopsis Log event severity level

Context **configure log filter** *string* **named-entry** *string* **match severity** **lte** *keyword*

Tree **lte**

Options cleared, indeterminate, critical, major, minor, warning

Notes The following elements are part of a choice: **eq**, **gt**, **gte**, **lt**, **lte**, or **neq**.

Introduced 21.2.R1

Platforms All

neq keyword

Synopsis Log event severity level to filter out

Context	configure log filter <i>string</i> named-entry <i>string</i> match severity neq <i>keyword</i>
Tree	neq
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: eq , gt , gte , lt , lte , or neq .
Introduced	21.2.R1
Platforms	All

subject

Synopsis	Enter the subject context
Context	configure log filter <i>string</i> named-entry <i>string</i> match subject
Tree	subject
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event subject string to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match subject eq <i>string</i>
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq *string*

Synopsis	Log event subject string to filter out
Context	configure log filter <i>string</i> named-entry <i>string</i> match subject neq <i>string</i>
Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

regexp *boolean*

Synopsis	String comparison to determine if the log event matches the value of subject
Context	configure log filter <i>string</i> named-entry <i>string</i> match <i>subject</i> regexp <i>boolean</i>
Tree	regexp
Default	false
Introduced	21.2.R1
Platforms	All

vrtr-name

Synopsis	Enter the vrtr-name context
Context	configure log filter <i>string</i> named-entry <i>string</i> match <i>vrtr-name</i>
Tree	vrtr-name
Description	Commands in this context configure the criteria for the name of a router instance. The vrtr-name is a name for a router instance, in a special format, used in the logging system. Examples of names include Base and vprn101, where 101 is the service ID of the VPRN service. The name represents the router instance that generated the log event.
Introduced	21.2.R1
Platforms	All

eq *string*

Synopsis	Log event router instance to match
Context	configure log filter <i>string</i> named-entry <i>string</i> match <i>vrtr-name</i> eq <i>string</i>
Tree	eq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

neq *string*

Synopsis	Log event router instance to filter out
Context	configure log filter <i>string</i> named-entry <i>string</i> match <i>vrtr-name</i> neq <i>string</i>

Tree	neq
String Length	1 to 32
Notes	The following elements are part of a choice: eq or neq .
Introduced	21.2.R1
Platforms	All

regexp *boolean*

Synopsis	Match the router instance string
Context	configure log filter <i>string</i> named-entry <i>string</i> match vrtr-name regexp <i>boolean</i>
Tree	regexp
Default	false
Introduced	21.2.R1
Platforms	All

log-events

Synopsis	Enter the log-events context
Context	configure log log-events
Tree	log-events
Introduced	16.0.R1
Platforms	All

adp event *keyword*

Synopsis	Enter the adp list instance
Context	configure log log-events adp event <i>keyword</i>
Tree	adp
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events adp event <i>keyword</i>

Tree	adp
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events adp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events adp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events adp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
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Context	configure log log-events adp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events adp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events adp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events adp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

anysec event *keyword*

Synopsis	Enter the anysec list instance
Context	configure log log-events anysec event <i>keyword</i>

Tree	anysec
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

event keyword

Synopsis	Events for ANYSec module.
Context	configure log log-events anysec event <i>keyword</i>
Tree	anysec
Options	tmnxAnySecMkaPskRollover, tmnxAnySecMkaOperStateChanged
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events anysec event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events anysec event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events anysec event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events anysec event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events anysec event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events anysec event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events](#) [anysec](#) [event](#) *keyword* **throttle** *boolean*

Tree [throttle](#)

Introduced 23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

application-assurance [event](#) *keyword*

Synopsis Enter the **application-assurance** list instance

Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword*

Tree [application-assurance](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [application-assurance](#) [event](#) *keyword*

Tree [application-assurance](#)

Options tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup, tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate, tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate, tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr, tmnxBsxIsaAaGrpOvridCutthru, tmnxBsxIsaAaGrpOvridCutthruClr,

tmnxBsxTransitIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged,
 tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure,
 tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure,
 tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpRequestParamLimitExceeded,
 tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure,
 tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate,
 tmnxBsxUrlListFailure, tmnxBsxIlsaAaTimFileProcFailure,
 tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear,
 tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear,
 tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear,
 tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear,
 tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage,
 tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed,
 tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd,
 tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear,
 tmnxBsxUrlFiltrWebServOprStateChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events application-assurance event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events application-assurance event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
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Context	configure log log-events application-assurance event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events application-assurance event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events application-assurance event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events application-assurance event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events application-assurance event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aps event *keyword*

Synopsis	Enter the aps list instance
Context	configure log log-events aps event <i>keyword</i>
Tree	aps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events aps event <i>keyword</i>
Tree	aps
Options	apsEventSwitchover , apsEventModeMismatch , apsEventChannelMismatch , apsEventPSBF , apsEventFEPLF , tApsModeMismatchClear , tApsChannelMismatchClear , tApsPSBFClear , tApsFEPLFClear , tApsLocalSwitchCommandSet , tApsLocalSwitchCommandClear , tApsRemoteSwitchCommandSet , tApsRemoteSwitchCommandClear , tApsMcApsCtlLinkStateChange , tApsChanTxLaisStateChange , tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events aps event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events aps event** *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events aps event** *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events aps event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events aps event** *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
 Context **configure log log-events aps event** *keyword specific-throttle-limit number*
 Tree [specific-throttle-limit](#)
 Range 1 to 20000
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure log log-events aps event** *keyword throttle boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

auto-prov *event keyword*

Synopsis Enter the **auto-prov** list instance
 Context **configure log log-events auto-prov event** *keyword*
 Tree [auto-prov](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure log log-events auto-prov event** *keyword*
 Tree [auto-prov](#)
 Options autoNodeProv
 Notes This element is part of a list key.
 Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events auto-prov event** keyword **generate** *boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events auto-prov event** keyword **repeat** *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events auto-prov event** keyword **severity** *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events auto-prov event** keyword **specific-throttle** *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events auto-prov event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events auto-prov event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events auto-prov event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

bfd [event](#) *keyword*

Synopsis	Enter the bfd list instance
Context	configure log log-events bfd event <i>keyword</i>
Tree	bfd
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bfd event <i>keyword</i>
Tree	bfd
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events bfd event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bfd event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events bfd event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [bfd event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1

Platforms All

bgp event *keyword*

Synopsis Enter the **bgp** list instance

Context **configure log log-events bgp event** *keyword*

Tree [bgp](#)

Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure log log-events bgp event** *keyword*

Tree [bgp](#)

Options sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tmnxBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events of this type and increment the event counter

Context **configure log log-events bgp event** *keyword generate* *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bgp event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events bgp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events bgp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events bgp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	configure log log-events bgp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events bgp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

bier event *keyword*

Synopsis	Enter the bier list instance
Context	configure log log-events bier event <i>keyword</i>
Tree	bier
Introduced	19.5.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events bier event <i>keyword</i>
Tree	bier
Options	vRtrBierBfrldCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events bier event <i>keyword generate boolean</i>
Tree	generate
Introduced	19.5.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events bier event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	19.5.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events bier event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	19.5.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events bier event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	19.5.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events bier event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	19.5.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events bier event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	19.5.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events bier event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	19.5.R1
Platforms	All

calltrace *event* *keyword*

Synopsis	Enter the calltrace list instance
Context	configure log log-events calltrace event <i>keyword</i>
Tree	calltrace
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events calltrace event keyword
Tree	calltrace
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events calltrace event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events calltrace event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events calltrace event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events calltrace event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events calltrace event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events calltrace event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events calltrace event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd event keyword

Synopsis	Enter the cflowd list instance
Context	configure log log-events cflowd event keyword
Tree	cflowd
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events cflowd event keyword
Tree	cflowd
Options	tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events cflowd event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events cflowd event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events cflowd event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events cflowd event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events cflowd event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events cflowd event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events cflowd event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

chassis event *keyword*

Synopsis	Enter the chassis list instance
Context	configure log log-events chassis event <i>keyword</i>
Tree	chassis
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events chassis event <i>keyword</i>
Tree	chassis
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclftimingHoldover, tmnxEqSynclftimingHoldoverClear, tmnxEqSynclftimingRef1Alarm, tmnxEqSynclftimingRef1AlarmClear, tmnxEqSynclftimingRef2Alarm, tmnxEqSynclftimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclftimingBITSAlarm, tmnxEqSynclftimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclftimingRef1Quality, tmnxEqSynclftimingRef2Quality, tmnxEqSynclftimingBITSQuality, tmnxEqSynclftimingBITS2Quality, tmnxEqSynclftimingRefSwitch, tmnxEqSynclftimingBITS2Alarm, tmnxEqSynclftimingBITS2AlarmClr,

tmnxEqSynclfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent,
tmnxEqSynclfTimingSystemQuality, tmnxEqHwEnhancedCapability,
tmnxEqSynclfTimingPTPQuality, tmnxEqSynclfTimingPTPAlarm,
tmnxEqSynclfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning,
tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded,
tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity,
tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState,
tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent,
tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent,
tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent,
tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear,
tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear,
tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear,
tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm,
tmnxEqProvPowerCapacityAlmClr, tmnxPlyAcctStatsPoolExcResource,
tmnxPlyAcctStatsPoolLowResource, tmnxPlyAcctStatsEventOvrflwClr,
tmnxPlyAcctStatsEventOvrflw, tmnxlomResHighLimitReached,
tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow,
tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact,
tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail,
tmnxEqMdalngrXplError, tmnxSynclfTimBITS2048khzUnsup,
tmnxSynclfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise,
tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,
tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,
tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,
tmnxPhysChassisPCMIInputFeed, tmnxPhysChassisPCMIInputFeedClr,
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,

tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,
tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,
tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,
tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,
tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,
tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,
tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,
tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,
tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,
tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,
tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,
tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,
tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,
tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,
tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,
tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged,
tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged,
tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached,
tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered,
tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr,
tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscrbdClr,
tmnxInterChassisCommsDown, tmnxInterChassisCommsUp,
tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted,
tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort,
tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure,
CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError,
CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure,
tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp,
tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure,
SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError,

SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure, tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear, tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch, tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events chassis event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events chassis event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events chassis event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events chassis event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events chassis event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events chassis event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events chassis event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

debug event keyword

Synopsis	Enter the debug list instance
Context	configure log log-events debug event keyword
Tree	debug
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events debug event keyword
Tree	debug
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events debug event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events debug event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events debug event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events debug event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events debug event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events debug event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events debug event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

dhcp event keyword

Synopsis	Enter the dhcp list instance
Context	configure log log-events dhcp event <i>keyword</i>
Tree	dhcp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dhcp event <i>keyword</i>
Tree	dhcp
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dhcp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dhcp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dhcp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dhcp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dhcp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dhcp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dhcp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

dhcps [event](#) *keyword*

Synopsis	Enter the dhcps list instance
Context	configure log log-events dhcps event <i>keyword</i>
Tree	dhcps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dhcps event <i>keyword</i>
Tree	dhcps
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPITHTooLowV6, tmnxDhcpSvrPITHDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dhcps event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dhcps event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dhcp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dhcp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dhcp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dhcp event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dhcps event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter [event](#) *keyword*

Synopsis	Enter the diameter list instance
Context	configure log log-events diameter event <i>keyword</i>
Tree	diameter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events diameter event <i>keyword</i>
Tree	diameter
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events diameter event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events diameter event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events diameter event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events diameter event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events diameter event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events diameter event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events diameter event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

dot1x [event](#) *keyword*

Synopsis	Enter the dot1x list instance
Context	configure log log-events dot1x event <i>keyword</i>
Tree	dot1x
Introduced	21.2.R1
Platforms	All

event *keyword*

Synopsis	Events for dynsvc module.
Context	configure log log-events dot1x event <i>keyword</i>
Tree	dot1x
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events dot1x event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	21.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dot1x event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	21.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events dot1x event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	21.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dot1x event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dot1x event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.2.R1
Platforms	All

dynsvc [event](#) *keyword*

Synopsis	Enter the dynsvc list instance
Context	configure log log-events dynsvc event <i>keyword</i>
Tree	dynsvc
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events dynsvc event keyword
Tree	dynsvc
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events dynsvc event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events dynsvc event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events dynsvc event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events dynsvc event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events dynsvc event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

efm-oam event keyword

Synopsis	Enter the efm-oam list instance
Context	configure log log-events efm-oam event keyword
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events efm-oam event keyword
Tree	efm-oam
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events efm-oam event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events efm-oam event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events efm-oam event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events efm-oam event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events efm-oam event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events efm-oam event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events efm-oam event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

elmi [event](#) *keyword*

Synopsis	Enter the elmi list instance
Context	configure log log-events elmi event <i>keyword</i>
Tree	elmi
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events elmi event <i>keyword</i>
Tree	elmi
Options	tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events elmi event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events elmi event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events elmi event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events elmi event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events elmi event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events elmi event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events elmi event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ering *event* *keyword*

Synopsis	Enter the ering list instance
Context	configure log log-events ering event <i>keyword</i>
Tree	ering
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ering event <i>keyword</i>
Tree	ering
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ering event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ering event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ering event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ering event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ering event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ering event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ering event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

eth-cfm [event](#) *keyword*

Synopsis	Enter the eth-cfm list instance
Context	configure log log-events eth-cfm event <i>keyword</i>
Tree	eth-cfm
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events eth-cfm event <i>keyword</i>
Tree	eth-cfm
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcltyFaultRaise, tmnxDot1agCfmMepFcltyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events eth-cfm event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events eth-cfm event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events eth-cfm event <i>keyword</i> severity <i>keyword</i>
Tree	severity

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events eth-cfm event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events eth-cfm event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events eth-cfm event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events eth-cfm event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle

Introduced 16.0.R1
Platforms All

etun *event* keyword

Synopsis Enter the **etun** list instance
Context **configure log log-events etun event** keyword
Tree **etun**
Introduced 16.0.R1
Platforms All

event keyword

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure log log-events etun event** keyword
Tree **etun**
Options tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events etun event** keyword **generate** *boolean*
Tree **generate**
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events etun event** keyword **repeat** *boolean*

Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events etun event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events etun event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events etun event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events etun event <i>keyword</i> specific-throttle-limit <i>number</i>

Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events etun event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

filter [event](#) *keyword*

Synopsis	Enter the filter list instance
Context	configure log log-events filter event <i>keyword</i>
Tree	filter
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events filter event <i>keyword</i>
Tree	filter
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events filter event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events filter event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events filter event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events filter event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events filter event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events filter event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events filter event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

gsmp *event* *keyword*

Synopsis	Enter the gsmp list instance
Context	configure log log-events gsmp event <i>keyword</i>
Tree	gsmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events gsm event <i>keyword</i>
Tree	gsm
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events gsm event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events gsm event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events gsm event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log log-events gsmp event keyword specific-throttle boolean](#)

Tree [specific-throttle](#)

Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log log-events gsmp event keyword specific-throttle-interval number](#)

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log log-events gsmp event keyword specific-throttle-limit number](#)

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log log-events gsmp event keyword throttle boolean](#)

Tree [throttle](#)

Introduced 16.0.R1

Platforms All

igmp event keyword

Synopsis	Enter the igmp list instance
Context	configure log log-events igmp event keyword
Tree	igmp
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igmp event keyword
Tree	igmp
Options	vRtrIgmplfRxQueryVerMismatch, vRtrIgmplfCModeRxQueryMismatch, vRtrIgmplfMaxGrpsLimitExceeded, vRtrIgmplfMcacPlcyDropped, vRtrIgmplfHostInstantiationFail, vRtrIgmplfHostMaxGrpsLimitExceeded, vRtrIgmplfHostMcacPlcyDropped, vRtrIgmplfHostCModeRxQueryMismatch, vRtrIgmplfHostRxQueryVerMismatch, vRtrIgmplfHostMaxSrcsLimitExceeded, vRtrIgmplfMaxSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpsLimExceed, vRtrIgmplfGrpIfSapMaxSrcsLimExceed, vRtrIgmplfGrpIfSapMcacPlcyDropped, vRtrIgmplfGrpIfSapCModeRxQueryMism, vRtrIgmplfGrpIfSapRxQueryVerMism, vRtrIgmplfHostMaxGrpSrcsLimitExcd, vRtrIgmplfMaxGrpSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpSrcLimExcd, vRtrIgmplfHostQryIntervalConflict, vRtrIgmplfNotifyNumOfIPsecIfLowWm, vRtrIgmplfNotifyNumOfIPsecIfHighWm, vRtrIgmplfNotifyNumOfIPsecIfMaxRch, vRtrIgmplfSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events igmp event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events igmp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events igmp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events igmp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events igmp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events igmp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events igmp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

igmp-snooping [event](#) *keyword*

Synopsis	Enter the igmp-snooping list instance
Context	configure log log-events igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events igmp-snooping event <i>keyword</i>
Tree	igmp-snooping
Options	sapIgmPsnpgGrpLimitExceeded, sapIgmPsnpgMcacPlcyDropped, sdpBndIgmPsnpgGrpLimitExceeded, sdpBndIgmPsnpgMcacPlcyDropped, sapIgmPsnpgMcsFailure, sapIgmPsnpgSrcLimitExceeded, sdpBndIgmPsnpgSrcLimitExceeded, sdpBndIgmPsnpgGrpSrcLimitExceed, sapIgmPsnpgGrpSrcLimitExceeded, eMplslgmPsnpgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events igmp-snooping event** *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events igmp-snooping event** *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events igmp-snooping event** *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events igmp-snooping event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events igmp-snooping event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events igmp-snooping event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events igmp-snooping event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ip [event](#) *keyword*

Synopsis	Enter the ip list instance
Context	configure log log-events ip event <i>keyword</i>
Tree	ip
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ip event keyword
Tree	ip
Options	clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events ip event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ip event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events ip event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log](#) [log-events](#) [ip event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [ip event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [ip event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events](#) [ip event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Introduced 16.0.R1

Platforms All

ipsec event keyword

Synopsis	Enter the ipsec list instance
Context	configure log log-events ipsec event keyword
Tree	ipsec
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ipsec event keyword
Tree	ipsec
Options	tIPsecRUTnlFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlyFailure, tIPsecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnlEncapIpMtuTooSmall, tmnxSecNotifCmptdCertHashChngd, tmnxSecNotifCmptdCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnlRemoved, tIPsecTunnelProtocolFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events ipsec event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ipsec event keyword repeat boolean
Tree	repeat
Default	false

Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [ipsec event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [ipsec event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [ipsec event](#) *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [ipsec event](#) *keyword specific-throttle-limit number*
Tree [specific-throttle-limit](#)
Range 1 to 20000

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log log-events ipsec event](#) *keyword* **throttle** *boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis event *keyword*

Synopsis Enter the **isis** list instance
 Context **configure** [log log-events isis event](#) *keyword*
 Tree [isis](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log log-events isis event](#) *keyword*
 Tree [isis](#)
 Options vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAdrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency, tmnxIsisLSPTooLargeToPropagate, tmnxIsisOrigLSPBufSizeMismatch, tmnxIsisProtoSuppMismatch, tmnxIsisAdjacencyChange, tmnxIsisCirclDExhausted, tmnxIsisAdjRestartStatusChange, tmnxIsisLdpSyncTimerStarted, tmnxIsisLdpSyncExit, tmnxIsisExportLimitReached, tmnxIsisExportLimitWarning, tmnxIsisRoutesExpLmtDropped, tmnxIsisFailureDisabled, tmnxIsisSidError, tmnxIsisSidNotInLabelRange, tmnxIsisRejectedAdjacencySid, tmnxIsisLSPPurge, tmnxIsisPfxLimitOverloadWarning, tmnxIsisAdjBfdSessionSetupFail, tmnxIsisSrgbBadLabelRange, tmnxIsisCircMtuTooLow, tmnxIsisRejectedAdjacencySet, tmnxIsisCorruptRemainingLifetime, tmnxIsisSidStatsIndexAlloc,

	tmnxIisFaOperParticipationDown, tmnxIisRejectedEndXSid, tmnxIisRejectedPglD, tmnxIisSrv6LocError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events isis event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events isis event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events isis event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events isis event <i>keyword specific-throttle boolean</i>

Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events isis event keyword specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events isis event keyword specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events isis event keyword throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

l2tp event *keyword*

Synopsis	Enter the l2tp list instance
Context	configure log log-events l2tp event keyword
Tree	l2tp

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log log-events l2tp event keyword](#)
 Tree [l2tp](#)
 Options tmnxL2tpPeerUnreachable, tmnxL2tpIlsaMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis Generate log events when the event occurs
 Context **configure** [log log-events l2tp event keyword generate boolean](#)
 Tree [generate](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
 Context **configure** [log log-events l2tp event keyword repeat boolean](#)
 Tree [repeat](#)
 Default false
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis Severity level associated with event type

Context	configure log log-events l2tp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events l2tp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events l2tp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events l2tp event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
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Context	configure log log-events l2tp event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lag event *keyword*

Synopsis	Enter the lag list instance
Context	configure log log-events lag event <i>keyword</i>
Tree	lag
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events lag event <i>keyword</i>
Tree	lag
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events lag event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
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Context	configure log log-events lag event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events lag event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events lag event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events lag event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
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Context	configure log log-events lag event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle boolean

Synopsis	Throttle log events of this type
Context	configure log log-events lag event keyword throttle boolean
Tree	throttle
Introduced	16.0.R1
Platforms	All

ldap event keyword

Synopsis	Enter the ldap list instance
Context	configure log log-events ldap event keyword
Tree	ldap
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ldap event keyword
Tree	ldap
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
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Context	configure log log-events ldap event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ldap event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events ldap event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle boolean

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ldap event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval number

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ldap event keyword specific-throttle-interval number

Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ldap event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ldap event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ldap event *keyword*

Synopsis	Enter the ldap list instance
Context	configure log log-events ldap event <i>keyword</i>
Tree	ldap
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ldap event <i>keyword</i>
Tree	ldap

Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ldp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ldp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ldp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ldp event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ldp event keyword specific-throttle-interval number
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ldp event keyword specific-throttle-limit number
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ldp event keyword throttle boolean
Tree	throttle
Introduced	16.0.R1
Platforms	All

li event keyword

Synopsis	Enter the li list instance
Context	configure log log-events li event <i>keyword</i>
Tree	li
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events li event <i>keyword</i>
Tree	li
Options	sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXlflLicenseInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
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Context	configure log log-events li event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events li event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events li event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events li event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events li event <i>keyword specific-throttle-interval number</i>

Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events li event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events li event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

lldp event *keyword*

Synopsis	Enter the lldp list instance
Context	configure log log-events lldp event <i>keyword</i>
Tree	lldp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events lldp event <i>keyword</i>
Tree	lldp

Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events lldp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events lldp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events lldp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
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Context	configure log log-events lldp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events lldp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events lldp event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events lldp event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

logger [event](#) *keyword*

Synopsis	Enter the logger list instance
Context	configure log log-events logger event <i>keyword</i>

Tree	logger
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events logger event <i>keyword</i>
Tree	logger
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events logger event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events logger event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events logger event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events logger event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events logger event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events logger event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events logger event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

macsec [event](#) *keyword*

Synopsis	Enter the macsec list instance
Context	configure log log-events macsec event <i>keyword</i>
Tree	macsec
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events macsec event <i>keyword</i>
Tree	macsec
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events macsec event <i>keyword</i> generate <i>boolean</i>
Tree	generate

Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events macsec event** *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events macsec event** *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events macsec event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events macsec event** *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200

Introduced 16.0.R1
 Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
 Context **configure log log-events macsec event** *keyword* **specific-throttle-limit** *number*
 Tree [specific-throttle-limit](#)
 Range 1 to 20000
 Introduced 16.0.R1
 Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure log log-events macsec event** *keyword* **throttle** *boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms All

mc-redundancy *event* *keyword*

Synopsis Enter the **mc-redundancy** list instance
 Context **configure log log-events mc-redundancy event** *keyword*
 Tree [mc-redundancy](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure log log-events mc-redundancy event** *keyword*
 Tree [mc-redundancy](#)
 Options tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared,

tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared,
 tmnxSrrpInstanceldMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch,
 tmnxSrrpRedlIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged,
 tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged,
 tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd,
 tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared,
 tmnxSrrpDuplicateSublIfAddress, tmnxMcPeerRingsOperStateChanged,
 tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded,
 tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen,
 tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp,
 tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp,
 tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled,
 tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg,
 tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh,
 tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear,
 tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg,
 tMcIpssecDomainProtStatusChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mc-redundancy event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mc-redundancy event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mc-redundancy event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mc-redundancy event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mc-redundancy event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mc-redundancy event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mc-redundancy event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mcpath **event** *keyword*

Synopsis	Enter the mcpath list instance
Context	configure log log-events mcpath event <i>keyword</i>
Tree	mcpath
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mcpath event <i>keyword</i>
Tree	mcpath
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mcpath event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mcpath event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mcpath event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mcpath event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mcpath event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mgmt-core [event](#) *keyword*

Synopsis	Enter the mgmt-core list instance
Context	configure log log-events mgmt-core event <i>keyword</i>
Tree	mgmt-core
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mgmt-core event <i>keyword</i>
Tree	mgmt-core
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mgmt-core event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mgmt-core event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mgmt-core event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mgmt-core event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mgmt-core event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mgmt-core event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mgmt-core event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mirror [event](#) *keyword*

Synopsis	Enter the mirror list instance
Context	configure log log-events mirror event <i>keyword</i>
Tree	mirror
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mirror event keyword
Tree	mirror
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpv6FilterChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events mirror event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mirror event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events mirror event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events](#) [mirror](#) [event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Introduced 16.0.R1

Platforms All

mld event *keyword*

Synopsis	Enter the mld list instance
Context	configure log log-events mld event <i>keyword</i>
Tree	mld
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mld event <i>keyword</i>
Tree	mld
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProfInstMcacPlyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mld event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mld event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mld event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mld event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mld event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mld event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mld event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mld-snooping *event* *keyword*

Synopsis	Enter the mld-snooping list instance
Context	configure log log-events mld-snooping <i>event</i> <i>keyword</i>
Tree	mld-snooping
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mld-snooping <i>event</i> <i>keyword</i>
Tree	mld-snooping
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mld-snooping event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mld-snooping event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mld-snooping event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mld-snooping event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mld-snooping event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mld-snooping event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mld-snooping event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mpls **event** *keyword*

Synopsis	Enter the mpls list instance
Context	configure log log-events mpls event <i>keyword</i>
Tree	mpls
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mpls event <i>keyword</i>
Tree	mpls
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResigned, vRtrMplsP2mplInstanceUp, vRtrMplsP2mplInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResigned, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mplInstanceResigned, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInlpgOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted, vRtrMplsNodeInlpgOverloadIpv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mpls event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mpls event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mpls event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mpls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mpls event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mpls event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mpls-tp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

mpls-tp [event](#) *keyword*

Synopsis	Enter the mpls-tp list instance
Context	configure log log-events mpls-tp event <i>keyword</i>
Tree	mpls-tp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events mpls-tp event <i>keyword</i>
Tree	mpls-tp
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events mpls-tp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events mpls-tp event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events mpls-tp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events mpls-tp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events mpls-tp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events mpls-tp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events mpls-tp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

msdp [event](#) *keyword*

Synopsis	Enter the msdp list instance
Context	configure log log-events msdp event <i>keyword</i>
Tree	msdp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events msdp event <i>keyword</i>
Tree	msdp
Options	msdpEstablished , msdpBackwardTransition , tmnxMsdpNgActSrcLimExcd , tmnxMsdpNgPeerActSrcLimExcd , tmnxMsdpNgRPFFailure , tmnxMsdpNgSourceSrcActMsgsExcd , tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events msdp event** keyword **generate** *boolean*
Tree **generate**
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events msdp event** keyword **repeat** *boolean*
Tree **repeat**
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events msdp event** keyword **severity** *keyword*
Tree **severity**
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events msdp event** keyword **specific-throttle** *boolean*
Tree **specific-throttle**
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events msdp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events msdp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events msdp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

nat event *keyword*

Synopsis	Enter the nat list instance
Context	configure log log-events nat event <i>keyword</i>
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events nat event <i>keyword</i>
Tree	nat
Options	tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events nat event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events nat event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events nat event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events nat event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events nat event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events nat event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ntp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ntp event *keyword*

Synopsis	Enter the ntp list instance
Context	configure log log-events ntp event <i>keyword</i>
Tree	ntp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ntp event <i>keyword</i>
Tree	ntp
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ntp event <i>keyword</i> generate <i>boolean</i>

Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ntp event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ntp event keyword severity keyword
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ntp event keyword specific-throttle boolean
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ntp event keyword specific-throttle-interval number
Tree	specific-throttle-interval

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ntp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ntp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

oam [event](#) *keyword*

Synopsis	Enter the oam list instance
Context	configure log log-events oam event <i>keyword</i>
Tree	oam
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events oam event <i>keyword</i>
Tree	oam
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted,

tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcldInvalid, svcldWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events oam event](#) keyword [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events oam event](#) keyword [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events oam event](#) keyword [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle](#) *boolean*

Tree [specific-throttle](#)

Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle-interval](#) *number*

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged

Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle-limit](#) *number*

Tree [specific-throttle-limit](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms All

throttle *boolean*

Synopsis Throttle log events of this type

Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [throttle](#) *boolean*

Tree [throttle](#)

Introduced 16.0.R1

Platforms All

openflow event keyword

Synopsis	Enter the openflow list instance
Context	configure log log-events openflow event keyword
Tree	openflow
Introduced	16.0.R2
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events openflow event keyword
Tree	openflow
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events openflow event keyword generate boolean
Tree	generate
Introduced	16.0.R2
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events openflow event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events openflow event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R2
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events openflow event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R2
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events openflow event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R2
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events openflow event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R2
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events openflow event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R2
Platforms	All

ospf *event* *keyword*

Synopsis	Enter the ospf list instance
Context	configure log log-events ospf event <i>keyword</i>
Tree	ospf
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ospf event <i>keyword</i>
Tree	ospf
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate,

	tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events ospf event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events ospf event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events ospf event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events ospf event <i>keyword</i> specific-throttle <i>boolean</i>

Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ospf event keyword specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ospf event keyword specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ospf event keyword throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

pcap [event keyword](#)

Synopsis	Enter the pcap list instance
Context	configure log log-events pcap event keyword
Tree	pcap

Introduced 16.0.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log](#) [log-events](#) [pcap](#) [event](#) *keyword*
Tree [pcap](#)
Options tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log](#) [log-events](#) [pcap](#) [event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log](#) [log-events](#) [pcap](#) [event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [pcap](#) [event](#) *keyword* [severity](#) *keyword*

Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pcap event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pcap event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pcap event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pcap event <i>keyword</i> throttle <i>boolean</i>

Tree	throttle
Introduced	16.0.R1
Platforms	All

pcep event *keyword*

Synopsis	Enter the pcep list instance
Context	configure log log-events pcep event <i>keyword</i>
Tree	pcep
Introduced	22.2.R1
Platforms	All

event *keyword*

Synopsis	PCEP module events
Context	configure log log-events pcep event <i>keyword</i>
Tree	pcep
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pcep event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	22.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pcep event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat

Default	false
Introduced	22.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pcep event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	22.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pcep event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	22.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pcep event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	22.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pcep event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	22.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pcep event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	22.2.R1
Platforms	All

pfcp event *keyword*

Synopsis	Enter the pfcp list instance
Context	configure log log-events pfcp event <i>keyword</i>
Tree	pfcp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	PFCP events
Context	configure log log-events pfcp event <i>keyword</i>
Tree	pfcp
Options	tmnxPfcplInvalidle
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pfcp event <i>keyword generate boolean</i>
Tree	generate

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events pfc event** *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events pfc event** *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events pfc event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events pfc event** *keyword specific-throttle-interval number*
Tree [specific-throttle-interval](#)
Range 1 to 1200

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
 Context **configure** [log](#) [log-events](#) [pfc](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
 Tree [specific-throttle-limit](#)
 Range 1 to 20000
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log](#) [log-events](#) [pfc](#) [event](#) *keyword* [throttle](#) *boolean*
 Tree [throttle](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim event *keyword*

Synopsis Enter the **pim** list instance
 Context **configure** [log](#) [log-events](#) [pim](#) [event](#) *keyword*
 Tree [pim](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log](#) [log-events](#) [pim](#) [event](#) *keyword*
 Tree [pim](#)
 Options vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded,

vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded,
 vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused,
 vRtrPimNgMcacPlcyDropped, vRtrPimNgInvalidIPmsiTunnel,
 vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId,
 vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri,
 vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pim event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pim event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pim event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pim event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pim event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pim event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pim event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

pim-snooping event keyword

Synopsis	Enter the pim-snooping list instance
Context	configure log log-events pim-snooping event keyword
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pim-snooping event keyword
Tree	pim-snooping
Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events pim-snooping event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pim-snooping event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pim-snooping event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pim-snooping event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pim-snooping event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

port **event** *keyword*

Synopsis	Enter the port list instance
Context	configure log log-events port event <i>keyword</i>
Tree	port
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events port event <i>keyword</i>
Tree	port
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified,

tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset,
 tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart,
 tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange,
 tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected,
 tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered,
 tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown,
 tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber,
 tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm,
 tmnxCellularRssiAlarmClear

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events of this type and increment the event counter

Context **configure** [log log-events port event keyword generate boolean](#)

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events port event keyword repeat boolean](#)

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events port event keyword severity keyword](#)

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events port event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events port event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Times that this event can be logged within the specific throttle interval
Context	configure log log-events port event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events port event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

pppoe event keyword

Synopsis	Enter the pppoe list instance
Context	configure log log-events pppoe event keyword
Tree	pppoe
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pppoe event keyword
Tree	pppoe
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events pppoe event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pppoe event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pppoe event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pppoe event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pppoe event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pppoe event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pppoe event <i>keyword throttle boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-clnt *event keyword*

Synopsis	Enter the pppoe-clnt list instance
Context	configure log log-events pppoe-clnt event <i>keyword</i>
Tree	pppoe-clnt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events pppoe-clnt event <i>keyword</i>
Tree	pppoe-clnt
Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events pppoe-clnt event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events pppoe-clnt event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events pppoe-clnt event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events pppoe-clnt event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events pppoe-clnt event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events pppoe-clnt event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events pppoe-clnt event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ptp *event* *keyword*

Synopsis	Enter the ptp list instance
Context	configure log log-events ptp event <i>keyword</i>
Tree	ptp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ptp event <i>keyword</i>
Tree	ptp
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events ptp event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log log-events ptp event](#) *keyword* [repeat](#) *boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log log-events ptp event](#) *keyword* [severity](#) *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log log-events ptp event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
 Context **configure** [log](#) [log-events](#) [ptp event](#) *keyword* [specific-throttle-interval](#) *number*
 Tree [specific-throttle-interval](#)
 Range 1 to 1200
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
 Context **configure** [log](#) [log-events](#) [ptp event](#) *keyword* [specific-throttle-limit](#) *number*
 Tree [specific-throttle-limit](#)
 Range 1 to 20000
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log](#) [log-events](#) [ptp event](#) *keyword* [throttle](#) *boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

python [event](#) *keyword*

Synopsis Enter the **python** list instance
 Context **configure** [log](#) [log-events](#) [python event](#) *keyword*
 Tree [python](#)
 Introduced 21.2.R1
 Platforms All

event *keyword*

Synopsis	Python module events
Context	configure log log-events python event <i>keyword</i>
Tree	python
Options	tmnxPythonInterpreterRestarted
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events python event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	21.2.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events python event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	21.2.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events python event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events python event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	21.2.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events python event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events python event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events python event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	21.2.R1
Platforms	All

radius event keyword

Synopsis	Enter the radius list instance
Context	configure log log-events radius event keyword
Tree	radius
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events radius event keyword
Tree	radius
Options	tmnxRadSrvPlySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events radius event keyword generate boolean
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events radius event keyword repeat boolean
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events radius event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events radius event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events radius event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events radius event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events radius event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

rip [event](#) *keyword*

Synopsis	Enter the rip list instance
Context	configure log log-events rip event <i>keyword</i>
Tree	rip
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rip event <i>keyword</i>
Tree	rip
Options	ripPacketDiscarded , vRtrRipAuthTypeMismatch , vRtrRipAuthTypeFailure , vRtrRipInstanceShuttingDown , vRtrRipInstanceRestarted , vRtrRipInstanceExpLmtReached , vRtrRipInstanceExpLmtWarning , vRtrRipInstanceRtsExpLmtDropped , vRtrRipPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rip event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rip event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rip event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events rip event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rip event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rip event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rip event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

ripng event *keyword*

Synopsis	Enter the ripng list instance
Context	configure log log-events ripng event <i>keyword</i>
Tree	ripng
Introduced	16.0.R3
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events ripng event <i>keyword</i>
Tree	ripng
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure log log-events ripng event** *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R3
Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure log log-events ripng event** *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure log log-events ripng event** *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R3
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure log log-events ripng event** *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R3
Platforms All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events ripng event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R3
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events ripng event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R3
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events ripng event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R3
Platforms	All

route-policy [event](#) *keyword*

Synopsis	Enter the route-policy list instance
Context	configure log log-events route-policy event <i>keyword</i>
Tree	route-policy
Introduced	16.0.R1
Platforms	All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events route-policy event <i>keyword</i>
Tree	route-policy
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate boolean

Synopsis	Generate log events when the event occurs
Context	configure log log-events route-policy event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat boolean

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events route-policy event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity keyword

Synopsis	Severity level associated with event type
Context	configure log log-events route-policy event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events route-policy event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events route-policy event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events route-policy event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events route-policy event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

rpki event *keyword*

Synopsis	Enter the rpki list instance
Context	configure log log-events rpki event <i>keyword</i>
Tree	rpki
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rpki event <i>keyword</i>
Tree	rpki
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rpki event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rpki event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rpk event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events rpk event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rpk event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rpk event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rpk event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

rsvp [event](#) *keyword*

Synopsis	Enter the rsvp list instance
Context	configure log log-events rsvp event <i>keyword</i>
Tree	rsvp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events rsvp event <i>keyword</i>
Tree	rsvp
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events rsvp event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events rsvp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events rsvp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events rsvp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events rsvp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events rsvp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events rsvp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

satellite *event* *keyword*

Synopsis	Enter the satellite list instance
Context	configure log log-events satellite event <i>keyword</i>
Tree	satellite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events satellite event <i>keyword</i>
Tree	satellite
Options	tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword generate boolean*
Tree [generate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword repeat boolean*
Tree [repeat](#)
Default false
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword severity keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword specific-throttle boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

security event *keyword*

Synopsis Enter the **security** list instance
Context **configure** [log](#) [log-events](#) [security event](#) *keyword*
Tree [security](#)
Introduced 16.0.R1
Platforms All

event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events security event <i>keyword</i>
Tree	security
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrIOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrIUpdateStart, tmnxPkiCAProfCrIUpdateSuccess, tmnxPkiCAProfCrIUpdateUrlFail, tmnxPkiCAProfCrIUpdAllUrlsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrIUpdNoNxtUpdTime, tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,

tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid, tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, tmnxSysLicenseActivated, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid, tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md_cli_io, md_cli_unauth_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth, tmnxCertKeyPairGen, tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed, tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events security event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events security event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events security event](#) *keyword severity keyword*

Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events security event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events security event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events security event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events security event <i>keyword</i> throttle <i>boolean</i>

Tree	throttle
Introduced	16.0.R1
Platforms	All

sflow event *keyword*

Synopsis	Enter the sflow list instance
Context	configure log log-events sflow event <i>keyword</i>
Tree	sflow
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events sflow event <i>keyword</i>
Tree	sflow
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events sflow event <i>keyword generate</i> <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events sflow event <i>keyword repeat</i> <i>boolean</i>
Tree	repeat

Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-s, 7950 XRS

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events sflow event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events sflow event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events sflow event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events sflow event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit

Range	1 to 20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events sflow event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

snmp event *keyword*

Synopsis	Enter the snmp list instance
Context	configure log log-events snmp event <i>keyword</i>
Tree	snmp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events snmp event <i>keyword</i>
Tree	snmp
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events snmp event <i>keyword</i> generate <i>boolean</i>

Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events snmp event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events snmp event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events snmp event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events snmp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval

Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events snmp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events snmp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

sr-mpls [event](#) *keyword*

Synopsis	Enter the sr-mpls list instance
Context	configure log log-events sr-mpls event <i>keyword</i>
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

event *keyword*

Synopsis	SR MPLS event
Context	configure log log-events sr-mpls event <i>keyword</i>
Tree	sr-mpls
Options	tmnxSrMplsPfxSidFailure

Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events sr-mpls event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	21.10.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events sr-mpls event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	21.10.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events sr-mpls event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events sr-mpls event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced 21.10.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [sr-mpls](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 21.10.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [sr-mpls](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 21.10.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [sr-mpls](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 21.10.R1
Platforms All

srv6 [event](#) *keyword*

Synopsis Enter the **srv6** list instance
Context **configure** [log](#) [log-events](#) [srv6](#) [event](#) *keyword*
Tree [srv6](#)
Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure log log-events srv6 event** *keyword*
 Tree [srv6](#)
 Options vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
 Notes This element is part of a list key.
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

generate *boolean*

Synopsis Generate log events when the event occurs
 Context **configure log log-events srv6 event** *keyword generate* *boolean*
 Tree [generate](#)
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared
 Context **configure log log-events srv6 event** *keyword repeat* *boolean*
 Tree [repeat](#)
 Default false
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

severity *keyword*

Synopsis Severity level associated with event type
 Context **configure log log-events srv6 event** *keyword severity* *keyword*
 Tree [severity](#)
 Options cleared, indeterminate, critical, major, minor, warning

Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [srv6](#) [event](#) *keyword* [specific-throttle](#) *boolean*
Tree [specific-throttle](#)
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [srv6](#) [event](#) *keyword* [specific-throttle-interval](#) *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [srv6](#) [event](#) *keyword* [specific-throttle-limit](#) *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 21.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log](#) [log-events](#) [srv6](#) [event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

stp event *keyword*

Synopsis Enter the **stp** list instance

Context **configure** [log log-events stp event keyword](#)

Tree [stp](#)

Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log log-events stp event keyword](#)

Tree [stp](#)

Options topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events stp event keyword generate boolean](#)

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events stp event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events stp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events stp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events stp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events stp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events stp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

svcmgr [event](#) *keyword*

Synopsis	Enter the svcmgr list instance
Context	configure log log-events svcmgr event <i>keyword</i>
Tree	svcmgr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events svcmgr event <i>keyword</i>
Tree	svcmgr
Options	svcTlsMacPinningViolation , tmnxSubSlaacOverride , svcEvpnMplsMacMoveExceedNonBlock , svcTlsVxInstReplicatorChgd , svcArpHostOverride , svcEvpnMHEsEviDFStateChgd , svcEvpnMHEsIsidDFStateChgd , svcEvpnRcvdProtSrcMac , svcBgpEvpnBHDupMacAddrsDetected , svcEvpnEtreeBumLabelSysHiUsgSet , svcEvpnEtreeBumLabelSysHiUsgClr , svcVxlanEvpnMplsDestSysHiUsgSet , svcVxlanEvpnMplsDestSysHiUsgClr , svcStatusChanged , svcTlsFdbTableFullAlarmRaised , svcTlsFdbTableFullAlarmCleared ,

svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet,
ieslIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr,
svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet,
svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr,
svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac,
svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTbIFullAlarmRaised,
svcTlsMrpAttrTbIFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd,
svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd,
svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd,
svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd,
svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, sapStatusChanged,
sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared,
hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac,
sapTlsMacMoveExceeded, sapPortStateChangeProcessed,
sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear,
msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock,
sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall,
tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop,
sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged,
sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure,
sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised,
sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged,
sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged,
sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked,
sdpBindInsufficientBandwidth, dynamicSdpConfigChanged,
dynamicSdpBindConfigChanged, dynamicSdpCreationFailed,
dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged,
sdpBindPipeCelpAddressChange, sdpBindReceivedProtSrcMac,
sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock,
sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped,
sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected,
svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,
svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,
svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,
svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,
svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,
svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,
svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,
svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,
svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,
svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,
svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,
svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet,
svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,
svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,
sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,
svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,
tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,
tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,
tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,
svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,

tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,
 tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,
 tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTbIFullAlrm,
 svcFdbMimDestTbIFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,
 svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,
 svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,
 sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,
 svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,
 tmnxSubUserCategoryError, svcTIsSiteDesigFwdrChg, sapTIsDataSapInstStatusChgd,
 svcTIsGroupOperStatusChanged, sapTunnelStateChange,
 tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig,
 svcOperGrpOperStatusChanged, sapIpPipeCelpAddrChange,
 svcMSPwRetryExpiredNotif, svcVIIISiteDesigFwdrChg, tmnxSubSlaacSetupFailure,
 tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,
 tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,
 tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,
 tmnxSubIpoeInvalidSessionKey, tmnxSubIpoeInvalidCidRidChange,
 tmnxSubIpoeSessionLimitReached, tmnxSubIpoePersistenceRecovery,
 tmnxSubIpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,
 tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,
 tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,
 tmnxSubBrgRadiusUpdateIpoeSeFail, tmnxSubBrgRadiusCoaError,
 tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,
 tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected,
 aluIpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError,
 tmnxSubIpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,
 tmnxSubSVlanStatsReachedMaximum, svcTIsVxInstMacAdrLimitAlrmRsd,
 svcTIsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed,
 tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd,
 tmnxSubInfoEgrAggRateLimitLowReq, tmnxSubIpoeWppRegistrationFailed,
 svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr,
 svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict,
 svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr,
 svcLfSubForwardingStatsDisNotify, svcLfSubForwardingStatsEnNotify,
 svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet,
 svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** **log log-events** **svcmgr event keyword** **generate** *boolean*

Tree **generate**

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events svcmgr event keyword repeat boolean](#)

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events svcmgr event keyword severity keyword](#)

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log log-events svcmgr event keyword specific-throttle boolean](#)

Tree [specific-throttle](#)

Introduced 16.0.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure** [log log-events svcmgr event keyword specific-throttle-interval number](#)

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 16.0.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
 Context **configure** [log](#) [log-events](#) [svcmgr event](#) *keyword* [specific-throttle-limit](#) *number*
 Tree [specific-throttle-limit](#)
 Range 1 to 20000
 Introduced 16.0.R1
 Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log](#) [log-events](#) [svcmgr event](#) *keyword* [throttle](#) *boolean*
 Tree [throttle](#)
 Introduced 16.0.R1
 Platforms All

system event *keyword*

Synopsis Enter the **system** list instance
 Context **configure** [log](#) [log-events](#) [system event](#) *keyword*
 Tree [system](#)
 Introduced 16.0.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log](#) [log-events](#) [system event](#) *keyword*
 Tree [system](#)
 Options stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, snmpTimeDiffExceedsThreshold,

tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, mdCommitInProgress

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [system event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [system event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4
Platforms All

severity *keyword*

Synopsis Severity level associated with event type
Context **configure** [log](#) [log-events](#) [system event](#) *keyword* **severity** *keyword*
Tree [severity](#)
Options cleared, indeterminate, critical, major, minor, warning
Introduced 16.0.R1
Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event
Context **configure** [log](#) [log-events](#) [system event](#) *keyword* **specific-throttle** *boolean*
Tree [specific-throttle](#)
Introduced 16.0.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure** [log](#) [log-events](#) [system event](#) *keyword* **specific-throttle-interval** *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 16.0.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure** [log](#) [log-events](#) [system event](#) *keyword* **specific-throttle-limit** *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000

Introduced 16.0.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure** [log log-events system event](#) *keyword* [throttle](#) *boolean*
Tree [throttle](#)
Introduced 16.0.R1
Platforms All

tls event *keyword*

Synopsis Enter the **tls** list instance
Context **configure** [log log-events tls event](#) *keyword*
Tree [tls](#)
Introduced 20.5.R1
Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
Context **configure** [log log-events tls event](#) *keyword*
Tree [tls](#)
Options tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs
Context **configure** [log log-events tls event](#) *keyword* [generate](#) *boolean*
Tree [generate](#)
Introduced 20.5.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure log log-events tls event** *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 20.5.R1

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure log log-events tls event** *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 20.5.R1

Platforms All

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure log log-events tls event** *keyword specific-throttle boolean*

Tree [specific-throttle](#)

Introduced 20.5.R1

Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval

Context **configure log log-events tls event** *keyword specific-throttle-interval number*

Tree [specific-throttle-interval](#)

Range 1 to 1200

Introduced 20.5.R1

Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
 Context **configure** [log](#) [log-events](#) [tls event](#) *keyword* [specific-throttle-limit](#) *number*
 Tree [specific-throttle-limit](#)
 Range 1 to 20000
 Introduced 20.5.R1
 Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
 Context **configure** [log](#) [log-events](#) [tls event](#) *keyword* [throttle](#) *boolean*
 Tree [throttle](#)
 Introduced 20.5.R1
 Platforms All

tree-sid [event](#) *keyword*

Synopsis Enter the **tree-sid** list instance
 Context **configure** [log](#) [log-events](#) [tree-sid event](#) *keyword*
 Tree [tree-sid](#)
 Introduced 20.10.R1
 Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers
 Context **configure** [log](#) [log-events](#) [tree-sid event](#) *keyword*
 Tree [tree-sid](#)
 Options vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeIdAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events tree-sid event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	20.10.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events tree-sid event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	20.10.R1
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events tree-sid event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.10.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events tree-sid event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle

Introduced 20.10.R1
Platforms All

specific-throttle-interval *number*

Synopsis Duration of the event specific throttling interval
Context **configure log log-events tree-sid event** *keyword* **specific-throttle-interval** *number*
Tree [specific-throttle-interval](#)
Range 1 to 1200
Introduced 20.10.R1
Platforms All

specific-throttle-limit *number*

Synopsis Throttle limit within which events can be logged
Context **configure log log-events tree-sid event** *keyword* **specific-throttle-limit** *number*
Tree [specific-throttle-limit](#)
Range 1 to 20000
Introduced 20.10.R1
Platforms All

throttle *boolean*

Synopsis Throttle log events of this type
Context **configure log log-events tree-sid event** *keyword* **throttle** *boolean*
Tree [throttle](#)
Introduced 20.10.R1
Platforms All

user *event* *keyword*

Synopsis Enter the **user** list instance
Context **configure log log-events user event** *keyword*
Tree [user](#)
Introduced 16.0.R1

Platforms All

event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword*

Tree [user](#)

Options cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [user](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context	configure log log-events user event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events user event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events user event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events user event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
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Context	configure log log-events user event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

video [event](#) *keyword*

Synopsis	Enter the video list instance
Context	configure log log-events video event <i>keyword</i>
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events video event <i>keyword</i>
Tree	video
Options	tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSelmtExceeded, tmnxVdoMdaFccRetTotSelmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceeded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSelmtExceeded, tmnxVdoVappFccRetTotSelmtCleared
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [video](#) [event](#) *keyword* **generate** *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [video](#) [event](#) *keyword* **repeat** *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [video](#) [event](#) *keyword* **severity** *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle *boolean*

Synopsis Use parameters that throttle this specific event

Context **configure** [log](#) [log-events](#) [video](#) [event](#) *keyword* **specific-throttle** *boolean*

Tree [specific-throttle](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events video event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events video event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events video event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vrrp event *keyword*

Synopsis	Enter the vrrp list instance
Context	configure log log-events vrrp event <i>keyword</i>

Tree	vrrp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events vrrp <i>event</i> <i>keyword</i>
Tree	vrrp
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events vrrp <i>event</i> <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events vrrp <i>event</i> <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events vrrp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events vrrp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events vrrp event <i>keyword specific-throttle-interval number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events vrrp event <i>keyword specific-throttle-limit number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events vrrp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

vrrtr *event* *keyword*

Synopsis	Enter the vrrtr list instance
Context	configure log log-events vrrtr event <i>keyword</i>
Tree	vrrtr
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events vrrtr event <i>keyword</i>
Tree	vrrtr
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState,

tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared,
 tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped,
 tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged,
 tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified,
 vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCIStateDnsChanged,
 vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CIStateDnsChanged,
 tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped,
 tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold,
 tmnxVRtrBfdMultiHopFpMismatch, vRtrBgplInstanceError

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events vrtr event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events vrtr event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events vrtr event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events vrtr event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events vrtr event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events vrtr event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events vrtr event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

wlan-gw event *keyword*

Synopsis	Enter the wlan-gw list instance
Context	configure log log-events wlan-gw event <i>keyword</i>
Tree	wlan-gw
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events wlan-gw event <i>keyword</i>
Tree	wlan-gw
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events wlan-gw event <i>keyword</i> generate <i>boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events wlan-gw event <i>keyword</i> repeat <i>boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events wlan-gw event <i>keyword</i> severity <i>keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle <i>boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events wlan-gw event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events wlan-gw event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

wpp *event* *keyword*

Synopsis	Enter the wpp list instance
Context	configure log log-events wpp <i>event</i> <i>keyword</i>
Tree	wpp
Introduced	16.0.R1
Platforms	All

event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	configure log log-events wpp <i>event</i> <i>keyword</i>
Tree	wpp
Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

generate *boolean*

Synopsis	Generate log events when the event occurs
Context	configure log log-events wpp event <i>keyword generate boolean</i>
Tree	generate
Introduced	16.0.R1
Platforms	All

repeat *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	configure log log-events wpp event <i>keyword repeat boolean</i>
Tree	repeat
Default	false
Introduced	16.0.R4
Platforms	All

severity *keyword*

Synopsis	Severity level associated with event type
Context	configure log log-events wpp event <i>keyword severity keyword</i>
Tree	severity
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

specific-throttle *boolean*

Synopsis	Use parameters that throttle this specific event
Context	configure log log-events wpp event <i>keyword specific-throttle boolean</i>
Tree	specific-throttle
Introduced	16.0.R1
Platforms	All

specific-throttle-interval *number*

Synopsis	Duration of the event specific throttling interval
Context	configure log log-events wpp event <i>keyword</i> specific-throttle-interval <i>number</i>
Tree	specific-throttle-interval
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

specific-throttle-limit *number*

Synopsis	Throttle limit within which events can be logged
Context	configure log log-events wpp event <i>keyword</i> specific-throttle-limit <i>number</i>
Tree	specific-throttle-limit
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

throttle *boolean*

Synopsis	Throttle log events of this type
Context	configure log log-events wpp event <i>keyword</i> throttle <i>boolean</i>
Tree	throttle
Introduced	16.0.R1
Platforms	All

log-id [*name*] *string*

Synopsis	Enter the log-id list instance
Context	configure log log-id <i>string</i>
Tree	log-id
Max. Instances	30
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Log ID
Context	configure log log-id string
Tree	log-id
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the log
Context	configure log log-id string admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log log-id string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination

Synopsis	Enter the destination context
Context	configure log log-id string destination
Tree	destination
Introduced	16.0.R1
Platforms	All

cli

Synopsis	Enable the cli context
Context	configure log log-id string destination cli
Tree	cli
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this CLI log
Context	configure log log-id string destination cli max-entries <i>number</i>
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

console

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the system console port
Context	configure log log-id string destination console
Tree	console
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

file reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified file ID
Context	configure log log-id string destination file reference
Tree	file
Reference	configure log file string
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

memory

Synopsis	Enable the memory context
Context	configure log log-id string destination memory
Tree	memory
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

max-entries *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	configure log log-id string destination memory max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1

Platforms All

netconf

Synopsis Enable the **netconf** context

Context **configure log log-id string destination netconf**

Tree [netconf](#)

Notes The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.

Introduced 16.0.R1

Platforms All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of events stored in this NETCONF log

Context **configure log log-id string destination netconf max-entries number**

Tree [max-entries](#)

Range 50 to 3000

Default 100

Introduced 16.0.R1

Platforms All

snmp

Synopsis Enable the **snmp** context

Context **configure log log-id string destination snmp**

Tree [snmp](#)

Notes The following elements are part of a choice: **cli**, **console**, **file**, **memory**, **netconf**, **snmp**, or **syslog**.

Introduced 16.0.R1

Platforms All

max-entries *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this SNMP log
Context	configure log log-id string destination snmp max-entries number
Tree	max-entries
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

syslog *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log events to send to the specified syslog ID
Context	configure log log-id string destination syslog reference
Tree	syslog
Reference	configure log syslog string
Notes	The following elements are part of a choice: cli , console , file , memory , netconf , snmp , or syslog .
Introduced	16.0.R1
Platforms	All

filter *reference*

Synopsis	Event filter policy with the log destination
Context	configure log log-id string filter reference
Tree	filter
Reference	configure log filter string
Introduced	16.0.R1
Platforms	All

netconf-stream *string*

Synopsis	Destination NETCONF stream name
Context	configure log log-id <i>string</i> netconf-stream <i>string</i>
Tree	netconf-stream
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	configure log log-id <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

source

Synopsis	Enter the source context
Context	configure log log-id <i>string</i> source
Tree	source
Introduced	16.0.R1
Platforms	All

change *boolean*

Synopsis	Collect log events from change event stream
Context	configure log log-id <i>string</i> source change <i>boolean</i>
Tree	change
Introduced	16.0.R1
Platforms	All

debug *boolean*

Synopsis	Collect log events from the debug event stream
Context	configure log log-id <i>string</i> source debug <i>boolean</i>
Tree	debug
Default	false
Introduced	16.0.R1
Platforms	All

main *boolean*

Synopsis	Collect log events from the main event stream
Context	configure log log-id <i>string</i> source main <i>boolean</i>
Tree	main
Introduced	16.0.R1
Platforms	All

security *boolean*

Synopsis	Collect log events from the security event stream
Context	configure log log-id <i>string</i> source security <i>boolean</i>
Tree	security
Introduced	16.0.R1
Platforms	All

time-format *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	configure log log-id <i>string</i> time-format <i>keyword</i>
Tree	time-format
Default	utc
Options	utc, local
Introduced	16.0.R1
Platforms	All

route-preference

Synopsis	Enter the route-preference context
Context	configure log route-preference
Tree	route-preference
Introduced	16.0.R1
Platforms	All

primary *keyword*

Synopsis	Primary routing preference for traffic that is generated for SNMP notifications and syslog messages
Context	configure log route-preference primary <i>keyword</i>
Tree	primary
Default	outband
Options	inband, outband
Introduced	16.0.R1
Platforms	All

secondary *keyword*

Synopsis	Secondary route preference for SNMP and syslog traffic
Context	configure log route-preference secondary <i>keyword</i>
Tree	secondary
Default	inband
Options	inband, outband, none
Introduced	16.0.R1
Platforms	All

services-all-events

Synopsis	Enter the services-all-events context
Context	configure log services-all-events
Tree	services-all-events
Introduced	19.10.R1
Platforms	All

service [[service-name](#)] *reference*

Synopsis	Add a list entry for service
Context	configure log services-all-events service <i>reference</i>
Tree	service
Introduced	19.10.R1
Platforms	All

[service-name] *reference*

Synopsis	Administrative service name
Context	configure log services-all-events service <i>reference</i>
Tree	service
Reference	configure service vprn <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

snmp-trap-group [[log-name](#)] *string*

Synopsis	Enter the snmp-trap-group list instance
Context	configure log snmp-trap-group <i>string</i>
Tree	snmp-trap-group
Max. Instances	15
Introduced	16.0.R1
Platforms	All

[log-name] *string*

Synopsis	Log ID
Context	configure log snmp-trap-group <i>string</i>
Tree	snmp-trap-group
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 21.2.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [log snmp-trap-group](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

trap-target [[name](#)] *string*

Synopsis Enter the **trap-target** list instance
 Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string*
 Tree [trap-target](#)
 Max. Instances 25
 Introduced 16.0.R1
 Platforms All

[name] *string*

Synopsis Trap target name
 Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string*
 Tree [trap-target](#)
 String Length 1 to 28
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the trap receiver

Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

notify-community *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> notify-community <i>string</i>
Tree	notify-community
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	configure log snmp-trap-group <i>string</i> trap-target <i>string</i> port <i>number</i>
Tree	port
Range	0 1 to 65535
Default	162
Introduced	16.0.R1

Platforms All

replay *boolean*

Synopsis Retransmit missed notifications

Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string* **replay** *boolean*

Tree [replay](#)

Default false

Introduced 16.0.R1

Platforms All

security-level *keyword*

Synopsis Security level at which SNMP notification messages are sent to SNMP notification collector

Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string* **security-level** *keyword*

Tree [security-level](#)

Default no-auth-no-privacy

Options no-auth-no-privacy, auth-no-privacy, privacy

Introduced 16.0.R1

Platforms All

version *keyword*

Synopsis SNMP version to format notification messages sent to this SNMP notification collector

Context **configure** [log snmp-trap-group](#) *string* [trap-target](#) *string* **version** *keyword*

Tree [version](#)

Default snmpv3

Options snmpv1, snmpv2c, snmpv3

Introduced 16.0.R1

Platforms All

syslog [[syslog-name](#)] *string*

Synopsis Enter the **syslog** list instance

Context **configure** [log syslog](#) *string*

Tree	syslog
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[syslog-name] *string*

Synopsis	Syslog name
Context	configure log syslog <i>string</i>
Tree	syslog
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the Syslog target host
Context	configure log syslog <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure log syslog <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

facility *keyword*

Synopsis	Facility code for messages
Context	configure log syslog <i>string facility keyword</i>
Tree	facility
Default	local7
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Introduced	16.0.R1
Platforms	All

log-prefix (*keyword* | *string*)

Synopsis	String that is prepended to every log message sent to this target syslog host
Context	configure log syslog <i>string log-prefix (keyword string)</i>
Tree	log-prefix
String Length	1 to 32
Default	TMNX
Options	no-prefix
Introduced	16.0.R1
Platforms	All

port *number*

Synopsis	Destination port when sending syslog over UDP
Context	configure log syslog <i>string port number</i>
Tree	port
Range	0 1 to 65535
Default	514
Introduced	16.0.R1
Platforms	All

severity *keyword*

Synopsis	Severity level threshold for the syslog message
Context	configure log syslog <i>string severity keyword</i>

Tree	severity
Default	info
Options	emergency, alert, critical, error, warning, notice, info, debug
Introduced	16.0.R1
Platforms	All

tls-client-profile *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	configure log syslog <i>string</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Description	<p>This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.</p> <p>Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.</p> <p>When this command is unconfigured, the syslog messages are sent over UDP.</p>
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	21.10.R1
Platforms	All

throttle-rate

Synopsis	Enter the throttle-rate context
Context	configure log throttle-rate
Tree	throttle-rate
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Duration of an event throttling interval
Context	configure log throttle-rate interval <i>number</i>

Tree	interval
Range	1 to 1200
Default	1
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of log events within the throttle interval
Context	configure log throttle-rate <i>limit number</i>
Tree	limit
Range	1 to 20000
Default	2000
Introduced	16.0.R1
Platforms	All

3.25 macsec commands

```
configure
- macsec
  - apply-groups reference
  - apply-groups-exclude reference
  - connectivity-association string
    - admin-state keyword
    - anysec boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - cipher-suite keyword
    - clear-tag-mode keyword
    - delay-protection boolean
    - description string
    - encryption-offset number
    - macsec-encrypt boolean
    - replay-protection boolean
    - replay-window-size number
  - static-cak
    - active-psk number
    - apply-groups reference
    - apply-groups-exclude reference
    - mka-hello-interval keyword
    - mka-key-server-priority number
    - pre-shared-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - cak string
      - cak-name string
      - encryption-type keyword
  - mac-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-mac-address string
```

3.25.1 macsec command descriptions

macsec

Synopsis	Enter the macsec context
Context	configure macsec
Tree	macsec
Introduced	16.0.R1
Platforms	All

connectivity-association [[ca-name](#)] *string*

Synopsis	Enter the connectivity-association list instance
Context	configure macsec connectivity-association <i>string</i>
Tree	connectivity-association
Introduced	16.0.R1
Platforms	All

[\[ca-name\]](#) *string*

Synopsis	Connectivity association name
Context	configure macsec connectivity-association <i>string</i>
Tree	connectivity-association
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the connectivity association
Context	configure macsec connectivity-association <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
 Platforms All

anysec *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Mark this CA for use by ANYSec only.
 Context **configure** **macsec connectivity-association** *string anysec boolean*
 Tree [anysec](#)
 Default false
 Introduced 23.3.R1
 Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

cipher-suite *keyword*

Synopsis Data path encryption algorithm
 Context **configure** **macsec connectivity-association** *string cipher-suite keyword*
 Tree [cipher-suite](#)
 Default gcm-aes-128
 Options gcm-aes-128, gcm-aes-256, gcm-aes-xpn-128, gcm-aes-xpn-256
 Introduced 16.0.R1
 Platforms All

clear-tag-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Clear tag mode for clear text before the SecTAG
 Context **configure** **macsec connectivity-association** *string clear-tag-mode keyword*
 Tree [clear-tag-mode](#)
 Default none

Options	none, single-tag, dual-tag
Introduced	16.0.R1
Platforms	All

delay-protection *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable delay protection
Context	configure macsec connectivity-association <i>string</i> delay-protection <i>boolean</i>
Tree	delay-protection
Default	false
Introduced	20.10.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure macsec connectivity-association <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

encryption-offset *number*

Synopsis	Confidentiality (encryption) offset
Context	configure macsec connectivity-association <i>string</i> encryption-offset <i>number</i>
Tree	encryption-offset
Range	0 30 50
Default	0
Introduced	16.0.R1
Platforms	All

macsec-encrypt *boolean*

Synopsis	Encrypt and authenticate all PDUs
Context	configure macsec connectivity-association <i>string macsec-encrypt boolean</i>
Tree	macsec-encrypt
Description	When configured to true , all PDUs are encrypted and authenticated. When configured to false , all PDUs are transmitted in clear text, however, they are still authenticated and have the trailing ICV.
Default	true
Introduced	16.0.R1
Platforms	All

replay-protection *boolean*

Synopsis	Discard packet when not within the replay window size
Context	configure macsec connectivity-association <i>string replay-protection boolean</i>
Tree	replay-protection
Description	When configured to true , replay protection is enabled and packets are discarded when they are not within the replay window size. With replay protection, the sequence of the ID number of received packets is checked. If a packet arrives out of sequence and the difference between the packet IDs exceeds the replay protection window size, the packet is counted by the receiving port and discarded. For example if the replay protection window size is configured to five and a packet with an ID of 1006 arrives on the receiving link immediately following the packet assigned an ID of 1000, the packet with ID 1006 is counted and discarded because it is outside the parameter of the window size. Replay protection is particularly useful for addressing man-in-the-middle attacks. A packet that is replayed by a man-in-the-middle attacker on the Ethernet link that arrives on the receiving link out of sequence will be detected and dropped instead of forwarded through the network. Replay protection should not be enabled in cases where packets are expected to arrive out of order. When configured to false , replay protection is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

replay-window-size *number*

Synopsis	Replay protection window size
Context	configure macsec connectivity-association <i>string replay-window-size number</i>
Tree	replay-window-size
Range	0 to 4294967294
Default	0
Introduced	16.0.R1
Platforms	All

static-cak

Synopsis	Enter the static-cak context
Context	configure macsec connectivity-association <i>string static-cak</i>
Tree	static-cak
Description	Commands in this context configure the Connectivity Association Key (CAK) to manage the MACsec Key Agreement (MKA).
Introduced	16.0.R1
Platforms	All

active-psk *number*

Synopsis	Active pre-shared-key (PSK)
Context	configure macsec connectivity-association <i>string static-cak active-psk number</i>
Tree	active-psk
Description	This command specifies the active transmitting PSK. If two PSKs are configured, the arriving MACsec MKA can be decrypted via CAKs using either PSK; however, only the active PSK is used for TX encryption of MKA PDUs.
Range	1 to 2
Default	1
Introduced	16.0.R1
Platforms	All

mka-hello-interval *keyword*

Synopsis	MKA hello interval
Context	configure macsec connectivity-association <i>string static-cak mka-hello-interval keyword</i>

Tree	mka-hello-interval
Description	This command configures the interval at which MKA hello packets are sent or received for the connectivity association.
Default	2
Options	1, 2, 3, 4, 5, 6, 500ms
Introduced	19.5.R1
Platforms	All

mka-key-server-priority *number*

Synopsis	Key server priority used by the MKA protocol
Context	configure macsec connectivity-association <i>string</i> static-cak mka-key-server-priority <i>number</i>
Tree	mka-key-server-priority
Description	This command specifies the key server priority used by the MACsec Key Agreement (MKA) protocol to select the key server when MACsec is enabled using static connectivity association key (CAK) security mode.
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

pre-shared-key [[psk-id](#)] *number*

Synopsis	Enter the pre-shared-key list instance
Context	configure macsec connectivity-association <i>string</i> static-cak pre-shared-key <i>number</i>
Tree	pre-shared-key
Description	<p>Commands in this context configure pre-shared key attributes to enable MACsec using static connectivity association key (CAK) security mode.</p> <p>A pre-shared key includes a connectivity association key name (CKN) and a connectivity association key (CAK). The pre-shared key, the CKN and the CAK, must match on both ends of a link.</p> <p>A pre-shared key is configured on both devices at each end of a point-to-point link to enable MACsec via static CAK security mode. The MACsec Key Agreement (MKA) protocol is enabled after the successful MKA liveness negotiation.</p> <p>The encryption type is used to encrypt the SAK and authenticate the MKA packet. The symmetric encryption key SAK (Security Association Key) must be encrypted (wrapped) via the MKA protocols. The AES key is derived from the pre-shared-key.</p>

Max. Instances	2
Introduced	16.0.R1
Platforms	All

[psk-id] number

Synopsis	Pre-shared-key (PSK) ID
Context	configure macsec connectivity-association string static-cak pre-shared-key number
Tree	pre-shared-key
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cak string

Synopsis	Connectivity association key (CAK) for the PSK
Context	configure macsec connectivity-association string static-cak pre-shared-key number cak string
Tree	cak
Description	This command specifies the connectivity association key (CAK) for the pre-shared key. Two values are derived from the CAK: <ul style="list-style-type: none"> • Key Encryption Key (KEK), used to encrypt the MKA and SAK (symmetric key used for data path PDUs) distributed between all members • Integrity Check Value (ICV), used to authenticate the MKA and SAK PDUs distributed between all members
String Length	1 to 71
Introduced	16.0.R1
Platforms	All

cak-name string

Synopsis	Connectivity association key name (CKN) for the PSK
Context	configure macsec connectivity-association string static-cak pre-shared-key number cak-name string
Tree	cak-name

Description	This command specifies the connectivity association key name (CKN) for the pre-shared key. The CKN is appended to the MKA for identification of the appropriate CAK by the peer.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

encryption-type *keyword*

Synopsis	Encryption for authentication of the MKA packet
Context	configure macsec connectivity-association <i>string</i> static-cak pre-shared-key <i>number</i> encryption-type <i>keyword</i>
Tree	encryption-type
Options	aes-128-cmac, aes-256-cmac
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mac-policy [**mac-policy-id**] *number*

Synopsis	Enter the mac-policy list instance
Context	configure macsec mac-policy <i>number</i>
Tree	mac-policy
Introduced	16.0.R5
Platforms	All

[mac-policy-id] *number*

Synopsis	MAC address policy ID
Context	configure macsec mac-policy <i>number</i>
Tree	mac-policy
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

destination-mac-address [*dest-mac-addr*] *string*

Synopsis	Add a list entry for destination-mac-address
Context	configure macsec mac-policy number destination-mac-address string
Tree	destination-mac-address
Max. Instances	5
Introduced	16.0.R5
Platforms	All

[dest-mac-addr] *string*

Synopsis	Destination MAC address added to the MAC policy
Context	configure macsec mac-policy number destination-mac-address string
Tree	destination-mac-address
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

3.26 mcac commands

```

configure
- mcac
  - apply-groups reference
  - apply-groups-exclude reference
  - interface-policy string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - description string
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - bundle string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone) source (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
        - priority-class keyword
        - type keyword
    - description string
  - mc-constraints
    - lag-port-down string number-down number
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
    - level number
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - use-lag-port-weight boolean
  - default-action keyword
  - description string

```

3.26.1 mcac command descriptions

mcac

Synopsis	Enter the mcac context
Context	configure mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

interface-policy [[policy-name](#)] *string*

Synopsis	Enter the interface-policy list instance
Context	configure mcac interface-policy <i>string</i>
Tree	interface-policy
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	MCAC interface policy name
Context	configure mcac interface-policy <i>string</i>
Tree	interface-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MCAC interface policy
Context	configure mcac interface-policy <i>string admin-state</i> <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure mcac interface-policy string bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number | keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure mcac interface-policy string bandwidth mandatory (<i>number keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number | keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure mcac interface-policy string bandwidth total (<i>number keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure mcac interface-policy <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

policy [[policy-name](#)] *string*

Synopsis	Enter the policy list instance
Context	configure mcac policy <i>string</i>
Tree	policy
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	Name of the global MCAC channel definition policy
Context	configure mcac policy <i>string</i>
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bundle [[bundle-name](#)] *string*

Synopsis	Enter the bundle list instance
Context	configure mcac policy string bundle <i>string</i>
Tree	bundle
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[bundle-name] *string*

Synopsis	Multicast policy bundle name
Context	configure mcac policy string bundle string
Tree	bundle
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the policy bundle
Context	configure mcac policy string bundle string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Maximum bandwidth for the MCAC policy bundle
Context	configure mcac policy string bundle string bandwidth number
Tree	bandwidth
Range	1 to 4294967295
Default	100
Units	kilobps
Introduced	16.0.R1
Platforms	All

channel **start** (*ipv4-address-no-zone | ipv6-address-no-zone*) **end** (*ipv4-address-no-zone | ipv6-address-no-zone*) **source** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the channel list instance
----------	--

Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>)
Tree	channel
Introduced	16.0.R1
Platforms	All

start (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Starting multicast IP address for a multicast stream
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>)
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Ending multicast IP address for a multicast stream
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>)
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source (*ipv4-prefix | ipv6-prefix*)

Synopsis	Source prefix for the multicast IP stream
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>)
Tree	channel
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth required by the channel
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>) bandwidth <i>number</i>
Tree	bandwidth
Range	10 to 10000000
Default	10
Units	kilobps
Introduced	16.0.R1
Platforms	All

priority-class *keyword*

Synopsis	Channel classification for when LAG ports change state
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>) priority-class <i>keyword</i>
Tree	priority-class
Default	low
Options	low, high
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Channel type
Context	configure mcac policy string bundle string channel start (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) source (<i>ipv4-prefix ipv6-prefix</i>) type <i>keyword</i>
Tree	type
Default	optional
Options	optional, mandatory

Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure mcac policy** *string bundle string description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

mc-constraints

Synopsis Enter the **mc-constraints** context
 Context **configure mcac policy** *string bundle string mc-constraints*
 Tree [mc-constraints](#)
 Introduced 16.0.R1
 Platforms All

lag-port-down [**lag-name**] *string number-down number*

Synopsis Enter the **lag-port-down** list instance
 Context **configure mcac policy** *string bundle string mc-constraints lag-port-down string number-down number*
 Tree [lag-port-down](#)
 Introduced 16.0.R1
 Platforms All

[lag-name] *string*

Synopsis LAG name
 Context **configure mcac policy** *string bundle string mc-constraints lag-port-down string number-down number*
 Tree [lag-port-down](#)
 String Length 1 to 27

Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

number-down *number*

Synopsis	Number of LAG ports that are down
Context	configure mcac policy <i>string bundle string mc-constraints lag-port-down string number-down number</i>
Tree	lag-port-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure mcac policy <i>string bundle string mc-constraints lag-port-down string number-down number level number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure mcac policy <i>string bundle string mc-constraints level number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] number

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure mcac policy string bundle string mc-constraints level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth number

Synopsis	Bandwidth available for this level
Context	configure mcac policy string bundle string mc-constraints level number bandwidth number
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight boolean

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure mcac policy string bundle string mc-constraints use-lag-port-weight boolean
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

default-action *keyword*

Synopsis	Default action for the MCAC policy
Context	configure mcac policy <i>string</i> default-action <i>keyword</i>
Tree	default-action
Default	discard
Options	accept, discard
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure mcac policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

3.27 mirror commands

```

configure
- mirror
- apply-groups reference
- apply-groups-exclude reference
- global-sampling-rate number
- mirror-dest string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- encap
- layer-3-encap
- apply-groups reference
- apply-groups-exclude reference
- direction-bit boolean
- gateway
- apply-groups reference
- apply-groups-exclude reference
- ip-address
- destination string
- source string
- udp-port
- destination number
- source number
- header-type keyword
- router-instance string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- revert-time (number | keyword)
- fc keyword
- pcap string
- apply-groups reference
- apply-groups-exclude reference
- file-url string
- remote-source
- far-end string
- apply-groups reference
- apply-groups-exclude reference
- icb boolean
- ing-vc-label number
- label-signaling keyword
- vc-id number
- spoke-sdp string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- vc-label number
- endpoint
- icb boolean
- name reference
- ingress
- l2tpv3
- cookie
- cookie1 string
- cookie2 string

```

configure mirror mirror-dest remote-source spoke-sdp ingress vc-label

```

    - vc-label number
  - sampling-rate number
  - sap string
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - ip-mirror
      - mac
        - destination string
        - source string
      - qos
        - sap-egress
          - policy-name reference
          - port-redirect-group
            - group-name reference
            - instance number
        - endpoint reference
    - service-id number
  - slice-size number
  - spoke-sdp string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - control-word boolean
  - egress
    - l2tpv3
      - cookie string
      - vc-label number
    - endpoint
      - icb boolean
      - name reference
      - precedence (number | keyword)
  - ingress
    - vc-label number
  - type keyword
  - use-global-sampling-rate boolean
- mirror-source string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - ipv6-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - mac-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - port string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
  - sap string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
  - subscriber string
    - apply-groups reference

```

configure mirror mirror-source subscriber apply-groups-exclude

- **apply-groups-exclude** *reference*
- **egress** *boolean*
- **fc** *keyword*
- **host-type** *keyword*
- **ingress** *boolean*
- **ip-address** *string*
- **ip-family** *keyword*
- **mac-address** *string*
- **sap-id** *string*
- **sla-profile** *string*

3.27.1 mirror command descriptions

mirror

Synopsis	Enter the mirror context
Context	configure mirror
Tree	mirror
Introduced	16.0.R1
Platforms	All

global-sampling-rate *number*

Synopsis	System wide global sampling rate
Context	configure mirror global-sampling-rate <i>number</i>
Tree	global-sampling-rate
Description	<p>This command configures the global sampling rate. The global sampling rate provides a higher sampling rate than the sampling rate specified on the mirror destination. When set, this command applies to all mirror destination services that have the use-global-sampling-rate command configured.</p> <p>The global sampling rate takes precedence over the rate specified on the mirror destination. This means that when this command and the configure mirror mirror-dest sampling-rate are configured under the same mirror destination, the system automatically samples using the higher rate configured with this command and ignores the lower rate configured with the sampling-rate command.</p> <p>When unconfigured, no mirror destinations are associated to a global sampling rate and all mirror destinations mirror at the full rate, which means every packet is mirrored unless a mirror destination rate is specified.</p>
Range	0 2 to 255
Default	0
Introduced	22.10.R1
Platforms	All

mirror-dest [[service-name](#)] *string*

Synopsis	Enter the mirror-dest list instance
Context	configure mirror mirror-dest <i>string</i>
Tree	mirror-dest

Max. Instances	255
Introduced	16.0.R1
Platforms	All

[service-name] string

Synopsis	Administrative service name
Context	configure mirror mirror-dest string
Tree	mirror-dest
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the service
Context	configure mirror mirror-dest string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure mirror mirror-dest string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

encap

Synopsis	Enter the encap context
Context	configure mirror mirror-dest string encap
Tree	encap
Introduced	16.0.R1
Platforms	All

layer-3-encap

Synopsis	Enable the layer-3-encap context
Context	configure mirror mirror-dest string encap layer-3-encap
Tree	layer-3-encap
Introduced	16.0.R1
Platforms	All

direction-bit *boolean*

Synopsis	Use the highest bit to specify traffic flow direction
Context	configure mirror mirror-dest string encap layer-3-encap direction-bit <i>boolean</i>
Tree	direction-bit
Default	false
Introduced	16.0.R1
Platforms	All

gateway

Synopsis	Enable the gateway context
Context	configure mirror mirror-dest string encap layer-3-encap gateway
Tree	gateway
Introduced	16.0.R1
Platforms	All

ip-address

Synopsis	Enter the ip-address context
----------	-------------------------------------

Context	configure mirror mirror-dest string encap layer-3-encap gateway ip-address
Tree	ip-address
Introduced	16.0.R1
Platforms	All

destination string

Synopsis	IPv4 destination address for the gateway
Context	configure mirror mirror-dest string encap layer-3-encap gateway ip-address destination string
Tree	destination
Introduced	16.0.R1
Platforms	All

source string

Synopsis	IPv4 source address for the gateway
Context	configure mirror mirror-dest string encap layer-3-encap gateway ip-address source string
Tree	source
Introduced	16.0.R1
Platforms	All

udp-port

Synopsis	Enter the udp-port context
Context	configure mirror mirror-dest string encap layer-3-encap gateway udp-port
Tree	udp-port
Introduced	16.0.R1
Platforms	All

destination number

Synopsis	UDP destination port to use with the gateway
Context	configure mirror mirror-dest string encap layer-3-encap gateway udp-port destination number

Tree	destination
Range	0 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

source number

Synopsis	UDP source port to use with the gateway
Context	configure mirror mirror-dest <i>string</i> encap layer-3-encap gateway udp-port source <i>number</i>
Tree	source
Range	0 1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

header-type keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Header type for Layer 3 encapsulation
Context	configure mirror mirror-dest <i>string</i> encap layer-3-encap header-type <i>keyword</i>
Tree	header-type
Options	ip-udp-shim, ip-gre, ip-udp-shim-sampled
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

router-instance string

Synopsis	Router instance to use with routed encapsulation
Context	configure mirror mirror-dest <i>string</i> encap layer-3-encap router-instance <i>string</i>
Tree	router-instance

Default	Base
Introduced	16.0.R1
Platforms	All

endpoint *[name]* *string*

Synopsis	Enter the endpoint list instance
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Tree	endpoint
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Service endpoint name
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Tree	endpoint
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

revert-time (*number* | *keyword*)

Synopsis	Time to wait before reverting back to primary spoke SDP
Context	configure mirror mirror-dest <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>)
Tree	revert-time
Range	1 to 600
Default	immediate
Units	seconds
Options	never, immediate
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class for destination traffic
Context	configure mirror mirror-dest <i>string</i> fc <i>keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

pcap [*session-name*] *string*

Synopsis	Enter the pcap list instance
Context	configure mirror mirror-dest <i>string</i> pcap <i>string</i>
Tree	pcap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[session-name] *string*

Synopsis	PCAP session name
Context	configure mirror mirror-dest <i>string</i> pcap <i>string</i>

Tree	pcap
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

file-url *string*

Synopsis	URL and file name for packet capture transfer
Context	configure mirror mirror-dest <i>string</i> pcap <i>string</i> file-url <i>string</i>
Tree	file-url
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

remote-source

Synopsis	Enable the remote-source context
Context	configure mirror mirror-dest <i>string</i> remote-source
Tree	remote-source
Introduced	16.0.R1
Platforms	All

far-end [[far-end-addr](#)] *string*

Synopsis	Enter the far-end list instance
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i>
Tree	far-end
Introduced	16.0.R1
Platforms	All

[far-end-addr] *string*

Synopsis	Far end IP address
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i>

Tree	far-end
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

icb *boolean*

Synopsis	Remote source as an inter-chassis backup
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> icb <i>boolean</i>
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

ing-vc-label *number*

Synopsis	Ingress virtual circuit label
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> ing-vc-label <i>number</i>
Tree	ing-vc-label
Range	32 to 18431
Notes	The following elements are part of a choice: ing-vc-label or label-signaling .
Introduced	16.0.R1
Platforms	All

label-signaling *keyword*

Synopsis	Protocol to obtain the ingress labels
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> label-signaling <i>keyword</i>
Tree	label-signaling
Default	tldp
Options	tldp
Notes	The following elements are part of a choice: ing-vc-label or label-signaling .
Introduced	16.0.R1
Platforms	All

vc-id *number*

Synopsis	Virtual circuit ID associated with the remote source
Context	configure mirror mirror-dest <i>string</i> remote-source far-end <i>string</i> vc-id <i>number</i>
Tree	vc-id
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

spoke-sdp [**sdp-bind-id**] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP ID number
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> control-word <i>boolean</i>
Tree	control-word
Description	When configured to true , this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type ether . When configured to false , this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575

Introduced 16.0.R1
 Platforms All

endpoint

Synopsis Enter the **endpoint** context
 Context **configure** [mirror](#) [mirror-dest](#) *string* [remote-source](#) [spoke-sdp](#) *string* [endpoint](#)
 Tree [endpoint](#)
 Introduced 16.0.R1
 Platforms All

icb *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Bind the SDP as the Inter-Chassis Backup (ICB) type
 Context **configure** [mirror](#) [mirror-dest](#) *string* [remote-source](#) [spoke-sdp](#) *string* [endpoint](#) [icb](#) *boolean*
 Tree [icb](#)
 Default false
 Introduced 16.0.R1
 Platforms All

name *reference*

Synopsis SAP-associated endpoint name
 Context **configure** [mirror](#) [mirror-dest](#) *string* [remote-source](#) [spoke-sdp](#) *string* [endpoint](#) [name](#) *reference*
 Tree [name](#)
 Reference **configure** [mirror](#) [mirror-dest](#) *string* [endpoint](#) *string*
 Introduced 16.0.R1
 Platforms All

ingress

Synopsis	Enter the ingress context
Context	configure mirror mirror-dest string remote-source spoke-sdp string ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

I2tpv3

Synopsis	Enter the I2tpv3 context
Context	configure mirror mirror-dest string remote-source spoke-sdp string ingress I2tpv3
Tree	I2tpv3
Introduced	16.0.R1
Platforms	All

cookie

Synopsis	Enter the cookie context
Context	configure mirror mirror-dest string remote-source spoke-sdp string ingress I2tpv3 cookie
Tree	cookie
Introduced	16.0.R1
Platforms	All

cookie1 string

Synopsis	Value of the first cookie for the tunnel
Context	configure mirror mirror-dest string remote-source spoke-sdp string ingress I2tpv3 cookie cookie1 string
Tree	cookie1
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

cookie2 *string*

Synopsis	Value of the second cookie for the tunnel
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress l2tpv3 cookie cookie2 <i>string</i>
Tree	cookie2
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> remote-source spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	32 to 18431
Introduced	16.0.R1
Platforms	All

sampling-rate *number*

Synopsis	Sampling rate
Context	configure mirror mirror-dest <i>string</i> sampling-rate <i>number</i>
Tree	sampling-rate
Description	This command configures the packet sampling rate value for mirrored traffic and is supported with mirror source configurations. The sampling rate is common to all endpoints on a given line card FP per mirror destination service.
Range	256 to 10000
Introduced	20.7.R1
Platforms	All

sap [*sap-id*] *string*

Synopsis	Enter the sap list instance
Context	configure mirror mirror-dest string sap string
Tree	sap
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	configure mirror mirror-dest string sap string
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest string sap string egress
Tree	egress
Introduced	16.0.R1
Platforms	All

ip-mirror

Synopsis	Enter the ip-mirror context
Context	configure mirror mirror-dest string sap string egress ip-mirror
Tree	ip-mirror
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Enter the mac context
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress ip-mirror mac
Tree	mac
Introduced	16.0.R1
Platforms	All

destination *string*

Synopsis	Destination MAC address
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress ip-mirror mac destination <i>string</i>
Tree	destination
Introduced	16.0.R1
Platforms	All

source *string*

Synopsis	Source MAC address
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress ip-mirror mac source <i>string</i>
Tree	source
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos
Tree	qos
Introduced	16.0.R1
Platforms	All

sap-egress

Synopsis	Enter the sap-egress context
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Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos sap-egress
Tree	sap-egress
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos sap-egress <i>string</i>
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group group-name <i>reference</i>
Tree	group-name
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

instance *number*

Synopsis	Port queue group instance
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Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group instance <i>number</i>
Tree	instance
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

endpoint *reference*

Synopsis	Service endpoint name
Context	configure mirror mirror-dest <i>string</i> sap <i>string</i> endpoint <i>reference</i>
Tree	endpoint
Reference	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Introduced	16.0.R1
Platforms	All

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	configure mirror mirror-dest <i>string</i> service-id <i>number</i>
Tree	service-id
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

slice-size *number*

Synopsis	Maximum size of the transmitted mirrored frame
Context	configure mirror mirror-dest <i>string</i> slice-size <i>number</i>
Tree	slice-size
Range	0 128 to 9216
Default	0

Introduced	16.0.R1
Platforms	All

spoke-sdp [**sdp-bind-id**] *string*

Synopsis	Enter the spoke-sdp list instance
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
Introduced	16.0.R1
Platforms	All

[sdp-bind-id] *string*

Synopsis	SDP ID number
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i>
Tree	spoke-sdp
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the service SDP binding
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

control-word *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i>

Tree	control-word
Description	When configured to true , this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type ether . When configured to false , this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> egress l2tpv3
Tree	l2tpv3
Introduced	16.0.R1
Platforms	All

cookie *string*

Synopsis	RX or TX cookie for L2TPV3 spoke SDPs
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> egress l2tpv3 cookie <i>string</i>
Tree	cookie
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i>
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

endpoint

Synopsis	Enter the endpoint context
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	All

icb *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> endpoint icb <i>boolean</i>
Tree	icb
Default	false
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Endpoint name associated with the SAP
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> endpoint name <i>reference</i>

Tree	name
Reference	configure mirror mirror-dest <i>string</i> endpoint <i>string</i>
Introduced	16.0.R1
Platforms	All

precedence (*number* | *keyword*)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> endpoint precedence (<i>number</i> <i>keyword</i>)
Tree	precedence
Range	1 to 4
Default	4
Options	primary
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	configure mirror mirror-dest <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	32 to 18431
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Mirror type information
 Context **configure** **mirror** **mirror-dest** *string* **type** *keyword*
 Tree **type**
 Default ether
 Options ether, ip-only
 Introduced 16.0.R1
 Platforms All

use-global-sampling-rate *boolean*

Synopsis Enables global sampling rate by mirror destination
 Context **configure** **mirror** **mirror-dest** *string* **use-global-sampling-rate** *boolean*
 Tree **use-global-sampling-rate**
 Description When configured to **true**, this command configures each mirror destination service to use the global sampling rate, which allows a single high sampling rate for the entire system.
 When configured to **false**, the mirror destination mirrors at the full rate (all packets) or mirrors based on the sampling rate for the mirror destination if the **sampling-rate** command is configured.
 Default false
 Introduced 22.10.R1
 Platforms All

mirror-source [*service-name*] *string*

Synopsis Enter the **mirror-source** list instance
 Context **configure** **mirror** **mirror-source** *string*
 Tree **mirror-source**
 Introduced 19.10.R1

Platforms All

[service-name] *string*

Synopsis Administrative service name
Context **configure mirror mirror-source** *string*
Tree [mirror-source](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 19.10.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the mirror service
Context **configure mirror mirror-source** *string admin-state* *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 19.10.R1
Platforms All

ip-filter [[filter-name](#)] *reference*

Synopsis Enter the **ip-filter** list instance
Context **configure mirror mirror-source** *string ip-filter* *reference*
Tree [ip-filter](#)
Introduced 19.10.R1
Platforms All

[filter-name] *reference*

Synopsis IP filter name
Context **configure mirror mirror-source** *string ip-filter* *reference*
Tree [ip-filter](#)

Reference	configure filter ip-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [**entry-id**] *number*

Synopsis	Add a list entry for entry
Context	configure mirror mirror-source <i>string ip-filter reference entry number</i>
Tree	entry
Min.	1
Instances	
Introduced	19.10.R1
Platforms	All

[entry-id] *number*

Synopsis	IP filter entry ID
Context	configure mirror mirror-source <i>string ip-filter reference entry number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

ipv6-filter [**filter-name**] *reference*

Synopsis	Enter the ipv6-filter list instance
Context	configure mirror mirror-source <i>string ipv6-filter reference</i>
Tree	ipv6-filter
Introduced	19.10.R1
Platforms	All

[filter-name] reference

Synopsis	IPv6 filter name
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i>
Tree	ipv6-filter
Reference	configure filter ipv6-filter <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

entry [entry-id] number

Synopsis	Add a list entry for entry
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i> entry <i>number</i>
Tree	entry
Min. Instances	1
Introduced	19.10.R1
Platforms	All

[entry-id] number

Synopsis	IPv6 filter entry ID
Context	configure mirror mirror-source <i>string</i> ipv6-filter <i>reference</i> entry <i>number</i>
Tree	entry
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

mac-filter [filter-name] reference

Synopsis	Enter the mac-filter list instance
Context	configure mirror mirror-source <i>string</i> mac-filter <i>reference</i>
Tree	mac-filter
Introduced	19.10.R1

Platforms All

[filter-name] *reference*

Synopsis MAC filter name

Context **configure** **mirror** **mirror-source** *string* **mac-filter** *reference*

Tree **mac-filter**

Reference **configure** **filter** **mac-filter** *string*

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

entry [**entry-id**] *number*

Synopsis Add a list entry for **entry**

Context **configure** **mirror** **mirror-source** *string* **mac-filter** *reference* **entry** *number*

Tree **entry**

Min. 1

Instances

Introduced 19.10.R1

Platforms All

[entry-id] *number*

Synopsis MAC filter entry ID

Context **configure** **mirror** **mirror-source** *string* **mac-filter** *reference* **entry** *number*

Tree **entry**

Range 1 to 2097151

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

port [**port-id**] *string*

Synopsis Enter the **port** list instance

Context	configure mirror mirror-source <i>string port string</i>
Tree	port
Introduced	19.10.R1
Platforms	All

[port-id] *string*

Synopsis	Port ID
Context	configure mirror mirror-source <i>string port string</i>
Tree	port
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>string port string egress boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>string port string ingress boolean</i>
Tree	ingress
Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

sap [*sap-id*] *string*

Synopsis	Enter the sap list instance
Context	configure mirror mirror-source <i>string sap string</i>
Tree	sap
Introduced	19.10.R1
Platforms	All

[sap-id] *string*

Synopsis	SAP ID
Context	configure mirror mirror-source <i>string sap string</i>
Tree	sap
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>string sap string egress boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ingress *boolean*

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>string sap string ingress boolean</i>
Tree	ingress

Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

subscriber [[subscriber-id](#)] *string*

Synopsis	Enter the subscriber list instance
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i>
Tree	subscriber
Introduced	19.10.R1
Platforms	All

[subscriber-id] *string*

Synopsis	Subscriber ID
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i>
Tree	subscriber
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

egress *boolean*

Synopsis	Mirror egress packets
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> egress <i>boolean</i>
Tree	egress
Description	When configured to true , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

fc keyword

Synopsis	The forwarding classes traffic which should be mirrored
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

host-type keyword

Synopsis	Host type for mirroring
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> host-type <i>keyword</i>
Tree	host-type
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

ingress boolean

Synopsis	Mirror ingress packets
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> ingress <i>boolean</i>
Tree	ingress
Description	When configured to true , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

ip-address string

Synopsis	Service IP address of remote device sending LI traffic
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> ip-address <i>string</i>
Tree	ip-address

Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

ip-family *keyword*

Synopsis	IP family for mirroring
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> ip-family <i>keyword</i>
Tree	ip-family
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the subscriber
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

sap-id *string*

Synopsis	Subscriber SAP ID
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> sap-id <i>string</i>
Tree	sap-id
String Length	1 to 45
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

sla-profile *string*

Synopsis	SLA profile name
Context	configure mirror mirror-source <i>string</i> subscriber <i>string</i> sla-profile <i>string</i>
Tree	sla-profile
String Length	1 to 32
Notes	The following elements are part of a choice: (ip-address , mac-address , and sap-id) or sla-profile .
Introduced	19.10.R1
Platforms	All

3.28 multicast-management commands

```

configure
-  multicast-management
-    apply-groups reference
-    apply-groups-exclude reference
-    bandwidth-policy string
-      admin-bw-threshold number
-      apply-groups reference
-      apply-groups-exclude reference
-      description string
-      falling-percent-reset number
-      impm-paths
-        primary-path
-          apply-groups reference
-          apply-groups-exclude reference
-          queue-parameters
-            cbs decimal-number
-            drop-tail
-              low
-              percent-reduction-from-mbs number
-            mbs decimal-number
-        secondary-path
-          apply-groups reference
-          apply-groups-exclude reference
-          number-paths
-            number-of-paths number
-            redundant-sfm number
-          queue-parameters
-            cbs decimal-number
-            drop-tail
-              low
-              percent-reduction-from-mbs number
-            mbs decimal-number
-    mcast-pool
-      percent-of-total number
-      resv-cbs number
-      slope-policy reference
-    chassis-level
-      apply-groups reference
-      apply-groups-exclude reference
-      mmrp-imp-override boolean
-      per-mcast-plane-capacity
-        mcast-capacity
-          primary-percentage decimal-number
-          secondary-percentage decimal-number
-        redundant-mcast-capacity
-          primary-percentage decimal-number
-          secondary-percentage decimal-number
-        total-capacity keyword
-        round-robin-inactive-records boolean
-    multicast-info-policy string
-      apply-groups reference
-      apply-groups-exclude reference
-      bundle string
-        admin-bw number
-        apply-groups reference
-        apply-groups-exclude reference
-        bw-activity
-          black-hole-rate number
-          bw-activity-type keyword

```

configure multicast-management multicast-info-policy bundle bw-activity falling-delay

```

- falling-delay number
- channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- source-override (ipv4-address-no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- video
- analyzer
- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
- poa number
- qos number
- tnc number
- pat-syntax boolean
- pcr-repetition
- poa number
- qos number
- tnc number
- pid-pmt-unref boolean
- pmt-repetition
- poa number
- qos number
- tnc number
- pmt-syntax boolean
- report-alarm
- severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server keyword
- local-rt-server keyword
- reorder-audio number
- rt-buffer-size number

```

configure multicast-management multicast-info-policy bundle channel source-override video rt-server

```

- rt-server
  - ip-address string
  - port number
  - rt-state keyword
- stream-selection
  - intf1 string
  - intf2 string
  - source1 string
  - source2 string
  - video-group (number | keyword)
- video
  - analyzer
  - alarms
    - cc-error boolean
    - non-vid-pid-absent number
    - pat-repetition
      - poa number
      - qos number
      - tnc number
    - pat-syntax boolean
    - pcr-repetition
      - poa number
      - qos number
      - tnc number
    - pid-pmt-unref boolean
    - pmt-repetition
      - poa number
      - qos number
      - tnc number
    - pmt-syntax boolean
    - report-alarm
      - severity keyword
    - tei-set boolean
    - ts-sync-loss boolean
    - vid-pid-absent number
  - description string
  - fcc-channel-type keyword
  - fcc-min-duration number
  - fcc-server keyword
  - local-rt-server keyword
  - reorder-audio number
  - rt-buffer-size number
  - rt-server
    - ip-address string
    - port number
    - rt-state keyword
  - stream-selection
    - intf1 string
    - intf2 string
    - source1 string
    - source2 string
    - video-group (number | keyword)
- cong-priority-threshold number
- description string
- ecmp-opt-threshold number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
  - ldp-p2mp number
  - rsvp-p2mp string
  - sender string
- video
  - analyzer

```

configure multicast-management multicast-info-policy bundle video analyzer alarms

```

- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
-   poa number
-   qos number
-   tnc number
- pat-syntax boolean
- pcr-repetition
-   poa number
-   qos number
-   tnc number
- pid-pmt-unref boolean
- pmt-repetition
-   poa number
-   qos number
-   tnc number
- pmt-syntax boolean
- report-alarm
-   severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server boolean
- local-fcc-port number
- local-rt-port number
- local-rt-server boolean
- reorder-audio number
- rt-buffer-size number
- rt-server
-   ip-address string
-   port number
- stream-selection
-   intf1 string
-   intf2 string
-   source1 string
-   source2 string
-   video-group number
- description string
- video-policy
-   video-interface string
-   apply-groups reference
-   apply-groups-exclude reference
-   extended-unicast boolean
-   fcc-session-timeout number
-   hd
-     apply-groups reference
-     apply-groups-exclude reference
-     dent-threshold number
-     fcc-burst number
-     fcc-server
-       mode keyword
-     local-rt-server boolean
-     mc-handover number
-     rt-rate number
-   max-igmp-latency number
-   max-sessions number
-   pip
-     apply-groups reference
-     apply-groups-exclude reference
-     dent-threshold number

```

configure multicast-management multicast-info-policy video-policy video-interface pip fcc-burst

```
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
  - ret-session-timeout number
  - rt-payload-type number
  - rt-rate number
  - sd
    - apply-groups reference
    - apply-groups-exclude reference
    - dent-threshold number
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
    - subscriber-bw-limit number
- multicast-reporting-destination string
  - address string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - maximum-transmission-delay number
  - udp-port number
```

3.28.1 multicast-management command descriptions

multicast-management

Synopsis	Enter the multicast-management context
Context	configure multicast-management
Tree	multicast-management
Introduced	16.0.R1
Platforms	All

bandwidth-policy [[policy-name](#)] *string*

Synopsis	Enter the bandwidth-policy list instance
Context	configure multicast-management bandwidth-policy <i>string</i>
Tree	bandwidth-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

[\[policy-name\]](#) *string*

Synopsis	Bandwidth policy name
Context	configure multicast-management bandwidth-policy <i>string</i>
Tree	bandwidth-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

admin-bw-threshold *number*

Synopsis	Administrative bandwidth threshold
Context	configure multicast-management bandwidth-policy <i>string</i> admin-bw-threshold <i>number</i>

Tree	admin-bw-threshold
Range	1 to 40000000
Default	10
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure multicast-management bandwidth-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-percent-reset *number*

Synopsis	Percent of bandwidth that decreases before resetting
Context	configure multicast-management bandwidth-policy <i>string</i> falling-percent-reset <i>number</i>
Tree	falling-percent-reset
Range	1 to 100
Default	50
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

impm-paths

Synopsis	Enter the impm-paths context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths
Tree	impm-paths
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-path

Synopsis Enter the **primary-path** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#)

Tree [primary-path](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

queue-parameters

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

cbs *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#) [cbs](#) *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Default 5.00

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

drop-tail

Synopsis	Enter the drop-tail context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

low

Synopsis	Enter the low context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters drop-tail low percent-reduction-from-mbs <i>number</i>
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	10
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths primary-path queue-parameters mbs <i>decimal-number</i>

Tree	mbs
Range	0.00 to 100.00
Default	7.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-path

Synopsis	Enter the secondary-path context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path
Tree	secondary-path
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

number-paths

Synopsis	Enter the number-paths context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path number-paths
Tree	number-paths
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

number-of-paths *number*

Synopsis	Number of secondary paths
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path number-paths number-of-paths <i>number</i>
Tree	number-of-paths
Range	1 to 15
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

redundant-sfm *number*

Synopsis Number of secondary paths in redundant SFM mode

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [secondary-path](#) [number-paths](#) **redundant-sfm** *number*

Tree [redundant-sfm](#)

Range 1 to 15

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

queue-parameters

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [secondary-path](#) [queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

cbs *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [secondary-path](#) [queue-parameters](#) **cbs** *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Default 30.00

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

drop-tail

Synopsis	Enter the drop-tail context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path queue-parameters drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

low

Synopsis	Enter the low context
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path queue-parameters drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-reduction-from-mbs *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure multicast-management bandwidth-policy <i>string</i> impm-paths secondary-path queue-parameters drop-tail low percent-reduction-from-mbs <i>number</i>
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	10
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mbs *decimal-number*

Synopsis	Override for default MBS for single queue for each path
----------	---

Context	configure multicast-management bandwidth-policy <i>string</i> imp-path secondary-path queue-parameters mbs <i>decimal-number</i>
Tree	mbs
Range	0.00 to 100.00
Default	40.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mcast-pool

Synopsis	Enter the mcast-pool context
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool
Tree	mcast-pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

percent-of-total *number*

Synopsis	Percent of ingress buffers assigned to multicast pool
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool percent-of-total <i>number</i>
Tree	percent-of-total
Range	1 to 50
Default	10
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

resv-cbs *number*

Synopsis	Percentage of pool reserved for multicast path queues
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool resv-cbs <i>number</i>
Tree	resv-cbs

Range	1 to 100
Default	50
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

slope-policy *reference*

Synopsis	Slope policy name
Context	configure multicast-management bandwidth-policy <i>string</i> mcast-pool slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

chassis-level

Synopsis	Enter the chassis-level context
Context	configure multicast-management chassis-level
Tree	chassis-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mmp-imp-override *boolean*

Synopsis	Manage MMRP traffic by IMPM
Context	configure multicast-management chassis-level mmp-imp-override <i>boolean</i>
Tree	mmp-imp-override
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

per-mcast-plane-capacity

Synopsis	Enter the per-mcast-plane-capacity context
Context	configure multicast-management chassis-level per-mcast-plane-capacity
Tree	per-mcast-plane-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

mcast-capacity

Synopsis	Enter the mcast-capacity context
Context	configure multicast-management chassis-level per-mcast-plane-capacity mcast-capacity
Tree	mcast-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	configure multicast-management chassis-level per-mcast-plane-capacity mcast-capacity primary-percentage <i>decimal-number</i>
Tree	primary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	configure multicast-management chassis-level per-mcast-plane-capacity mcast-capacity secondary-percentage <i>decimal-number</i>
Tree	secondary-percentage

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

redundant-mcast-capacity

Synopsis	Enter the redundant-mcast-capacity context
Context	configure multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity
Tree	redundant-mcast-capacity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	configure multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity primary-percentage <i>decimal-number</i>
Tree	primary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	configure multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity secondary-percentage <i>decimal-number</i>
Tree	secondary-percentage
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

total-capacity *keyword*

Synopsis Total multicast plane bandwidth

Context **configure** [multicast-management](#) [chassis-level](#) [per-mcast-plane-capacity](#) **total-capacity** *keyword*

Tree [total-capacity](#)

Units megabps

Options dynamic, 2000, 4000, 5250, 8250, 15000, 17000, 19000, 27000, 42000, 90000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

round-robin-inactive-records *boolean*

Synopsis Redistribute newly populated inactive records

Context **configure** [multicast-management](#) [chassis-level](#) **round-robin-inactive-records** *boolean*

Tree [round-robin-inactive-records](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

multicast-info-policy [[policy-name](#)] *string*

Synopsis Enter the **multicast-info-policy** list instance

Context **configure** [multicast-management](#) **multicast-info-policy** *string*

Tree [multicast-info-policy](#)

Max. Instances 32

Introduced 16.0.R1

Platforms All

[policy-name] *string*

Synopsis	Multicast information policy name
Context	configure multicast-management multicast-info-policy <i>string</i>
Tree	multicast-info-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bundle [[bundle-name](#)] *string*

Synopsis	Enter the bundle list instance
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i>
Tree	bundle
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[bundle-name] *string*

Synopsis	Bundle name
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i>
Tree	bundle
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> admin-bw <i>number</i>
Tree	admin-bw

Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the bw-activity context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> bw-activity black-hole-rate <i>number</i>
Tree	black-hole-rate
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> bw-activity bw-activity-type <i>keyword</i>
Tree	bw-activity-type
Default	dynamic
Options	use-admin-bw, dynamic
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis Falling delay threshold value until delay time expires

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **bw-activity** **falling-delay** *number*

Tree **falling-delay**

Range 10 to 3600

Default 30

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

channel **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **channel** list instance

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Introduced 16.0.R1

Platforms All

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Starting IP address for the channel range

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending IP address for the channel range
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	channel
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-bw <i>number</i>
Tree	admin-bw
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the bw-activity context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity black-hole-rate <i>number</i>
Tree	black-hole-rate
Range	0 to 40000000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity bw-activity-type <i>keyword</i>
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity falling-delay <i>number</i>
Tree	falling-delay
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

explicit-sf-path *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) explicit-sf-path <i>keyword</i>
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive-override <i>number</i>
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) preference <i>number</i>
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the primary-tunnel-interface context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface ldp-p2mp <i>number</i>
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1
Platforms	All

rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface rsvp-p2mp <i>string</i>
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface sender <i>string</i>

Tree	sender
Introduced	16.0.R1
Platforms	All

source-override [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the source-override list instance
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-override
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for the source override
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-override
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-bw *number*

Synopsis	Administrative bandwidth
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-bw <i>number</i>
Tree	admin-bw
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

bw-activity

Synopsis	Enter the bw-activity context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity
Tree	bw-activity
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

black-hole-rate *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity black-hole-rate <i>number</i>
Tree	black-hole-rate
Range	0 to 40000000
Default	0
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

bw-activity-type *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity bw-activity-type <i>keyword</i>
Tree	bw-activity-type
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

falling-delay *number*

Synopsis	Falling delay threshold value until delay time expires
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) bw-activity falling-delay <i>number</i>
Tree	falling-delay
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

explicit-sf-path *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) explicit-sf-path <i>keyword</i>
Tree	explicit-sf-path
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis	Keepalive timer override
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive-override <i>number</i>
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1

Platforms All

preference *number*

Synopsis Relative preference level for multicast channels

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **preference** *number*

Tree [preference](#)

Range 1 to 7

Introduced 16.0.R1

Platforms All

primary-tunnel-interface

Synopsis Enter the **primary-tunnel-interface** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface**

Tree [primary-tunnel-interface](#)

Introduced 16.0.R1

Platforms All

ldp-p2mp *number*

Synopsis ID for signaling MLDP P2MP LSP

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface** **ldp-p2mp** *number*

Tree [ldp-p2mp](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

rsvp-p2mp *string*

Synopsis	P2MP name for the LDP P2MP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface rsvp-p2mp <i>string</i>
Tree	rsvp-p2mp
String Length	1 to 32
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1
Platforms	All

sender *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) primary-tunnel-interface sender <i>string</i>
Tree	sender
Introduced	16.0.R1
Platforms	All

video

Synopsis	Enter the video context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video
Tree	video
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis	Enable the analyzer context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer
Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the alarms context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms cc-error <i>boolean</i>
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-</i>

	address-no-zone) source-override (ipv4-address-no-zone ipv6-address-no-zone) video analyzer alarms non-vid-pid-absent number
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the pat-repetition context
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) source-override (ipv4-address-no-zone ipv6-address-no-zone) video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PATs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy string bundle string channel start (ipv4-address-no-zone ipv6-address-no-zone) end (ipv4-address-no-zone ipv6-address-no-zone) source-override (ipv4-address-no-zone ipv6-address-no-zone) video analyzer alarms pat-repetition poa number
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax boolean

Synopsis	Check for PAT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-syntax <i>boolean</i>
Tree	pat-syntax
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the pcr-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition qos <i>number</i>
Tree	qos

Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition tnc number
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref boolean

Synopsis	Check for unreferenced PIDs in the PMT
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pid-pmt-unref boolean
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the pmt-repetition context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition poa <i>number</i>
Tree	poa
Range	300 to 5000
Default	2000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition qos <i>number</i>
Tree	qos
Range	200 to 4900
Default	800
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 4800
Default	400
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax boolean

Synopsis	Check for PMT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-syntax <i>boolean</i>
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the report-alarm context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Keyword for the type of alarm
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms report-alarm severity <i>keyword</i>
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms tei-set <i>boolean</i>
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms ts-sync-loss <i>boolean</i>
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms vid-pid-absent <i>number</i>
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-channel-type <i>keyword</i>
Tree	fcc-channel-type
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-min-duration <i>number</i>
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-server <i>keyword</i>
Tree	fcc-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *keyword*

Synopsis	Value to override the parent value of local RT server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video local-rt-server <i>keyword</i>
Tree	local-rt-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video reorder-audio <i>number</i>
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-buffer-size <i>number</i>
Tree	rt-buffer-size
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enter the rt-server context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server
Tree	rt-server
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis IP address of the upstream retransmission server

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **ip-address** *string*

Tree [ip-address](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis UDP port to send RET requests to the upstream RET sever

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **port** *number*

Tree [port](#)

Range 1024 to 5999 | 6251 to 65535

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-state *keyword*

Synopsis Retransmission server state

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **rt-server** **rt-state** *keyword*

Tree [rt-state](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis Enter the **stream-selection** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection**

Tree **stream-selection**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis Primary interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **intf1** *string*

Tree **intf1**

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis Secondary interface

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **intf2** *string*

Tree **intf2**

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis Primary source IP address

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **source1** *string*

Tree [source1](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis Secondary source IP address

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **stream-selection** **source2** *string*

Tree [source2](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group (*number* | *keyword*)

Synopsis Video group ID

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **video-group** (*number* | *keyword*)

Tree [video-group](#)

Range 1 to 4

Options none

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video

Synopsis Enter the **video** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video**

Tree **video**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis Enable the **analyzer** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer**

Tree **analyzer**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis Enter the **alarms** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms**

Tree **alarms**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error boolean

Synopsis Check the continuity counter

Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms cc-error <i>boolean</i>
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms non-vid-pid-absent <i>number</i>
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the pat-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition poa <i>number</i>

Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax *boolean*

Synopsis	Check for PAT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pat-syntax <i>boolean</i>
Tree	pat-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the pcr-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition qos number
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pcr-repetition tnc number
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref boolean

Synopsis	Check for unreferenced PIDs in the PMT
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pid-pmt-unref boolean
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis Enable the **pmt-repetition** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition**

Tree **pmt-repetition**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis Time between two PMTs for which a POA alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition** **poa** *number*

Tree **poa**

Range 300 to 5000

Default 2000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis Time between two PMTs for which a QoS alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video** **analyzer** **alarms** **pmt-repetition** **qos** *number*

Tree **qos**

Range 200 to 4900

Default 800

Units milliseconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-repetition tnc number
Tree	tnc
Range	100 to 4800
Default	400
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax boolean

Synopsis	Check for PMT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms pmt-syntax boolean
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the report-alarm context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis Keyword for the type of alarm

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms report-alarm severity** *keyword*

Tree **severity**

Options tnc, qos, poa

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis Check for TEI set errors

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms tei-set boolean**

Tree **tei-set**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis Check for synchronization loss errors

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms ts-sync-loss boolean**

Tree **ts-sync-loss**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis	VID PID checked within the specified time interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer alarms vid-pid-absent <i>number</i>
Tree	vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video analyzer description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis	Channel type for the bundle or channel
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-channel-type <i>keyword</i>
Tree	fcc-channel-type
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-min-duration <i>number</i>
Tree	fcc-min-duration
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video fcc-server <i>keyword</i>
Tree	fcc-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *keyword*

Synopsis	Value to override the parent value of local RT server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video local-rt-server <i>keyword</i>
Tree	local-rt-server
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video reorder-audio <i>number</i>
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-buffer-size <i>number</i>
Tree	rt-buffer-size
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enter the rt-server context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server
Tree	rt-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server ip-address <i>string</i>
Tree	ip-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server port <i>number</i>
Tree	port
Range	1024 to 5999 6251 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-state *keyword*

Synopsis	Retransmission server state
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video rt-server rt-state <i>keyword</i>
Tree	rt-state
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the stream-selection context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection intf1 <i>string</i>
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection intf2 <i>string</i>
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis	Primary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection source1 <i>string</i>
Tree	source1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video stream-selection source2 <i>string</i>
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group (*number* | *keyword*)

Synopsis	Video group ID
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> channel start (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) end (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) video video-group (<i>number</i> <i>keyword</i>)
Tree	video-group
Range	1 to 4
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cong-priority-threshold *number*

Synopsis	Preference level threshold from low to high priority
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> cong-priority-threshold <i>number</i>
Tree	cong-priority-threshold
Range	0 to 7
Default	4
Introduced	16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

ecmp-opt-threshold *number*

Synopsis ECMP threshold

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **ecmp-opt-threshold** *number*

Tree [ecmp-opt-threshold](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms All

explicit-sf-path *keyword*

Synopsis Explicit ingress switch fabric multicast path

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **explicit-sf-path** *keyword*

Tree [explicit-sf-path](#)

Options primary, secondary

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

keepalive-override *number*

Synopsis Keepalive timer override

Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> keepalive-override <i>number</i>
Tree	keepalive-override
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Relative preference level for multicast channels
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 7
Introduced	16.0.R1
Platforms	All

primary-tunnel-interface

Synopsis	Enter the primary-tunnel-interface context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> primary-tunnel-interface
Tree	primary-tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> primary-tunnel-interface ldp-p2mp <i>number</i>
Tree	ldp-p2mp
Range	1 to 4294967295
Notes	The following elements are part of a choice: ldp-p2mp or rsvp-p2mp .
Introduced	16.0.R1

Platforms All

rsvp-p2mp *string*

Synopsis P2MP name for the LDP P2MP

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [primary-tunnel-interface](#) **rsvp-p2mp** *string*

Tree [rsvp-p2mp](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

sender *string*

Synopsis Bundle set to receive from the primary tunnel interface

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [primary-tunnel-interface](#) **sender** *string*

Tree [sender](#)

Introduced 16.0.R1

Platforms All

video

Synopsis Enter the **video** context

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* **video**

Tree [video](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

analyzer

Synopsis Enable the **analyzer** context

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) **analyzer**

Tree	analyzer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

alarms

Synopsis	Enter the alarms context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms
Tree	alarms
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cc-error *boolean*

Synopsis	Check the continuity counter
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms cc-error <i>boolean</i>
Tree	cc-error
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms non-vid-pid-absent <i>number</i>
Tree	non-vid-pid-absent
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-repetition

Synopsis	Enable the pat-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition
Tree	pat-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PATs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pat-syntax boolean

Synopsis	Check for PAT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pat-syntax <i>boolean</i>
Tree	pat-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pcr-repetition

Synopsis	Enable the pcr-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition
Tree	pcr-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa number

Synopsis	Time between two PCRs for which a POA alarm is raised
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition poa <i>number</i>
Tree	poa
Range	300 to 1000
Default	500
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition qos <i>number</i>
Tree	qos
Range	200 to 900
Default	200
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc *number*

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pcr-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 800
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pid-pmt-unref *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pid-pmt-unref <i>boolean</i>
Tree	pid-pmt-unref
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-repetition

Synopsis	Enable the pmt-repetition context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition
Tree	pmt-repetition
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

poa *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition poa <i>number</i>
Tree	poa
Range	300 to 5000
Default	2000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos *number*

Synopsis	Time between two PMTs for which a QoS alarm is raised
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition qos <i>number</i>
Tree	qos
Range	200 to 4900
Default	800
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tnc number

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-repetition tnc <i>number</i>
Tree	tnc
Range	100 to 4800
Default	400
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pmt-syntax boolean

Synopsis	Check for PMT syntax errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms pmt-syntax <i>boolean</i>
Tree	pmt-syntax
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

report-alarm

Synopsis	Enter the report-alarm context
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

severity *keyword*

Synopsis	Keyword for the type of alarm
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms report-alarm severity <i>keyword</i>
Tree	severity
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

tei-set *boolean*

Synopsis	Check for TEI set errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms tei-set <i>boolean</i>
Tree	tei-set
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ts-sync-loss *boolean*

Synopsis	Check for synchronization loss errors
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video analyzer alarms ts-sync-loss <i>boolean</i>
Tree	ts-sync-loss
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

vid-pid-absent *number*

Synopsis VID PID checked within the specified time interval

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video analyzer](#) [alarms](#) [vid-pid-absent](#) *number*

Tree [vid-pid-absent](#)

Range 100 to 5000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video analyzer](#) [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-channel-type *keyword*

Synopsis Channel type for the bundle or channel

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [bundle](#) *string* [video](#) [fcc-channel-type](#) *keyword*

Tree [fcc-channel-type](#)

Default hd

Options hd, sd, pip

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-min-duration *number*

Synopsis	Minimum duration of the FCC burst
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video fcc-min-duration <i>number</i>
Tree	fcc-min-duration
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server *boolean*

Synopsis	Enable the FCC server for a multicast bundle
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video fcc-server <i>boolean</i>
Tree	fcc-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-fcc-port *number*

Synopsis	Local port for FCC requests
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video local-fcc-port <i>number</i>
Tree	local-fcc-port
Range	1024 to 5999 6251 to 65535
Default	4098
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-port *number*

Synopsis	Local port for RET requests
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video local-rt-port <i>number</i>
Tree	local-rt-port
Range	1024 to 5999 6251 to 65535
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

reorder-audio *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video reorder-audio <i>number</i>
Tree	reorder-audio
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-buffer-size *number*

Synopsis	Buffer size to store channel packets
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Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-buffer-size <i>number</i>
Tree	rt-buffer-size
Range	300 to 8000
Default	300
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-server

Synopsis	Enable the rt-server context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-server
Tree	rt-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-server ip-address <i>string</i>
Tree	ip-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

port *number*

Synopsis	RET server port number
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video rt-server port <i>number</i>
Tree	port

Range	1024 to 5999 6251 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

stream-selection

Synopsis	Enter the stream-selection context
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection
Tree	stream-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf1 *string*

Synopsis	Primary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection intf1 <i>string</i>
Tree	intf1
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

intf2 *string*

Synopsis	Secondary interface
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection intf2 <i>string</i>
Tree	intf2
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source1 *string*

Synopsis	Primary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection source1 <i>string</i>
Tree	source1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source2 *string*

Synopsis	Secondary source IP address
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video stream-selection source2 <i>string</i>
Tree	source2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-group *number*

Synopsis	Video group for the bundle
Context	configure multicast-management multicast-info-policy <i>string</i> bundle <i>string</i> video video-group <i>number</i>
Tree	video-group
Range	1 to 4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-info-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

video-policy

Synopsis	Enter the video-policy context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy
Tree	video-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

video-interface [[ip-address](#)] *string*

Synopsis	Enter the video-interface list instance
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i>
Tree	video-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[\[ip-address\]](#) *string*

Synopsis	IP address of the video interface
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i>
Tree	video-interface
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

extended-unicast *boolean*

Synopsis	Extend video unicast session
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Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> extended-unicast <i>boolean</i>
Tree	extended-unicast
Description	<p>When configured to true, video unicast is delayed from switching over to multicast for 5 minutes. The unicast session can be extended further by sending an RTCP extension request, which resets the 5-minute timer. This is ideal for services that require unicast video and end devices that require extended time to switch over from unicast to multicast.</p> <p>When configured to false, the unicast session switches over to multicast 1.5 seconds after the IGMP request is sent. Most Fast Channel Change deployments do not require a time extension.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-session-timeout *number*

Synopsis	FCC session timeout
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> fcc-session-timeout <i>number</i>
Tree	fcc-session-timeout
Range	5 to 300
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

hd

Synopsis	Enter the hd context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd
Tree	hd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd dent-threshold <i>number</i>
Tree	dent-threshold
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd fcc-burst <i>number</i>
Tree	fcc-burst
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the fcc-server context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd fcc-server mode <i>keyword</i>
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd mc-handover <i>number</i>
Tree	mc-handover
Range	0 to 100
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
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Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> hd rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

max-igmp-latency *number*

Synopsis	Maximum IGMP latency per client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> max-igmp-latency <i>number</i>
Tree	max-igmp-latency
Range	10 to 1000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

max-sessions *number*

Synopsis	Maximum number of sessions per client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> max-sessions <i>number</i>
Tree	max-sessions
Range	1 to 65536
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

pip

Synopsis	Enter the pip context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip
Tree	pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip dent-threshold <i>number</i>
Tree	dent-threshold
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip fcc-burst <i>number</i>
Tree	fcc-burst
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the fcc-server context
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Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip fcc-server mode <i>keyword</i>
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip mc-handover <i>number</i>
Tree	mc-handover
Range	0 to 600
Default	25

Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> pip rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ret-session-timeout *number*

Synopsis	RET session timeout
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> ret-session-timeout <i>number</i>
Tree	ret-session-timeout
Range	5 to 300
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-payload-type *number*

Synopsis	Format for the received retransmission packets
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> rt-payload-type <i>number</i>
Tree	rt-payload-type

Range	33 96 to 127
Default	99
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

sd

Synopsis	Enter the sd context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd
Tree	sd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd dent-threshold <i>number</i>
Tree	dent-threshold
Range	1 to 31
Default	16

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd fcc-burst <i>number</i>
Tree	fcc-burst
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

fcc-server

Synopsis	Enter the fcc-server context
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd fcc-server
Tree	fcc-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mode *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd fcc-server mode <i>keyword</i>
Tree	mode
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

local-rt-server *boolean*

Synopsis	Enable local retransmission server capability
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd local-rt-server <i>boolean</i>
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

mc-handover *number*

Synopsis	Rate the FCC server sends data during the handover
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd mc-handover <i>number</i>
Tree	mc-handover
Range	0 to 600
Default	25
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

rt-rate *number*

Synopsis	Rate the RET packets are sent to client
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> sd rt-rate <i>number</i>
Tree	rt-rate
Range	1 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

subscriber-bw-limit *number*

Synopsis	Egress bandwidth limit per subscriber
Context	configure multicast-management multicast-info-policy <i>string</i> video-policy video-interface <i>string</i> subscriber-bw-limit <i>number</i>
Tree	subscriber-bw-limit
Range	1 to 4294967295
Default	4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

multicast-reporting-destination [*name*] *string*

Synopsis	Enter the multicast-reporting-destination list instance
Context	configure multicast-management multicast-reporting-destination <i>string</i>
Tree	multicast-reporting-destination
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Multicast reporting destination name
Context	configure multicast-management multicast-reporting-destination <i>string</i>
Tree	multicast-reporting-destination
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IP address of the multicast reporting destination
Context	configure multicast-management multicast-reporting-destination <i>string</i> address <i>string</i>
Tree	address

Default	0.0.0.0
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast reporting destination
Context	configure multicast-management multicast-reporting-destination <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure multicast-management multicast-reporting-destination <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

maximum-transmission-delay *number*

Synopsis	Time delay before packet transmits to the destination
Context	configure multicast-management multicast-reporting-destination <i>string</i> maximum-transmission-delay <i>number</i>
Tree	maximum-transmission-delay
Range	0 to 100
Default	1
Units	deciseconds
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	UDP port where multicast reports are sent
Context	configure multicast-management multicast-reporting-destination <i>string</i> udp-port <i>number</i>
Tree	udp-port
Range	1 to 65535
Default	1037
Introduced	16.0.R1
Platforms	All

3.29 oam-pm commands

```

configure
- oam-pm
- apply-groups reference
- apply-groups-exclude reference
- bin-group number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bin-type keyword
- apply-groups reference
- apply-groups-exclude reference
- bin number
- apply-groups reference
- apply-groups-exclude reference
- lower-bound number
- delay-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- exclude-lowest-bin number
- lowest-bin number
- raise-threshold number
- exclude-from-avg keyword
- apply-groups reference
- apply-groups-exclude reference
- bins string
- description string
- session string
- apply-groups reference
- apply-groups-exclude reference
- bin-group reference
- description string
- ethernet
- dest-mac string
- dmm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- delay-template string
- interval number
- test-duration number
- test-id number
- lmm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- availability
- admin-state keyword
- flr-threshold number
- hli-force-count boolean
- timing
- chli-threshold number
- consec-delta-t number
- frames-per-delta-t number
- fc-collection boolean
- interval number
- loss-events
- avg-flr-event keyword

```

configure oam-pm session ethernet lmm loss-events avg-flr-event apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- test-duration number
- test-id number
- priority number
- remote-mep number
- slm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- flr-threshold number
- hli-force-count boolean
- interval number
- loss-events
- avg-flr-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference

```

configure oam-pm session ethernet slm loss-events undet-availability-event apply-groups-exclude

- **apply-groups-exclude** *reference*
- **clear-threshold** *number*
- **raise-threshold** *number*
- **undet-unavailability-event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **clear-threshold** *number*
- **raise-threshold** *number*
- **test-duration** *number*
- **test-id** *number*
- **timing**
 - **chli-threshold** *number*
 - **consec-delta-t** *number*
 - **frames-per-delta-t** *number*
- **source**
 - **ma-admin-name** *string*
 - **md-admin-name** *string*
 - **mep** *number*
- **ip**
 - **allow-egress-remark-dscp** *boolean*
 - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **destination-udp-port** *number*
 - **do-not-fragment** *boolean*
 - **dscp** (*keyword* | *keyword*)
 - **fc** *keyword*
 - **forwarding**
 - **bypass-routing**
 - **interface** *string*
 - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **pattern** (*keyword* | *number*)
 - **profile** *keyword*
 - **router-instance** *string*
 - **source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **source-udp-port** *number*
 - **ttl** *number*
 - **tunnel**
 - **mpls**
 - **rsvp-te**
 - **lsp** *string*
 - **rsvp-te-auto**
 - **from** *string*
 - **lsp-template** *string*
 - **to** *string*
 - **sr-isis**
 - **igp-instance** *number*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **sr-ospf**
 - **igp-instance** *number*
 - **prefix** *string*
 - **sr-ospf3**
 - **igp-instance** *number*
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **sr-te**
 - **lsp** *string*
 - **twamp-light**
 - **admin-state** *keyword*
 - **allow-ipv6-udp-checksum-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delay-template** *string*
 - **interval** *number*
 - **loss**
 - **flr-threshold** *number*
 - **hli-force-count** *boolean*

configure oam-pm session ip twamp-light loss timing

- **timing**
 - **chli-threshold** *number*
 - **consec-delta-t** *number*
 - **frames-per-delta-t** *number*
- **loss-events**
 - **avg-flr-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *decimal-number*
 - **raise-threshold** *decimal-number*
 - **chli-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
 - **hli-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
 - **unavailability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
 - **undet-availability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
 - **undet-unavailability-event** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clear-threshold** *number*
 - **raise-threshold** *number*
- **pad-size** *number*
- **pad-tlv-size** *number*
- **record-stats** *keyword*
- **session-sender-type** *keyword*
- **test-duration** *number*
- **test-id** *number*
- **timestamp-format** *keyword*
- **measurement-interval** *keyword*
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boundary-type** *keyword*
 - **clock-offset** *number*
 - **intervals-stored** *number*
 - **threshold-cross-alerts**
 - **admin-state** *keyword*
 - **delay-events** *boolean*
 - **loss-events** *boolean*
- **mpls**
 - **dm**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delay-template** *string*
 - **interval** *number*
 - **pad-tlv-size** *number*
 - **reflect-pad** *boolean*
 - **test-duration** *number*
 - **test-id** *number*

configure oam-pm session mpls dscp

```
- dscp keyword
- fc keyword
- lsp
  - mpls-tp-static
    - lsp string
  - rsvp
    - lsp string
    - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
  - rsvp-auto
    - from string
    - lsp-template string
    - to string
    - udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)
- pattern (keyword | number)
- profile keyword
- ttl number
- session-type keyword
- streaming
  - delay-template string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fd-avg keyword
  - ifdv-avg keyword
  - sample-window number
  - window-integrity number
```

3.29.1 oam-pm command descriptions

oam-pm

Synopsis	Enter the oam-pm context
Context	configure oam-pm
Tree	oam-pm
Introduced	16.0.R1
Platforms	All

bin-group [[bin-group-id](#)] *number*

Synopsis	Enter the bin-group list instance
Context	configure oam-pm bin-group <i>number</i>
Tree	bin-group
Introduced	16.0.R5
Platforms	All

[bin-group-id] *number*

Synopsis	Bin group ID
Context	configure oam-pm bin-group <i>number</i>
Tree	bin-group
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the bin group
Context	configure oam-pm bin-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R5

Platforms All

bin-type [**bin-metric**] *keyword*

Synopsis Enter the **bin-type** list instance
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword*
 Tree **bin-type**
 Introduced 16.0.R5
 Platforms All

[bin-metric] *keyword*

Synopsis Delay metric bin structure
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword*
 Tree **bin-type**
 Options fd, fdr, ifdv
 Notes This element is part of a list key.
 Introduced 16.0.R5
 Platforms All

bin [**bin-number**] *number*

Synopsis Enter the **bin** list instance
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **bin** *number*
 Tree **bin**
 Introduced 16.0.R5
 Platforms All

[bin-number] *number*

Synopsis Bin number
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **bin** *number*
 Tree **bin**
 Range 0 to 9
 Notes This element is part of a list key.

Introduced	16.0.R5
Platforms	All

lower-bound *number*

Synopsis	Lower bound for the bin
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> bin <i>number</i> lower-bound <i>number</i>
Tree	lower-bound
Range	0 1 to 4294967295
Units	microseconds
Introduced	16.0.R5
Platforms	All

delay-event [*direction*] *keyword*

Synopsis	Enter the delay-event list instance
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i>
Tree	delay-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i>
Tree	delay-event
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	OAM-PM clear threshold for an excessive delay
----------	---

Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

exclude-lowest-bin *number*

Synopsis	Lowest bin excluded from the TCA count
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> exclude-lowest-bin <i>number</i>
Tree	exclude-lowest-bin
Range	1 to 9
Introduced	16.0.R5
Platforms	All

lowest-bin *number*

Synopsis	Lowest delay bin used when applying a delay threshold
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> lowest-bin <i>number</i>
Tree	lowest-bin
Range	0 to 9
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Raise threshold for excessive delay
Context	configure oam-pm bin-group <i>number</i> bin-type <i>keyword</i> delay-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.

Introduced 16.0.R5
 Platforms All

exclude-from-avg [[direction](#)] *keyword*

Synopsis Enter the **exclude-from-avg** list instance
 Context **configure** [oam-pm](#) [bin-group](#) *number* [bin-type](#) *keyword* [exclude-from-avg](#) *keyword*
 Tree [exclude-from-avg](#)
 Introduced 16.0.R5
 Platforms All

[direction] *keyword*

Synopsis Traffic flow direction of the OAM-PM test or metric
 Context **configure** [oam-pm](#) [bin-group](#) *number* [bin-type](#) *keyword* [exclude-from-avg](#) *keyword*
 Tree [exclude-from-avg](#)
 Options forward, backward, round-trip
 Notes This element is part of a list key.
 Introduced 16.0.R5
 Platforms All

bins *string*

Synopsis Bin numbers excluded from the average calculation
 Context **configure** [oam-pm](#) [bin-group](#) *number* [bin-type](#) *keyword* [exclude-from-avg](#) *keyword* [bins](#) *string*
 Tree [bins](#)
 String Length 1 to 39
 Notes This element is mandatory.
 Introduced 16.0.R5
 Platforms All

description *string*

Synopsis Text description

Context	configure oam-pm bin-group <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R5
Platforms	All

session [[session-name](#)] *string*

Synopsis	Enter the session list instance
Context	configure oam-pm session <i>string</i>
Tree	session
Introduced	16.0.R5
Platforms	All

[session-name] *string*

Synopsis	OAM-PM session name
Context	configure oam-pm session <i>string</i>
Tree	session
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

bin-group *reference*

Synopsis	Bin group for the session
Context	configure oam-pm session <i>string</i> bin-group <i>reference</i>
Tree	bin-group
Reference	configure oam-pm bin-group <i>number</i>
Introduced	16.0.R5
Platforms	All

description *string*

Synopsis	Text description
Context	configure oam-pm session <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R5
Platforms	All

ethernet

Synopsis	Enable the ethernet context
Context	configure oam-pm session <i>string</i> ethernet
Tree	ethernet
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	16.0.R5
Platforms	All

dest-mac *string*

Synopsis	Destination MAC address for the session
Context	configure oam-pm session <i>string</i> ethernet dest-mac <i>string</i>
Tree	dest-mac
Introduced	16.0.R5
Platforms	All

dmm

Synopsis	Enable the dmm context
Context	configure oam-pm session <i>string</i> ethernet dmm
Tree	dmm
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>string</i> ethernet dmm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

data-tlv-size *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	configure oam-pm session <i>string</i> ethernet dmm data-tlv-size <i>number</i>
Tree	data-tlv-size
Range	0 3 to 2000
Default	0
Units	octets
Introduced	16.0.R5
Platforms	All

delay-template *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	configure oam-pm session <i>string</i> ethernet dmm delay-template <i>string</i>
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	configure oam-pm session <i>string</i> ethernet dmm interval <i>number</i>
Tree	interval
Range	100 1000 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

test-duration *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string</i> ethernet dmm test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string</i> ethernet dmm test-id <i>number</i>
Tree	test-id

Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

Imm

Synopsis	Enable the Imm context
Context	configure oam-pm session <i>string</i> ethernet Imm
Tree	Imm
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>string</i> ethernet Imm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

availability



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the availability context
Context	configure oam-pm session <i>string</i> ethernet Imm availability
Tree	availability
Introduced	16.0.R5
Platforms	All

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of availability statistics
Context	configure oam-pm session <i>string</i> ethernet lmm availability admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

flr-threshold *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	configure oam-pm session <i>string</i> ethernet lmm availability flr-threshold <i>number</i>
Tree	flr-threshold
Range	0 to 100
Default	50
Units	percent
Introduced	16.0.R5
Platforms	All

hli-force-count *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	configure oam-pm session <i>string</i> ethernet lmm availability hli-force-count <i>boolean</i>
Tree	hli-force-count

Default	false
Introduced	16.0.R5
Platforms	All

timing



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the timing context
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing
Tree	timing
Introduced	16.0.R5
Platforms	All

chli-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing chli-threshold <i>number</i>
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

consec-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing consec-delta-t <i>number</i>

Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	All

frames-per-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	configure oam-pm session <i>string</i> ethernet lmm availability timing frames-per-delta-t <i>number</i>
Tree	frames-per-delta-t
Range	1 to 50
Introduced	16.0.R5
Platforms	All

fc-collection *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable collection of per-forwarding class counters
Context	configure oam-pm session <i>string</i> ethernet lmm fc-collection <i>boolean</i>
Tree	fc-collection
Default	false
Introduced	16.0.R5
Platforms	All

interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	configure oam-pm session <i>string</i> ethernet lmm interval <i>number</i>
Tree	interval
Range	100 1000 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

loss-events

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the loss-events context
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events
Tree	loss-events
Introduced	16.0.R5
Platforms	All

avg-flr-event [[direction](#)] *keyword*

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	All

[[direction](#)] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i>

Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i> clear-threshold <i>decimal-number</i>
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

raise-threshold *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events avg-flr-event <i>keyword</i> raise-threshold <i>decimal-number</i>
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

chli-event [[direction](#)] *keyword*

Synopsis	Enter the chli-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events chli-event <i>keyword</i>
Tree	chli-event
Introduced	16.0.R5

Platforms All

[direction] *keyword*

Synopsis Traffic flow direction

Context **configure** **oam-pm session** *string* **ethernet lmm loss-events chli-event** *keyword*

Tree **chli-event**

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms All

clear-threshold *number*

Synopsis Clear threshold

Context **configure** **oam-pm session** *string* **ethernet lmm loss-events chli-event** *keyword* **clear-threshold** *number*

Tree **clear-threshold**

Range 0 to 863999

Introduced 16.0.R5

Platforms All

raise-threshold *number*

Synopsis Rising threshold that determines when to generate event

Context **configure** **oam-pm session** *string* **ethernet lmm loss-events chli-event** *keyword* **raise-threshold** *number*

Tree **raise-threshold**

Range 1 to 864000

Notes This element is mandatory.

Introduced 16.0.R5

Platforms All

hli-event [**direction**] *keyword*

Synopsis Enter the **hli-event** list instance

Context	configure <i>oam-pm session string ethernet lmm loss-events hli-event keyword</i>
Tree	hli-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure <i>oam-pm session string ethernet lmm loss-events hli-event keyword</i>
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure <i>oam-pm session string ethernet lmm loss-events hli-event keyword clear-threshold number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure <i>oam-pm session string ethernet lmm loss-events hli-event keyword raise-threshold number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000

Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-availability-event [[direction](#)] *keyword*

Synopsis	Enter the undet-availability-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold

Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ethernet lmm loss-events undet-unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

test-duration *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string</i> ethernet lmm test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string</i> ethernet lmm test-id <i>number</i>

Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

priority *number*

Synopsis	Priority and forwarding class for the session
Context	configure oam-pm session <i>string</i> ethernet priority <i>number</i>
Tree	priority
Range	0 to 7
Default	0
Introduced	16.0.R5
Platforms	All

remote-mep *number*

Synopsis	Remote MEP for the session
Context	configure oam-pm session <i>string</i> ethernet remote-mep <i>number</i>
Tree	remote-mep
Range	1 to 8191
Introduced	16.0.R5
Platforms	All

slm

Synopsis	Enable the slm context
Context	configure oam-pm session <i>string</i> ethernet slm
Tree	slm
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>string</i> ethernet slm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

data-tlv-size *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	configure oam-pm session <i>string</i> ethernet slm data-tlv-size <i>number</i>
Tree	data-tlv-size
Range	0 3 to 2000
Default	0
Units	octets
Introduced	16.0.R5
Platforms	All

flr-threshold *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	configure oam-pm session <i>string</i> ethernet slm flr-threshold <i>number</i>
Tree	flr-threshold
Range	0 to 100
Default	50
Units	percent

Introduced 16.0.R5
 Platforms All

hli-force-count *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Increment HLI/CHLI counters regardless of availability
 Context **configure** **oam-pm session** *string ethernet slm hli-force-count boolean*
 Tree [hli-force-count](#)
 Default false
 Introduced 16.0.R5
 Platforms All

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Time between transmission PDUs for the session's test
 Context **configure** **oam-pm session** *string ethernet slm interval number*
 Tree [interval](#)
 Range 100 | 1000
 Units milliseconds
 Introduced 16.0.R5
 Platforms All

loss-events



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **loss-events** context
 Context **configure** **oam-pm session** *string ethernet slm loss-events*

Tree	loss-events
Introduced	16.0.R5
Platforms	All

avg-flr-event [[direction](#)] *keyword*

Synopsis	Enter the avg-flr-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i> clear-threshold <i>decimal-number</i>
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

raise-threshold *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	configure oam-pm session <i>string</i> ethernet slm loss-events avg-flr-event <i>keyword</i> raise-threshold <i>decimal-number</i>
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

chli-event [**direction**] *keyword*

Synopsis	Enter the chli-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events chli-event <i>keyword</i>
Tree	chli-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet slm loss-events chli-event <i>keyword</i>
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet slm loss-events chli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold

Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ethernet slm loss-events chli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

hli-event [*direction*] *keyword*

Synopsis	Enter the hli-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events hli-event <i>keyword</i>
Tree	hli-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet slm loss-events hli-event <i>keyword</i>
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet slm loss-events hli-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ethernet slm loss-events hli-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Introduced	16.0.R5
Platforms	All

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ethernet slm loss-events unavailability-event <i>keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.

Introduced 16.0.R5
 Platforms All

clear-threshold *number*

Synopsis Clear threshold
 Context **configure** **oam-pm session** *string* **ethernet slm loss-events unavailability-event** *keyword*
clear-threshold *number*
 Tree **clear-threshold**
 Range 0 to 863999
 Introduced 16.0.R5
 Platforms All

raise-threshold *number*

Synopsis Rising threshold that determines when to generate event
 Context **configure** **oam-pm session** *string* **ethernet slm loss-events unavailability-event** *keyword*
raise-threshold *number*
 Tree **raise-threshold**
 Range 1 to 864000
 Notes This element is mandatory.
 Introduced 16.0.R5
 Platforms All

undet-availability-event [**direction**] *keyword*

Synopsis Enter the **undet-availability-event** list instance
 Context **configure** **oam-pm session** *string* **ethernet slm loss-events undet-availability-event**
keyword
 Tree **undet-availability-event**
 Introduced 16.0.R5
 Platforms All

[direction] *keyword*

Synopsis Traffic flow direction

Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

undet-unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>string</i> ethernet slm loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Introduced	16.0.R5

Platforms All

[direction] *keyword*

Synopsis Traffic flow direction

Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events undet-unavailability-event](#) *keyword*

Tree [undet-unavailability-event](#)

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms All

clear-threshold *number*

Synopsis Clear threshold

Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events undet-unavailability-event](#) *keyword* [clear-threshold](#) *number*

Tree [clear-threshold](#)

Range 0 to 863999

Introduced 16.0.R5

Platforms All

raise-threshold *number*

Synopsis Rising threshold that determines when to generate event

Context **configure** [oam-pm session](#) *string* [ethernet slm loss-events undet-unavailability-event](#) *keyword* [raise-threshold](#) *number*

Tree [raise-threshold](#)

Range 1 to 864000

Notes This element is mandatory.

Introduced 16.0.R5

Platforms All

test-duration *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string</i> ethernet slm test-duration <i>number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

test-id *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string</i> ethernet slm test-id <i>number</i>
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

timing

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the timing context
Context	configure oam-pm session <i>string</i> ethernet slm timing
Tree	timing
Introduced	16.0.R5

Platforms All

chli-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis CHLI threshold

Context **configure** [oam-pm session](#) *string* [ethernet slm timing chli-threshold](#) *number*

Tree [chli-threshold](#)

Range 1 to 9

Default 5

Introduced 16.0.R5

Platforms All

consec-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of consecutive delta-t intervals

Context **configure** [oam-pm session](#) *string* [ethernet slm timing consec-delta-t](#) *number*

Tree [consec-delta-t](#)

Range 2 to 10

Default 10

Introduced 16.0.R5

Platforms All

frames-per-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t

Context **configure** [oam-pm session](#) *string* [ethernet slm timing frames-per-delta-t](#) *number*

Tree	frames-per-delta-t
Range	1 to 50
Introduced	16.0.R5
Platforms	All

source

Synopsis	Enable the source context
Context	configure oam-pm session <i>string</i> ethernet source
Tree	source
Introduced	16.0.R5
Platforms	All

ma-admin-name *string*

Synopsis	Source Ethernet MA name
Context	configure oam-pm session <i>string</i> ethernet source ma-admin-name <i>string</i>
Tree	ma-admin-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

md-admin-name *string*

Synopsis	Source Ethernet MD name
Context	configure oam-pm session <i>string</i> ethernet source md-admin-name <i>string</i>
Tree	md-admin-name
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

mep number

Synopsis	Source Ethernet MEP ID
Context	configure oam-pm session <i>string</i> ethernet source mep number
Tree	mep
Range	1 to 8191
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

ip

Synopsis	Enable the ip context
Context	configure oam-pm session <i>string</i> ip
Tree	ip
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-egress-remark-dscp boolean

Synopsis	Allow DSCP modification by the egress QoS policy
Context	configure oam-pm session <i>string</i> ip allow-egress-remark-dscp boolean
Tree	allow-egress-remark-dscp
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	Destination IP address for the session
Context	configure oam-pm session <i>string</i> ip destination (ipv4-address-no-zone ipv6-address-no-zone)
Tree	destination
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination-udp-port *number*

Synopsis	Destination UDP port for the session
Context	configure oam-pm session <i>string ip destination-udp-port number</i>
Tree	destination-udp-port
Range	1 to 65535
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

do-not-fragment *boolean*

Synopsis	Do not allow packet fragmentation in the IPv4 header
Context	configure oam-pm session <i>string ip do-not-fragment boolean</i>
Tree	do-not-fragment
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp (*keyword | keyword*)

Synopsis	DSCP value configured to the DSCP name
Context	configure oam-pm session <i>string ip dscp (keyword keyword)</i>
Tree	dscp
Description	<p>This command allows for the explicit setting of the DSCP rather than deriving the DSCP value from the egress network QoS policy 1 using the fc and profile values.</p> <p>Although disconnected from the fc and profile settings unless required, the three parameters should be aligned to ensure proper treatment within the node and along the path.</p>
Default	resolve
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis	Forwarding class for the session
Context	configure oam-pm session <i>string ip fc keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding

Synopsis	Enable the forwarding context
Context	configure oam-pm session <i>string ip forwarding</i>
Tree	forwarding
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bypass-routing

Synopsis	Bypass the routing table when sending test packets
Context	configure oam-pm session <i>string ip forwarding bypass-routing</i>
Tree	bypass-routing
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface string

Synopsis	Interface name
Context	configure oam-pm session <i>string ip forwarding interface string</i>
Tree	interface
String Length	1 to 32

Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address for forwarding
Context	configure oam-pm session <i>string ip forwarding next-hop</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a mandatory choice: bypass-routing , interface , or next-hop .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern (*keyword | number*)

Synopsis	Pattern used to fill the packet padding field
Context	configure oam-pm session <i>string ip pattern</i> (<i>keyword number</i>)
Tree	pattern
Range	0 to 65535
Default	0
Options	sequential
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	Profile type for the session
Context	configure oam-pm session <i>string ip profile keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

router-instance *string*

Synopsis	Router instance for the session
Context	configure oam-pm session <i>string</i> ip router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for the session
Context	configure oam-pm session <i>string</i> ip source (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-udp-port *number*

Synopsis	Source UDP port for the session
Context	configure oam-pm session <i>string</i> ip source-udp-port <i>number</i>
Tree	source-udp-port
Range	64374 to 64383
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	TTL value for the session
Context	configure oam-pm session <i>string</i> ip tll <i>number</i>
Tree	tll
Range	1 to 255
Default	255
Introduced	16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tunnel

Synopsis Enter the **tunnel** context

Context **configure** [oam-pm session](#) *string* [ip tunnel](#)

Tree [tunnel](#)

Description Commands in this context configure packet tunneling options for the session. This command and the **oam-pm session ip forwarding** command are mutually exclusive.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls

Synopsis Enable the **mpls** context

Context **configure** [oam-pm session](#) *string* [ip tunnel mpls](#)

Tree [mpls](#)

Description Commands in this context configure the MPLS packet tunneling options for the session. Configure the **oam-pm session ip router-instance** to Base to configure commands in the tunnel MPLS context. When entering a context under MPLS, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te

Synopsis Enable the **rsvp-te** context

Context **configure** [oam-pm session](#) *string* [ip tunnel mpls rsvp-te](#)

Tree [rsvp-te](#)

Description Commands in this context allow for the specification of RSVP-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel-type options configured under the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.

Notes The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp string

Synopsis Name of LSP that carries the test packets
 Context **configure** [oam-pm session string ip tunnel mpls rsvp-te lsp string](#)
 Tree [lsp](#)
 String Length 1 to 64
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te-auto

Synopsis Enable the **rsvp-te-auto** context
 Context **configure** [oam-pm session string ip tunnel mpls rsvp-te-auto](#)
 Tree [rsvp-te-auto](#)
 Description Commands in this context configure the RSVP-TE-Auto feature and **rsvp-te-auto** (RSVP TE with dynamically-created LSPs) packet tunneling options for the session. If you enter a context within the MPLS context, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.
 Notes The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

from string

Synopsis IPv4 address used to identify the LSP to be tested
 Context **configure** [oam-pm session string ip tunnel mpls rsvp-te-auto from string](#)
 Tree [from](#)
 Description This command configures the headend of the RSV LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: **from**, **to**, and **lsp-template**. When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template *string*

Synopsis	LSP template used to identify the LSP to be tested
Context	configure oam-pm session <i>string</i> ip tunnel mpls rsvp-te-auto lsp-template <i>string</i>
Tree	lsp-template
Description	This command configures the name of the LSP template used to identify the unique LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: from , to , and lsp-template . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
String Length	1 to 32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

to *string*

Synopsis	IPv4 unicast address to identify the LSP to be tested
Context	configure oam-pm session <i>string</i> ip tunnel mpls rsvp-te-auto to <i>string</i>
Tree	to
Description	This command configures the termination point of the RSVP LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: from , to , and lsp-template . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-isis

Synopsis	Enable the sr-isis context
Context	configure oam-pm session <i>string</i> ip tunnel mpls sr-isis
Tree	sr-isis
Description	Commands in this context allow for the specification of SR-ISIS specific tunnel information used to transport the test packets. Entering this context removes all the other tunnel type commands configured in the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , or sr-te .
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igp-instance *number*

Synopsis IGP instance used to tunnel IP packets

Context **configure** **oam-pm session** *string ip tunnel mpls sr-isis igp-instance number*

Tree [igp-instance](#)

Description This command configures the IGP instance to tunnel IP packets for the session test.

Range 0 to 127

Default 0

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis IP prefix to tunnel IP packets for the session tests

Context **configure** **oam-pm session** *string ip tunnel mpls sr-isis prefix (ipv4-prefix | ipv6-prefix)*

Tree [prefix](#)

Description This command configures the IP prefix used with the IGP instance to tunnel IP packets for the session tests.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-ospf

Synopsis Enable the **sr-ospf** context

Context **configure** **oam-pm session** *string ip tunnel mpls sr-ospf*

Tree [sr-ospf](#)

Description Commands in this context allow for the specification of SR-OSPF specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the **configure oam-pm session ip tunnel mpls** context. Only a single MPLS type can be configured for an OAM-PM session.

Notes The following elements are part of a choice: **rsvp-te**, **rsvp-te-auto**, **sr-isis**, **sr-ospf**, **sr-ospf3**, or **sr-te**.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	configure oam-pm session <i>string</i> ip tunnel mpls sr-ospf igp-instance <i>number</i>
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix *string*

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	configure oam-pm session <i>string</i> ip tunnel mpls sr-ospf prefix <i>string</i>
Tree	prefix
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-ospf3

Synopsis	Enable the sr-ospf3 context
Context	configure oam-pm session <i>string</i> ip tunnel mpls sr-ospf3
Tree	sr-ospf3
Description	Commands in this context allow for the specification of SR-OSPFv3 specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , or sr-te .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

igp-instance *number*

Synopsis	IGP instance used to tunnel IP packets
Context	configure oam-pm session <i>string</i> ip tunnel mpls sr-ospf3 igp-instance <i>number</i>

Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	configure oam-pm session <i>string ip tunnel mpls sr-ospf3 prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sr-te

Synopsis	Enable the sr-te context
Context	configure oam-pm session <i>string ip tunnel mpls sr-te</i>
Tree	sr-te
Description	Commands in this context allow for the specification of SR-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the configure oam-pm session ip tunnel mpls context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: rsvp-te , rsvp-te-auto , sr-isis , sr-ospf , sr-ospf3 , or sr-te .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp *string*

Synopsis	Name of LSP that carries the test packets
Context	configure oam-pm session <i>string ip tunnel mpls sr-te lsp string</i>
Tree	lsp
String Length	1 to 64
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enable the twamp-light context
Context	configure oam-pm session <i>string ip twamp-light</i>
Tree	twamp-light
Description	Commands in this context configure the TWAMP-Light (Two Way Active Measurement Protocol, Light) or STAMP (Simple Two Way Active Measurement Protocol) test for the session.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the test
Context	configure oam-pm session <i>string ip twamp-light admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure oam-pm session <i>string ip twamp-light allow-ipv6-udp-checksum-zero boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	<p>When configured to true, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to false, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>

Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	configure oam-pm session <i>string ip twamp-light delay-template string</i>
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session's test
Context	configure oam-pm session <i>string ip twamp-light interval number</i>
Tree	interval
Range	100 1000 10000
Units	milliseconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loss



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the loss context
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Context	configure oam-pm session <i>string</i> ip twamp-light loss
Tree	loss
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flr-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	configure oam-pm session <i>string</i> ip twamp-light loss flr-threshold <i>number</i>
Tree	flr-threshold
Range	0 to 100
Default	50
Units	percent
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hli-force-count *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	configure oam-pm session <i>string</i> ip twamp-light loss hli-force-count <i>boolean</i>
Tree	hli-force-count
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timing



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the timing context
Context	configure oam-pm session <i>string</i> ip twamp-light loss timing
Tree	timing
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

chli-threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss timing chli-threshold <i>number</i>
Tree	chli-threshold
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

consec-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	configure oam-pm session <i>string</i> ip twamp-light loss timing consec-delta-t <i>number</i>
Tree	consec-delta-t
Range	2 to 10
Default	10
Introduced	16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

frames-per-delta-t *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t

Context **configure** **oam-pm session** *string ip twamp-light loss timing frames-per-delta-t number*

Tree [frames-per-delta-t](#)

Range 1 to 50

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loss-events



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **loss-events** context

Context **configure** **oam-pm session** *string ip twamp-light loss-events*

Tree [loss-events](#)

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

avg-flr-event [[direction](#)] *keyword*

Synopsis Enter the **avg-flr-event** list instance

Context **configure** **oam-pm session** *string ip twamp-light loss-events avg-flr-event keyword*

Tree [avg-flr-event](#)

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events avg-flr-event <i>keyword</i>
Tree	avg-flr-event
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events avg-flr-event <i>keyword</i> clear-threshold <i>decimal-number</i>
Tree	clear-threshold
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events avg-flr-event <i>keyword</i> raise-threshold <i>decimal-number</i>
Tree	raise-threshold
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

chli-event [**direction**] *keyword*

Synopsis	Enter the chli-event list instance
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Context	configure <i>oam-pm session string ip twamp-light loss-events chli-event keyword</i>
Tree	chli-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure <i>oam-pm session string ip twamp-light loss-events chli-event keyword</i>
Tree	chli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	configure <i>oam-pm session string ip twamp-light loss-events chli-event keyword clear-threshold number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure <i>oam-pm session string ip twamp-light loss-events chli-event keyword raise-threshold number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hli-event [[direction](#)] *keyword*

Synopsis	Enter the hli-event list instance
Context	configure oam-pm session <i>string ip twamp-light loss-events hli-event keyword</i>
Tree	hli-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string ip twamp-light loss-events hli-event keyword</i>
Tree	hli-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string ip twamp-light loss-events hli-event keyword clear-threshold number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string ip twamp-light loss-events hli-event keyword raise-threshold number</i>
Tree	raise-threshold
Range	1 to 864000

Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the unavailability-event list instance
Context	configure oam-pm session <i>string ip twamp-light loss-events unavailability-event keyword</i>
Tree	unavailability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string ip twamp-light loss-events unavailability-event keyword</i>
Tree	unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string ip twamp-light loss-events unavailability-event keyword clear-threshold number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

undet-availability-event [[direction](#)] *keyword*

Synopsis	Enter the undet-availability-event list instance
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i>
Tree	undet-availability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold

Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

undet-unavailability-event [[direction](#)] *keyword*

Synopsis	Enter the undet-unavailability-event list instance
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i>
Tree	undet-unavailability-event
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clear-threshold *number*

Synopsis	Clear threshold
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

raise-threshold *number*

Synopsis	Rising threshold that determines when to generate event
Context	configure oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-size *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of packet padding sent for the TWAMP-Light test
Context	configure oam-pm session <i>string</i> ip twamp-light pad-size <i>number</i>
Tree	pad-size
Range	0 to 2000
Default	0
Units	octets
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pad TLV size in each sent STAMP packet
Context	configure oam-pm session <i>string ip twamp-light pad-tlv-size number</i>
Tree	pad-tlv-size
Description	This command configures the PAD TLV included in the STAMP test packet with a total byte count specified by this command. TWAMP Light test packets do not allow TLVs. To pad the size of the TWAMP Light test packet the user must configure the pad-size command. STAMP test packets (the standard form of TWAMP Light) introduces TLVs for padding. Therefore, STAMP test packets must use the pad-tlv-size value.
Range	4 to 2000
Units	octets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

record-stats *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of statistics recorded for the TWAMP-Light test
Context	configure oam-pm session <i>string ip twamp-light record-stats keyword</i>
Tree	record-stats
Default	delay
Options	delay, loss, delay-and-loss
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

session-sender-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Packet type sent by the test
Context	configure oam-pm session <i>string ip twamp-light session-sender-type keyword</i>
Tree	session-sender-type
Description	This command configures the type of test packet format to transmit. When the stamp option is configured, STAMP transmission, packet formatting, and packet processing is allowed and STAMP test packets support TLVs. When the twamp-light option is configured, TWAMP Light transmission, packet formatting, and packet processing is allowed, but TWAMP Light test packets do not allow TLVs.
Default	twamp-light
Options	twamp-light, stamp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-duration *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	configure oam-pm session <i>string ip twamp-light test-duration number</i>
Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-id *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	configure oam-pm session <i>string ip twamp-light test-id number</i>
Tree	test-id
Range	0 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timestamp-format *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TWAMP Light or STAMP test packet timestamp format
Context	configure oam-pm session <i>string ip twamp-light timestamp-format keyword</i>
Tree	timestamp-format
Description	This command configures the format of the timestamp structure and epoch to include in the STAMP and TWAMP Light test packets. The command option value also sets the z-bit in the test packet. When timestamp-format value is ntp , the z-bit in the test packet is 0. When the timestamp-format is ptp , the z-bit in the test packets is 1.
Default	ntp
Options	ntp, ptp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-interval [[duration](#)] *keyword*

Synopsis	Enter the measurement-interval list instance
Context	configure oam-pm session <i>string measurement-interval keyword</i>
Tree	measurement-interval
Introduced	16.0.R5
Platforms	All

[duration] *keyword*

Synopsis	Duration of the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i>
Tree	measurement-interval
Options	15-mins, 1-hour, 1-day, 5-mins
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R5
Platforms	All

boundary-type *keyword*

Synopsis	Alignment of the start of the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> boundary-type <i>keyword</i>
Tree	boundary-type
Default	clock-aligned
Options	clock-aligned, test-relative
Introduced	16.0.R5
Platforms	All

clock-offset *number*

Synopsis	Offset for a clock-aligned measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> clock-offset <i>number</i>
Tree	clock-offset

Range	0 to 86399
Default	0
Units	seconds
Introduced	16.0.R5
Platforms	All

intervals-stored *number*

Synopsis	Maximum number of measurement intervals stored
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> intervals-stored <i>number</i>
Tree	intervals-stored
Range	1 to 96
Introduced	16.0.R5
Platforms	All

threshold-cross-alerts

Synopsis	Enter the threshold-cross-alerts context
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts
Tree	threshold-cross-alerts
Introduced	16.0.R5
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of TCAs for measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R5
Platforms	All

delay-events *boolean*

Synopsis	Enable delay TCAs for the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts delay-events <i>boolean</i>
Tree	delay-events
Default	false
Introduced	16.0.R5
Platforms	All

loss-events *boolean*

Synopsis	Enable loss TCAs for the measurement interval
Context	configure oam-pm session <i>string</i> measurement-interval <i>keyword</i> threshold-cross-alerts loss-events <i>boolean</i>
Tree	loss-events
Default	false
Introduced	16.0.R5
Platforms	All

mpls

Synopsis	Enable the mpls context
Context	configure oam-pm session <i>string</i> mpls
Tree	mpls
Notes	The following elements are part of a mandatory choice: ethernet , ip , or mpls .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dm

Synopsis	Enable the dm context
Context	configure oam-pm session <i>string</i> mpls dm
Tree	dm
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MPLS DM test
Context	configure oam-pm session <i>string</i> mpls dm admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	configure oam-pm session <i>string</i> mpls dm delay-template <i>string</i>
Tree	delay-template
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Elapsed time between query messages sent for the test
Context	configure oam-pm session <i>string</i> mpls dm interval <i>number</i>
Tree	interval
Range	1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
Default	1000
Units	milliseconds
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Size of the pad TLV in query messages sent for the test

Context **configure** *oam-pm session string mpls dm pad-tlv-size number*

Tree [pad-tlv-size](#)

Range 0 | 2 to 257

Default 0

Units octets

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflect-pad *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Copy the pad TLV in each query to the response

Context **configure** *oam-pm session string mpls dm reflect-pad boolean*

Tree [reflect-pad](#)

Default false

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-duration *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Duration of an on-demand test

Context **configure** *oam-pm session string mpls dm test-duration number*

Tree	test-duration
Range	1 to 86400
Units	seconds
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID for query and response messages
Context	configure oam-pm session <i>string</i> mpls dm test-id <i>number</i>
Tree	test-id
Range	0 to 67108863
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis	DSCP value for the session
Context	configure oam-pm session <i>string</i> mpls dscp <i>keyword</i>
Tree	dscp
Default	be
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class for the session
----------	----------------------------------

Context	configure <i>oam-pm session string mpls fc keyword</i>
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp

Synopsis	Enter the lsp context
Context	configure <i>oam-pm session string mpls lsp</i>
Tree	lsp
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mpls-tp-static

Synopsis	Enable the mpls-tp-static context
Context	configure <i>oam-pm session string mpls lsp mpls-tp-static</i>
Tree	mpls-tp-static
Notes	The following elements are part of a choice: mpls-tp-static , rsvp , or rsvp-auto .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp string

Synopsis	LSP to be tested
Context	configure <i>oam-pm session string mpls lsp mpls-tp-static lsp string</i>
Tree	lsp
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp

Synopsis	Enable the rsvp context
Context	configure oam-pm session <i>string</i> mpls lsp rsvp
Tree	rsvp
Notes	The following elements are part of a choice: mpls-tp-static , rsvp , or rsvp-auto .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp string

Synopsis	LSP to be tested
Context	configure oam-pm session <i>string</i> mpls lsp rsvp lsp string
Tree	lsp
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-return-object (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
Context	configure oam-pm session <i>string</i> mpls lsp rsvp udp-return-object (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	udp-return-object
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-auto

Synopsis	Enable the rsvp-auto context
Context	configure oam-pm session <i>string</i> mpls lsp rsvp-auto
Tree	rsvp-auto
Notes	The following elements are part of a choice: mpls-tp-static , rsvp , or rsvp-auto .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

from string

Synopsis	IPv4 address used to identify the LSP to be tested
Context	configure oam-pm session string mpls lsp rsvp-auto from string
Tree	from
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template string

Synopsis	LSP template used to identify the LSP to be tested
Context	configure oam-pm session string mpls lsp rsvp-auto lsp-template string
Tree	lsp-template
String Length	1 to 32
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

to string

Synopsis	IPv4 address used to identify the LSP to be tested
Context	configure oam-pm session string mpls lsp rsvp-auto to string
Tree	to
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-return-object (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis	IP address used by far end of the test to send response
Context	configure oam-pm session string mpls lsp rsvp-auto udp-return-object (ipv4-address-no-zone ipv6-address-no-zone)
Tree	udp-return-object
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern (*keyword | number*)

Synopsis	Pattern value repeated to fill padding field of packet
Context	configure oam-pm session <i>string</i> mpls pattern (<i>keyword number</i>)
Tree	pattern
Range	0 to 65535
Default	0
Options	sequential
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis	QoS profile for the session
Context	configure oam-pm session <i>string</i> mpls profile <i>keyword</i>
Tree	profile
Default	out
Options	in, out
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ttl *number*

Synopsis	MPLS TTL value for the session
Context	configure oam-pm session <i>string</i> mpls ttl <i>number</i>
Tree	ttl
Range	1 to 255
Default	255
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

session-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Session type
Context	configure oam-pm session <i>string</i> session-type <i>keyword</i>
Tree	session-type
Default	proactive
Options	proactive, on-demand
Introduced	16.0.R5
Platforms	All

streaming

Synopsis	Enter the streaming context
Context	configure oam-pm streaming
Tree	streaming
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delay-template [**delay-template-name**] *string*

Synopsis	Enter the delay-template list instance
Context	configure oam-pm streaming delay-template <i>string</i>
Tree	delay-template
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[**delay-template-name**] *string*

Synopsis	Streaming delay template name
Context	configure oam-pm streaming delay-template <i>string</i>
Tree	delay-template
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the delay template
Context	configure oam-pm streaming delay-template <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure oam-pm streaming delay-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fd-avg [[direction](#)] *keyword*

Synopsis	Add a list entry for fd-avg
Context	configure oam-pm streaming delay-template <i>string</i> fd-avg <i>keyword</i>
Tree	fd-avg
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm streaming delay-template <i>string</i> fd-avg <i>keyword</i>
Tree	fd-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ifdv-avg [*direction*] *keyword*

Synopsis	Add a list entry for ifdv-avg
Context	configure oam-pm streaming delay-template <i>string ifdv-avg keyword</i>
Tree	ifdv-avg
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[direction] *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	configure oam-pm streaming delay-template <i>string ifdv-avg keyword</i>
Tree	ifdv-avg
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sample-window *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Sample window duration for the template
Context	configure oam-pm streaming delay-template <i>string sample-window number</i>
Tree	sample-window
Range	10 to 60
Default	60
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-integrity *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Measurements for the sample window validity
Context	configure oam-pm streaming delay-template <i>string</i> window-integrity <i>number</i>
Tree	window-integrity
Range	1 to 100
Default	50
Units	percent
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.30 openflow commands

```

configure
- openflow
  - apply-groups reference
  - apply-groups-exclude reference
  - of-controller number
    - address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - echo-interval number
    - echo-multiple number
    - ipv6-address string
    - role keyword
    - tls-server-profile reference
    - version keyword
  - of-switch string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - aux-channel boolean
    - controller (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - apply-groups reference
      - apply-groups-exclude reference
      - ofc-loopback (ipv4-address-no-zone | ipv6-address-no-zone)
      - service-name string
      - tls-client-profile reference
    - description string
    - echo-interval number
    - echo-multiple number
    - flowtable number
      - apply-groups reference
      - apply-groups-exclude reference
      - max-size number
      - mismatch-action keyword
      - switch-defined-cookie boolean
    - logical-port-status keyword
    - ofs-id number

```


3.30.1 openflow command descriptions

openflow

Synopsis	Enter the openflow context
Context	configure openflow
Tree	openflow
Introduced	16.0.R4
Platforms	All

of-controller [[controller-id](#)] *number*

Synopsis	Enter the of-controller list instance
Context	configure openflow of-controller <i>number</i>
Tree	of-controller
Max. Instances	1
Introduced	16.0.R4
Platforms	VSR-NRC

[[controller-id](#)] *number*

Synopsis	OpenFlow controller ID
Context	configure openflow of-controller <i>number</i>
Tree	of-controller
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR-NRC

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address for the OpenFlow controller
Context	configure openflow of-controller <i>number</i> address <i>string</i>
Tree	address
Introduced	16.0.R4
Platforms	VSR-NRC

admin-state *keyword*

Synopsis	Administrative state of OpenFlow controller instance
Context	configure openflow of-controller <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	VSR-NRC

description *string*

Synopsis	Text description
Context	configure openflow of-controller <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR-NRC

echo-interval *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	configure openflow of-controller <i>number</i> echo-interval <i>number</i>
Tree	echo-interval
Range	10 to 3600
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	VSR-NRC

echo-multiple *number*

Synopsis	Consecutive lost messages before channel declared down
Context	configure openflow of-controller <i>number</i> echo-multiple <i>number</i>
Tree	echo-multiple
Range	3 to 100
Default	3
Introduced	16.0.R4
Platforms	VSR-NRC

ipv6-address *string*

Synopsis	IPv6 address for the OpenFlow channel to the controller
Context	configure openflow of-controller <i>number</i> ipv6-address <i>string</i>
Tree	ipv6-address
Introduced	19.10.R1
Platforms	VSR-NRC

role *keyword*

Synopsis	Role when multiple controllers connected to OF switch
Context	configure openflow of-controller <i>number</i> role <i>keyword</i>
Tree	role
Default	equal
Options	equal
Introduced	16.0.R4
Platforms	VSR-NRC

tls-server-profile *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Profile name used by the controller
Context	configure openflow of-controller <i>number</i> tls-server-profile <i>reference</i>

Tree	tls-server-profile
Reference	configure system security tls server-tls-profile <i>string</i>
Introduced	16.0.R4
Platforms	VSR-NRC

version *keyword*

Synopsis	Version negotiated between OF controller and switch
Context	configure openflow of-controller <i>number</i> version <i>keyword</i>
Tree	version
Default	version-1-3-1
Options	version-1-3-1
Introduced	16.0.R4
Platforms	VSR-NRC

of-switch [[name](#)] *string*

Synopsis	Enter the of-switch list instance
Context	configure openflow of-switch <i>string</i>
Tree	of-switch
Max. Instances	8
Introduced	16.0.R4
Platforms	All

[name] *string*

Synopsis	OpenFlow switch name
Context	configure openflow of-switch <i>string</i>
Tree	of-switch
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OpenFlow switch instance
Context	configure openflow of-switch <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

aux-channel *boolean*

Synopsis	Enable the auxiliary connection for the H-OFS instance
Context	configure openflow of-switch <i>string</i> aux-channel <i>boolean</i>
Tree	aux-channel
Default	false
Introduced	16.0.R4
Platforms	All

controller [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the controller list instance
Context	configure openflow of-switch <i>string</i> controller (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	controller
Max. Instances	2
Introduced	16.0.R4
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the OpenFlow channel to the controller
Context	configure openflow of-switch <i>string</i> controller (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i>
Tree	controller

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port number

Synopsis	Controller port ID
Context	configure openflow of-switch <i>string</i> controller (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) <i>port number</i>
Tree	controller
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

ofc-loopback (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Loopback IP address in the VPRN
Context	configure openflow of-switch <i>string</i> controller (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) <i>port number</i> ofc-loopback (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ofc-loopback
Introduced	16.0.R4
Platforms	All

service-name *string*

Synopsis	Administrative service name
Context	configure openflow of-switch <i>string</i> controller (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) <i>port number</i> service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

tls-client-profile *reference*

Synopsis	TLS profile name for use on the control channel
Context	configure openflow of-switch <i>string controller (ipv4-address-no-zone ipv6-address-no-zone)</i> <i>port number</i> tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure openflow of-switch <i>string description</i> <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R4
Platforms	All

echo-interval *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	configure openflow of-switch <i>string echo-interval</i> <i>number</i>
Tree	echo-interval
Range	1 to 3600
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	All

echo-multiple *number*

Synopsis	Consecutive lost messages before channel declared down
Context	configure openflow of-switch <i>string echo-multiple</i> <i>number</i>
Tree	echo-multiple
Range	3 to 100

Default	3
Introduced	16.0.R4
Platforms	All

flowtable [*table-id*] *number*

Synopsis	Enter the flowtable list instance
Context	configure openflow of-switch <i>string flowtable number</i>
Tree	flowtable
Max. Instances	1
Introduced	16.0.R4
Platforms	All

[table-id] *number*

Synopsis	OpenFlow table ID
Context	configure openflow of-switch <i>string flowtable number</i>
Tree	flowtable
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

max-size *number*

Synopsis	Maximum size of the flow table
Context	configure openflow of-switch <i>string flowtable number max-size number</i>
Tree	max-size
Range	1 to 524288
Default	1000
Introduced	16.0.R4
Platforms	All

mismatch-action *keyword*

Synopsis	Action taken when no match entries found in flow table
Context	configure openflow of-switch <i>string</i> flowtable <i>number</i> mismatch-action <i>keyword</i>
Tree	mismatch-action
Default	fall-through
Options	drop, fall-through, packet-in
Introduced	16.0.R4
Platforms	All

switch-defined-cookie *boolean*

Synopsis	Enable switch-defined cookie encoding
Context	configure openflow of-switch <i>string</i> flowtable <i>number</i> switch-defined-cookie <i>boolean</i>
Tree	switch-defined-cookie
Default	false
Introduced	16.0.R4
Platforms	All

logical-port-status *keyword*

Synopsis	Logical port type for status change reporting
Context	configure openflow of-switch <i>string</i> logical-port-status <i>keyword</i>
Tree	logical-port-status
Options	rsvp-te, mpls-tp, sr-te
Max. Instances	3
Introduced	16.0.R4
Platforms	All

ofs-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	OFS switch ID
----------	---------------

Context	configure openflow of-switch <i>string ofs-id number</i>
Tree	<i>ofs-id</i>
Range	1 to 8
Introduced	16.0.R6
Platforms	All

3.31 policy-options commands

```

configure
- policy-options
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression string
  - as-path-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - expression string
  - community string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression
      - apply-groups reference
      - apply-groups-exclude reference
      - exact boolean
      - expr string
    - member string
  - damping string
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress number
    - reuse number
    - suppress number
  - global-variables
    - name string
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - decimal decimal-number
      - number number
      - value string
  - policy-statement string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - action-type keyword
      - add-paths-send-limit (number | keyword)
      - admin-tag-policy (param-midstring-64 | string)
      - advertise-label keyword
      - aigp-metric
        - add (number | string)
        - set (keyword | number | string)
      - apply-groups reference
      - apply-groups-exclude reference
      - as-path
        - add (param-midstring | string)
        - replace (param-midstring | string)
      - as-path-prepend
        - as-path (number | string | keyword)
        - repeat (number | string)
      - bgp-high-priority boolean

```

configure policy-options policy-statement default-action bgp-leak

```

- bgp-leak boolean
- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirectation
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- description string
- entry number
- action
  - action-type keyword
  - add-paths-send-limit (number | keyword)
  - admin-tag-policy (param-midstring-64 | string)
  - advertise-label keyword
  - aigp-metric
    - add (number | string)
    - set (keyword | number | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path
    - add (param-midstring | string)
    - replace (param-midstring | string)
  - as-path-prepend
    - as-path (number | string | keyword)
    - repeat (number | string)

```

configure policy-options policy-statement entry action bgp-high-priority

```

- bgp-high-priority boolean
- bgp-leak boolean
- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- forwarding-class
  - fc keyword
  - priority keyword
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description string
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
  - as-path
    - group (param-midstring | string)

```

configure policy-options policy-statement entry from as-path length

```

- length
  - qualifier keyword
  - unique boolean
  - value (number | string)
- name (param-midstring | string)
- cluster-id
  - ip-address string
  - none-cluster-list boolean
- color number
- community
  - count
    - qualifier keyword
    - type keyword
    - value (number | string)
  - expression string
  - name (param-midstring-64 | string)
- distinguisher number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- external boolean
- family keyword
- flowspec
  - dest (param-midstring | string)
  - source (param-midstring | string)
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
  - ip-int-name string
  - service string
- level number
- local-preference
  - qualifier keyword
  - value (number | string)
- metric
  - qualifier keyword
  - value (number | string)
- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - decimal decimal-number
    - number number
    - value string
- prefix-list (param-midstring-64 | string)
- protocol
  - instance (keyword | number)
  - name keyword
- route-distinguisher-list (param-midstring-64 | string)
- source-address

```

configure policy-options policy-statement entry from source-address ip-address

```

    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - prefix-list (param-midstring | string)
    - state keyword
    - tag (number | keyword)
  - to
    - apply-groups reference
    - apply-groups-exclude reference
    - level number
    - neighbor
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
      - prefix-list (param-midstring | string)
      - prefix-list (param-midstring-64 | string)
      - protocol
        - instance (keyword | number)
        - name keyword
    - entry-type keyword
    - named-entry string
  - action
    - action-type keyword
    - add-paths-send-limit (number | keyword)
    - admin-tag-policy (param-midstring-64 | string)
    - advertise-label keyword
    - aigp-metric
      - add (number | string)
      - set (keyword | number | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - as-path
      - add (param-midstring | string)
      - replace (param-midstring | string)
    - as-path-prepend
      - as-path (number | string | keyword)
      - repeat (number | string)
    - bgp-high-priority boolean
    - bgp-leak boolean
    - bgp-med
      - adjust string
      - set (keyword | number | string)
    - bgp-tunnel-metric
      - prefer-aigp boolean
      - prefer-med boolean
      - value (string | number)
    - community
      - add (param-midstring-64 | string)
      - apply-groups reference
      - apply-groups-exclude reference
      - remove (param-midstring-64 | string)
      - replace (param-midstring-64 | string)
    - create-mpls-tunnel boolean
    - create-udp-tunnel boolean
    - damping (keyword | param-midstring | string)
    - dest-class number
    - egress-statistics boolean
    - flex-algo (string | number)
    - forwarding-class
      - fc keyword
      - priority keyword
    - ingress-statistics boolean
    - install-backup-path boolean
    - local-preference (number | string)
    - metric
      - add (number | string)
      - set (number | string)

```

configure policy-options policy-statement named-entry action metric subtract

```

- subtract (number | string)
- multicast-redirect
- fwd-service string
- ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
- prefer-igp boolean
- value (string | number)
- sr-maintenance-policy (param-midstring | string)
- srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
- apply-groups reference
- apply-groups-exclude reference
- route-exists string
- description string
- from
- aggregate-contributor boolean
- apply-groups reference
- apply-groups-exclude reference
- area string
- as-path
- group (param-midstring | string)
- length
- qualifier keyword
- unique boolean
- value (number | string)
- name (param-midstring | string)
- cluster-id
- ip-address string
- none-cluster-list boolean
- color number
- community
- count
- qualifier keyword
- type keyword
- value (number | string)
- expression string
- name (param-midstring-64 | string)
- distinguisher number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- external boolean
- family keyword
- flowspec
- dest (param-midstring | string)
- source (param-midstring | string)
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
- ip-int-name string
- service string

```


configure policy-options policy-statement named-entry from level

```

- level number
- local-preference
  - qualifier keyword
  - value (number | string)
- metric
  - qualifier keyword
  - value (number | string)
- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - decimal decimal-number
  - number number
  - value string
- prefix-list (param-midstring-64 | string)
- protocol
  - instance (keyword | number)
  - name keyword
- route-distinguisher-list (param-midstring-64 | string)
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- state keyword
- tag (number | keyword)
- to
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
  - neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
  - prefix-list (param-midstring-64 | string)
  - protocol
    - instance (keyword | number)
    - name keyword
- prefix-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix (ipv4-prefix | ipv6-prefix) type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - end-length number
  - mask-pattern (ipv4-address-no-zone | ipv6-address-no-zone)
  - start-length number
  - through-length number
  - to-prefix (ipv4-prefix | ipv6-prefix)
- route-distinguisher-list string
  - apply-groups reference
  - apply-groups-exclude reference

```

configure policy-options route-distinguisher-list rd-entry

– **rd-entry** *string*

3.31.1 policy-options command descriptions

policy-options

Synopsis	Enter the policy-options context
Context	configure policy-options
Tree	policy-options
Introduced	16.0.R1
Platforms	All

as-path [[name](#)] *string*

Synopsis	Enter the as-path list instance
Context	configure policy-options as-path <i>string</i>
Tree	as-path
Introduced	16.0.R1
Platforms	All

[\[name\]](#) *string*

Synopsis	AS path name
Context	configure policy-options as-path <i>string</i>
Tree	as-path
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

expression *string*

Synopsis	Regular expression string
Context	configure policy-options as-path <i>string</i> expression <i>string</i>
Tree	expression
String Length	1 to 255
Introduced	16.0.R1

Platforms All

as-path-group [[name](#)] *string*

Synopsis Enter the **as-path-group** list instance
 Context **configure** [policy-options as-path-group](#) *string*
 Tree [as-path-group](#)
 Introduced 16.0.R1
 Platforms All

[name] *string*

Synopsis AS path group name
 Context **configure** [policy-options as-path-group](#) *string*
 Tree [as-path-group](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

entry [[entry](#)] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [policy-options as-path-group](#) *string entry number*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms All

[entry] *number*

Synopsis AS path entry ID
 Context **configure** [policy-options as-path-group](#) *string entry number*
 Tree [entry](#)
 Range 1 to 128
 Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

expression *string*

Synopsis Regular expression string
Context **configure** [policy-options](#) [as-path-group](#) *string* [entry](#) [number](#) [expression](#) *string*
Tree [expression](#)
String Length 1 to 255
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

community [[name](#)] *string*

Synopsis Enter the **community** list instance
Context **configure** [policy-options](#) [community](#) *string*
Tree [community](#)
Introduced 16.0.R1
Platforms All

[name] *string*

Synopsis Community name
Context **configure** [policy-options](#) [community](#) *string*
Tree [community](#)
Description This command configures a route policy community name.
String values must be composed of printable, 7-bit ASCII characters. If the string contains special characters (<#>, [\\$](#), spaces, and so on), the entire string must be enclosed within double quotes.
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

expression

Synopsis	Enable the expression context
Context	configure policy-options community <i>string</i> expression
Tree	expression
Introduced	16.0.R1
Platforms	All

exact *boolean*

Synopsis	Match exactly for the specified expression
Context	configure policy-options community <i>string</i> expression exact <i>boolean</i>
Tree	exact
Default	false
Introduced	16.0.R1
Platforms	All

expr *string*

Synopsis	Community expression value
Context	configure policy-options community <i>string</i> expression expr <i>string</i>
Tree	expr
String Length	1 to 900
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

member [[member](#)] *string*

Synopsis	Add a list entry for member
Context	configure policy-options community <i>string</i> member <i>string</i>
Tree	member
Introduced	16.0.R1
Platforms	All

[member] *string*

Synopsis	Community member value
Context	configure policy-options community <i>string</i> member <i>string</i>
Tree	member
String Length	1 to 72
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

damping [[name](#)] *string*

Synopsis	Enter the damping list instance
Context	configure policy-options damping <i>string</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Damping profile name
Context	configure policy-options damping <i>string</i>
Tree	damping
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

half-life *number*

Synopsis	Time after the FOM value is halved
Context	configure policy-options damping <i>string</i> half-life <i>number</i>
Tree	half-life
Range	1 to 45
Units	minutes
Introduced	16.0.R1

Platforms All

max-suppress *number*

Synopsis Maximum time for a route to remain suppressed

Context **configure** [policy-options](#) [damping](#) *string max-suppress number*

Tree [max-suppress](#)

Range 1 to 720

Units minutes

Introduced 16.0.R1

Platforms All

reuse *number*

Synopsis Value below which a suppressed route can be used again

Context **configure** [policy-options](#) [damping](#) *string reuse number*

Tree [reuse](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms All

suppress *number*

Synopsis Value above which a route is suppressed

Context **configure** [policy-options](#) [damping](#) *string suppress number*

Tree [suppress](#)

Range 1 to 20000

Introduced 16.0.R1

Platforms All

global-variables

Synopsis Enter the **global-variables** context

Context **configure** [policy-options](#) [global-variables](#)

Tree [global-variables](#)

Introduced 16.0.R4
 Platforms All

name [*variable-name*] *string*

Synopsis Enter the **name** list instance
 Context **configure** *policy-options global-variables name string*
 Tree *name*
 Max. Instances 1000
 Introduced 16.0.R4
 Platforms All

[variable-name] *string*

Synopsis Global variable name used to reference policy functions
 Context **configure** *policy-options global-variables name string*
 Tree *name*
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R4
 Platforms All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the policy variable
 Context **configure** *policy-options global-variables name string address (ipv4-address-no-zone | ipv6-address-no-zone)*
 Tree *address*
 Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.
 Introduced 16.0.R4
 Platforms All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	configure policy-options global-variables name <i>string</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	19.7.R1
Platforms	All

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options global-variables name <i>string</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R4
Platforms	All

value *string*

Synopsis	Policy variable value
Context	configure policy-options global-variables name <i>string</i> value <i>string</i>
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R4
Platforms	All

policy-statement [[name](#)] *string*

Synopsis	Enter the policy-statement list instance
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Context	configure policy-options policy-statement <i>string</i>
Tree	policy-statement
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Route policy statement name
Context	configure policy-options policy-statement <i>string</i>
Tree	policy-statement
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enable the default-action context
Context	configure policy-options policy-statement <i>string</i> default-action
Tree	default-action
Introduced	16.0.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>string</i> default-action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>string</i> default-action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>string</i> default-action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>string</i> default-action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>string</i> default-action aigp-metric

Tree	aigp-metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>string</i> default-action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>string</i> default-action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> default-action as-path
Tree	as-path
Introduced	16.0.R1

Platforms All

add (*param-midstring* | *string*)

Synopsis AS path to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path](#) **add** (*param-midstring* | *string*)

Tree [add](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 16.0.R1

Platforms All

replace (*param-midstring* | *string*)

Synopsis AS path to replace

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path](#) **replace** (*param-midstring* | *string*)

Tree [replace](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 16.0.R1

Platforms All

as-path-prepend

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 16.0.R1

Platforms All

as-path (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context	configure policy-options policy-statement <i>string</i> default-action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>string</i> default-action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>string</i> default-action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6 <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p>

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>string</i> default-action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	16.0.R1
Platforms	All

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>string</i> default-action bgp-med
Tree	bgp-med
Introduced	19.7.R1
Platforms	All

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>string</i> default-action bgp-med adjust <i>string</i>
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.7.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
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Context	configure policy-options policy-statement <i>string</i> default-action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.7.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to false, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	23.3.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>string</i> default-action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the <code>prefer-aigp</code> option is set to false the <code>prefer-aigp</code> option is set to true but the BGP-LU route does not have an AIGP attribute
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> default-action community

Tree	community
Introduced	16.0.R1
Platforms	All

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>string</i> default-action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>string</i> default-action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
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Context	configure policy-options policy-statement <i>string</i> default-action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>string</i> default-action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6 • vpn-ipv4 • vpn-ipv6
Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>string</i> default-action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel

Default	false
Introduced	16.0.R1
Platforms	All

damping (*keyword | param-midstring | string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>string</i> default-action damping (<i>keyword param-midstring string</i>)
Tree	damping
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	configure policy-options policy-statement <i>string</i> default-action dest-class <i>number</i>
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> default-action egress-statistics <i>boolean</i>
Tree	egress-statistics
Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false

Introduced	20.10.R1
Platforms	All

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>string</i> default-action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	<p>This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.</p> <p>Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.</p> <p>This command is not supported for multicast address families.</p>
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

ingress-statistics *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> default-action ingress-statistics <i>boolean</i>
Tree	ingress-statistics
Description	<p>When configured to true, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.</p> <p>When configured to false, this command disables the allocation of statistical indexes to BGP-LU route entries.</p>
Default	false
Introduced	20.10.R1
Platforms	All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
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Context	configure policy-options policy-statement <i>string</i> default-action install-backup-path <i>boolean</i>
Tree	install-backup-path
Default	false
Introduced	16.0.R1
Platforms	All

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	configure policy-options policy-statement <i>string</i> default-action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> default-action metric
Tree	metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>string</i> default-action metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1

Platforms All

set (*number* | *string*)

Synopsis Metric to assign

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) **set** (*number* | *string*)

Tree [set](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

subtract (*number* | *string*)

Synopsis Metric to subtract

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) **subtract** (*number* | *string*)

Tree [subtract](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

multicast-redirect

Synopsis Enter the **multicast-redirect** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [multicast-redirect](#)

Tree [multicast-redirect](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
Context	configure policy-options policy-statement <i>string</i> default-action multicast-redirection fwd-service <i>string</i>
Tree	fwd-service
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	configure policy-options policy-statement <i>string</i> default-action multicast-redirection ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy (*param-midstring* | *string*)

Synopsis	BGP-VPN imported route and a NAT policy association
Context	configure policy-options policy-statement <i>string</i> default-action nat-policy (<i>param-midstring</i> <i>string</i>)
Tree	nat-policy
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type accept regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>string</i> default-action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>string</i> default-action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

preference (*number* | *string*)

Synopsis	Route preference applied to routes
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Context	configure policy-options policy-statement <i>string</i> default-action preference (<i>number</i> <i>string</i>)
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>string</i> default-action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>string</i> default-action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	19.10.R1
Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	configure policy-options policy-statement <i>string</i> default-action source-class <i>number</i>
Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis Enter the **sr-label-index** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [sr-label-index](#)

Tree [sr-label-index](#)

Description Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.

The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.

This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.

When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.

Introduced 19.10.R1

Platforms All

prefer-igp *boolean*

Synopsis Use the SR label index from the IGP route when present

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [sr-label-index](#) [prefer-igp](#) *boolean*

Tree [prefer-igp](#)

Description When configured to **true**, BGP obtains the SID index from the IGP route (if a SID index is present) and the **configure router bgp segment-routing prefix-sid-range global** command is set to **true**.

This command applies only to route table import policies.

When configured to **false**, or the SID index is not present in the IGP route, or the **configure router bgp segment-routing prefix-sid-range global** command is not set to **true**, BGP obtains the label index value from the **value** command.

Default false

Introduced 19.10.R1

Platforms All

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>string</i> default-action sr-label-index <i>value</i> (<i>string</i> <i>number</i>)
Tree	value
Description	This command specifies the BGP SR label index value to be associated with a route or routes. If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation. If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>string</i> default-action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

srv6-return-path-bfd-sid (*policy-var-name* | *ipv6-address*)

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	configure policy-options policy-statement <i>string</i> default-action srv6-return-path-bfd-sid (<i>policy-var-name</i> <i>ipv6-address</i>)
Tree	srv6-return-path-bfd-sid
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.

String Length	1 to 32
Introduced	23.3.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>string</i> default-action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action tag (<i>number</i> <i>string</i>)
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>string</i> default-action type (<i>number</i> <i>string</i>)
Tree	type
String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure policy-options policy-statement <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Entry ID for a route policy entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i>
Tree	entry
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action advertise-label <i>keyword</i>

Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action aigp-metric
Tree	aigp-metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp

Notes	The following elements are part of a choice: add or set .
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path add (<i>param-midstring</i> <i>string</i>)
Tree	add
String Length	1 to 32
Notes	The following elements are part of a choice: add or replace .
Introduced	16.0.R1
Platforms	All

replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path replace (<i>param-midstring</i> <i>string</i>)
Tree	replace
String Length	1 to 32
Notes	The following elements are part of a choice: add or replace .
Introduced	16.0.R1
Platforms	All

as-path-prepend

Synopsis	Enter the as-path-prepend context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path-prepend
Tree	as-path-prepend
Introduced	16.0.R1
Platforms	All

as-path (*number* | *string* | *keyword*)

Synopsis	AS number to prepend to the AS path attribute
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	16.0.R1
Platforms	All

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	16.0.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-high-priority <i>boolean</i>

Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6 <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p> <p>When configured to false, no routes are tagged for faster route table updates.</p>
Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	16.0.R1
Platforms	All

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-med
Tree	bgp-med
Introduced	19.7.R1
Platforms	All

adjust *string*

Synopsis	BGP-MED adjustment
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-med adjust <i>string</i>
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.7.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.7.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-tunnel-metric prefer-aigp <i>boolean</i>

Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to false, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	23.3.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the <code>prefer-aigp</code> option is set to false

- the `prefer-aigp` option is set to true but the BGP-LU route does not have an AIGP attribute

String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community
Tree	community
Introduced	16.0.R1
Platforms	All

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String Length	1 to 64

Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> • evpn • ipv4 • ipv6 • label-ipv4 • label-ipv6 • vpn-ipv4 • vpn-ipv6

Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action dest-class <i>number</i>
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action egress-statistics <i>boolean</i>
Tree	egress-statistics
Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

forwarding-class

Synopsis	Enter the forwarding-class context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action forwarding-class
Tree	forwarding-class
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc keyword

Synopsis Forwarding class associated with the route

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [forwarding-class](#) **fc** *keyword*

Tree [fc](#)

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority keyword

Synopsis Route priority

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [forwarding-class](#) [priority](#) *keyword*

Tree [priority](#)

Options low, high

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress-statistics *boolean*

Synopsis Enable ingress statistics for BGP-LU routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [ingress-statistics](#) *boolean*

Tree [ingress-statistics](#)

Description When configured to **true**, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.
When configured to **false**, this command disables the allocation of statistical indexes to BGP-LU route entries.

Default false

Introduced 20.10.R1

Platforms All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action install-backup-path <i>boolean</i>
Tree	install-backup-path
Default	false
Introduced	16.0.R1
Platforms	All

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric
Tree	metric
Introduced	16.0.R1
Platforms	All

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32

Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

set (*number* | *string*)

Synopsis	Metric to assign
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric set (<i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action metric subtract (<i>number</i> <i>string</i>)
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	16.0.R1
Platforms	All

multicast-redirect

Synopsis	Enter the multicast-redirect context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action multicast-redirect
Tree	multicast-redirect
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis Service ID for multicast redirection

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [multicast-redirection](#) **fwd-service** *string*

Tree [fwd-service](#)

Default Base

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis Alternate interface where IGMP messages are redirected

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [multicast-redirection](#) **ip-int-name** *string*

Tree [ip-int-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy (*param-midstring* | *string*)

Synopsis BGP-VPN imported route and a NAT policy association

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) **nat-policy** (*param-midstring* | *string*)

Tree [nat-policy](#)

Description This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.

A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.

All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type **accept** regardless of whether the NAT policy is configured in the action.

String Length 1 to 32
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis Next-hop IP address applied to routes
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [next-hop](#) (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)
 Tree [next-hop](#)
 String Length 1 to 32
 Options peer-address, self
 Introduced 16.0.R1
 Platforms All

origin (*keyword* | *string*)

Synopsis BGP origin for routes that are exported into BGP
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [origin](#) (*keyword* | *string*)
 Tree [origin](#)
 String Length 1 to 32
 Options igp, egp, incomplete
 Introduced 16.0.R1
 Platforms All

origin-validation-state (*keyword* | *string*)

Synopsis Origin validation state for routes
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [origin-validation-state](#) (*keyword* | *string*)
 Tree [origin-validation-state](#)
 String Length 1 to 32
 Options valid, not-found, invalid
 Introduced 16.0.R1
 Platforms All

preference (*number* | *string*)

Synopsis	Route preference applied to routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action preference (<i>number</i> <i>string</i>)
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	19.10.R1
Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action source-class <i>number</i>

Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false

Introduced	19.10.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-label-index value (<i>string</i> <i>number</i>)
Tree	value
Description	This command specifies the BGP SR label index value to be associated with a route or routes. If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation. If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

srv6-return-path-bfd-sid (*policy-var-name* | *ipv6-address*)

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action srv6-return-path-bfd-sid (<i>policy-var-name</i> <i>ipv6-address</i>)
Tree	srv6-return-path-bfd-sid
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	16.0.R1
Platforms	All

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action tag (<i>number</i> <i>string</i>)
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> action type (<i>number</i> <i>string</i>)
Tree	type

String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

conditional-expression

Synopsis	Enable the conditional-expression context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> conditional-expression
Tree	conditional-expression
Introduced	16.0.R1
Platforms	All

route-exists *string*

Synopsis	Conditional expression to test route existence
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> conditional-expression route-exists <i>string</i>
Tree	route-exists
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

from

Synopsis	Enable the from context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from

Tree	from
Description	Commands in this context configure policy match criteria based on the route's source or the protocol from which it is received. If conditions are not specified, all route sources are considered to match.
Introduced	16.0.R1
Platforms	All

aggregate-contributor *boolean*

Synopsis	Enable aggregate route match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from aggregate-contributor <i>boolean</i>
Tree	aggregate-contributor
Description	<p>When configured to true, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, vrf-export policy or vrf-import policy, no routes are matched by that entry.</p> <p>When configured to false, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.</p>
Default	false
Introduced	20.10.R1
Platforms	All

area *string*

Synopsis	OSPF area as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from area <i>string</i>
Tree	area
Introduced	16.0.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path
Tree	as-path
Introduced	16.0.R1
Platforms	All

group (*param-midstring* | *string*)

Synopsis	AS path group as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path group (<i>param-midstring</i> <i>string</i>)
Tree	group
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	16.0.R1
Platforms	All

length

Synopsis	Enter the length context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length
Tree	length
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	16.0.R1
Platforms	All

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path length unique <i>boolean</i>
Tree	unique
Default	false
Introduced	16.0.R1
Platforms	All

value (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 255
Introduced	16.0.R1
Platforms	All

name (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from as-path name (<i>param-midstring</i> <i>string</i>)
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	16.0.R1
Platforms	All

cluster-id

Synopsis	Enter the cluster-id context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from cluster-id
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from cluster-id ip-address <i>string</i>
Tree	ip-address
Max. Instances	5
Notes	The following elements are part of a choice: ip-address or none-cluster-list . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from cluster-id none-cluster-list <i>boolean</i>
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: ip-address or none-cluster-list .
Introduced	16.0.R1
Platforms	All

color *number*

Synopsis	Color ID as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from color <i>number</i>
Tree	color

Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community
Tree	community
Introduced	16.0.R1
Platforms	All

count

Synopsis	Enter the count context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community count
Tree	count
Introduced	16.0.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community count qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Community count to match the community count criteria
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community count type <i>keyword</i>
Tree	type
Options	standard, extended, large
Introduced	16.0.R1
Platforms	All

value (*number* | *string*)

Synopsis	Number of BGP communities to match the BGP route
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community count value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 1024
Introduced	16.0.R1
Platforms	All

expression *string*

Synopsis	Community expression name as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community expression <i>string</i>
Tree	expression
String Length	1 to 900
Notes	The following elements are part of a choice: expression or name .
Introduced	16.0.R1
Platforms	All

name (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from community name (<i>param-midstring-64</i> <i>string</i>)
Tree	name
String Length	1 to 64

Notes	The following elements are part of a choice: expression or name .
Introduced	16.0.R1
Platforms	All

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from distinguisher <i>number</i>
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from evpn-type <i>keyword</i>
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	16.0.R4

Platforms All

external *boolean*

Synopsis Specify the external IS-IS route as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [external](#) *boolean*

Tree [external](#)

Default false

Introduced 16.0.R1

Platforms All

family *keyword*

Synopsis Address family as the match condition

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [family](#) *keyword*

Tree [family](#)

Options ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6

Max. Instances 20

Introduced 16.0.R1

Platforms All

flowspec

Synopsis Enter the **flowspec** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [flowspec](#)

Tree [flowspec](#)

Introduced 16.0.R4

Platforms All

dest (*param-midstring* | *string*)

Synopsis BGP FlowSpec route matches per destination IP prefix

Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from flowspec dest (<i>param-midstring</i> <i>string</i>)
Tree	dest
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

source (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from flowspec source (<i>param-midstring</i> <i>string</i>)
Tree	source
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

group-address (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from group-address (<i>param-midstring</i> <i>string</i>)
Tree	group-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

host-ip (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from host-ip (<i>param-midstring</i> <i>string</i>)
Tree	host-ip
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

interface (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface (<i>named-item</i> <i>interface-name</i> <i>interface-name</i> <i>interface-name</i>)
Tree	interface
String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface-subnets

Synopsis	Enter the interface-subnets context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface-subnets
Tree	interface-subnets
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> • export, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • route-table-import, when used with BGP • vrf-export, when used with MP-BGP
Introduced	21.2.R1
Platforms	All

ip-int-name *string*

Synopsis	Interface name as the match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface-subnets ip-int-name <i>string</i>
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.

String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

service string

Synopsis	Service ID of the interface subnets
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from interface-subnets service <i>string</i>
Tree	service
Default	Base
Introduced	21.2.R1
Platforms	All

level number

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from level <i>number</i>
Tree	level
Range	1 to 2
Introduced	16.0.R1
Platforms	All

local-preference

Synopsis	Enter the local-preference context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from local-preference
Tree	local-preference
Introduced	16.0.R1
Platforms	All

qualifier keyword

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from local-preference qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	16.0.R1
Platforms	All

value (number | string)

Synopsis	BGP routes per local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from local-preference value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from metric
Tree	metric
Introduced	16.0.R1
Platforms	All

qualifier keyword

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from metric qualifier <i>keyword</i>
Tree	qualifier
Default	equal

Options	equal, or-higher, or-lower
Introduced	16.0.R1
Platforms	All

value (*number* | *string*)

Synopsis	Local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from metric value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

mvpn-type *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from mvpn-type <i>keyword</i>
Tree	mvpn-type
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	16.0.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from neighbor
Tree	neighbor
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from neighbor ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone ipv4-address-with-zone ipv6-address-with-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring | string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from neighbor prefix-list (<i>param-midstring string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

next-hop

Synopsis	Enter the next-hop context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from next-hop
Tree	next-hop
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the next hop to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from next-hop ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address

Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from next-hop prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

origin *keyword*

Synopsis	Route origin match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from origin <i>keyword</i>
Tree	origin
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the sub-mgmt option for the protocol command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the direct option for the protocol command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the direct option for the protocol command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the managed option for the protocol command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp

Introduced	16.0.R1
Platforms	All

origin-validation-state *keyword*

Synopsis	Origin validation state used for match criteria
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from origin-validation-state <i>keyword</i>
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from ospf-type <i>number</i>
Tree	ospf-type
Range	1 to 2
Introduced	16.0.R1
Platforms	All

path-type *keyword*

Synopsis	Path type as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from path-type <i>keyword</i>
Tree	path-type
Options	ibgp, ebgp
Introduced	16.0.R1
Platforms	All

policy (*string* | *string*)

Synopsis	Policy statement as a match criterion
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy (<i>string</i> <i>string</i>)
Tree	policy
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

policy-variables

Synopsis	Enter the policy-variables context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables
Tree	policy-variables
Introduced	16.0.R1
Platforms	All

name [[variable-name](#)] *string*

Synopsis	Enter the name list instance
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i>
Tree	name
Max. Instances	10
Introduced	16.0.R1
Platforms	All

[[variable-name](#)] *string*

Synopsis	Global variable name used to reference policy functions
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the policy variable
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R1
Platforms	All

decimal *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i> decimal <i>decimal-number</i>
Tree	decimal
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	19.7.R1
Platforms	All

number *number*

Synopsis	Numerical value of the policy variable
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i> number <i>number</i>
Tree	number
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R1
Platforms	All

value string

Synopsis	Policy variable value
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from policy-variables name <i>string</i> value <i>string</i>
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from prefix-list (<i>param-midstring-64</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	16.0.R1
Platforms	All

instance (*keyword | number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from protocol instance (<i>keyword number</i>)
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the name command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Default	0
Options	all
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from protocol name <i>keyword</i>
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none"> • direct • static • isis • aggregate • bgp • bgp-label • direct-interface If multiple protocols are specified, the instance command cannot be explicitly configured.
Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video
Max. Instances	5

Introduced	16.0.R1
Platforms	All

route-distinguisher-list (*param-midstring-64* | *string*)

Synopsis	Route Distinguisher list as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from route-distinguisher-list (<i>param-midstring-64</i> <i>string</i>)
Tree	route-distinguisher-list
Description	This command specifies the (possibly parameterized) name of a route distinguisher (RD) list. This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list. BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.
String Length	1 to 64
Introduced	23.3.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from source-address
Tree	source-address
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> from source-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1

Platforms All

prefix-list (*param-midstring* | *string*)

Synopsis Name of a source address prefix list to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [source-address](#) [prefix-list](#) (*param-midstring* | *string*)

Tree [prefix-list](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 16.0.R1

Platforms All

state *keyword*

Synopsis State used as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) *state* *keyword*

Tree [state](#)

Description This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.

Options srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag (*number* | *keyword*)

Synopsis Route tag used as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [tag](#) (*number* | *keyword*)

Tree [tag](#)

Range 1 to 4294967295

Options no-tag

Introduced 16.0.R1

Platforms All

to

Synopsis	Enable the to context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to
Tree	to
Introduced	16.0.R1
Platforms	All

level number

Synopsis	IS-IS route level as a match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to level <i>number</i>
Tree	level
Range	1 to 2
Introduced	16.0.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to neighbor
Tree	neighbor
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to neighbor ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to neighbor prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	16.0.R1
Platforms	All

prefix-list (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to prefix-list (<i>param-midstring-64</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to protocol
Tree	protocol
Introduced	16.0.R1
Platforms	All

instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
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Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Range	0 to 127
Default	0
Options	all
Introduced	16.0.R1
Platforms	All

name *keyword*

Synopsis	Protocol name to match
Context	configure policy-options policy-statement <i>string</i> entry <i>number</i> to protocol name <i>keyword</i>
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	16.0.R1
Platforms	All

entry-type *keyword*

Synopsis	The entry type for a route policy entry
Context	configure policy-options policy-statement <i>string</i> entry-type <i>keyword</i>
Tree	entry-type
Default	numbered
Options	numbered, named
Introduced	19.10.R1
Platforms	All

named-entry [[entry-name](#)] *string*

Synopsis	Enter the named-entry list instance
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i>
Tree	named-entry

Max. Instances	16384
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

[entry-name] *string*

Synopsis	Route policy entry name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i>
Tree	named-entry
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

action

Synopsis	Enable the action context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action
Tree	action
Introduced	19.10.R1
Platforms	All

action-type *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action action-type <i>keyword</i>
Tree	action-type
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

add-paths-send-limit (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action add-paths-send-limit (<i>number</i> <i>keyword</i>)
Tree	add-paths-send-limit
Range	1 to 16
Options	multipaths
Introduced	19.10.R1
Platforms	All

admin-tag-policy (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action admin-tag-policy (<i>param-midstring-64</i> <i>string</i>)
Tree	admin-tag-policy
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

advertise-label *keyword*

Synopsis	Label allocation for matched BGP routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action advertise-label <i>keyword</i>
Tree	advertise-label
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	19.10.R1
Platforms	All

aigp-metric

Synopsis	Enter the aigp-metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action aigp-metric

Tree	aigp-metric
Introduced	19.10.R1
Platforms	All

add (*number* | *string*)

Synopsis	AIGP metric to add
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action aigp-metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add or set .
Introduced	19.10.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action aigp-metric set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: add or set .
Introduced	19.10.R1
Platforms	All

as-path

Synopsis	Enter the as-path context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action as-path
Tree	as-path
Introduced	19.10.R1

Platforms All

add (*param-midstring* | *string*)

Synopsis AS path to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [as-path](#) [add](#) (*param-midstring* | *string*)

Tree [add](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 19.10.R1

Platforms All

replace (*param-midstring* | *string*)

Synopsis AS path to replace

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [as-path](#) [replace](#) (*param-midstring* | *string*)

Tree [replace](#)

String Length 1 to 32

Notes The following elements are part of a choice: **add** or **replace**.

Introduced 19.10.R1

Platforms All

as-path-prepend

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 19.10.R1

Platforms All

as-path (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action as-path-prepend as-path (<i>number</i> <i>string</i> <i>keyword</i>)
Tree	as-path
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	19.10.R1
Platforms	All

repeat (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action as-path-prepend repeat (<i>number</i> <i>string</i>)
Tree	repeat
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	19.10.R1
Platforms	All

bgp-high-priority *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-high-priority <i>boolean</i>
Tree	bgp-high-priority
Description	<p>When configured to true, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> • IPv4 • label-IPv4 • IPv6 • label-IPv6

This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

bgp-leak *boolean*

Synopsis	Allow leaking for BGP routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-leak <i>boolean</i>
Tree	bgp-leak
Default	false
Introduced	19.10.R1
Platforms	All

bgp-med

Synopsis	Enter the bgp-med context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-med
Tree	bgp-med
Introduced	19.10.R1
Platforms	All

adjust *string*

Synopsis	BGP-MED adjustment
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-med adjust <i>string</i>
Tree	adjust
String Length	1 to 64
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.10.R1
Platforms	All

set (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-med set (<i>keyword</i> <i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: adjust or set .
Introduced	19.10.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric
Tree	bgp-tunnel-metric
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric prefer-aigp <i>boolean</i>
Tree	prefer-aigp
Description	<p>When configured to true, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to false, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false

Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric prefer-med <i>boolean</i>
Tree	prefer-med
Description	<p>When configured to true, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to false, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	23.3.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action bgp-tunnel-metric value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> the <code>prefer-aigp</code> option is set to false the <code>prefer-aigp</code> option is set to true but the BGP-LU route does not have an AIGP attribute
String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community
Tree	community
Introduced	19.10.R1
Platforms	All

add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community add (<i>param-midstring-64</i> <i>string</i>)
Tree	add
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community remove (<i>param-midstring-64</i> <i>string</i>)
Tree	remove
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

replace (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action community replace (<i>param-midstring-64</i> <i>string</i>)
Tree	replace
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: (add and remove) or replace . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

create-mpls-tunnel *boolean*

Synopsis	Create an MPLS tunnel
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action create-mpls-tunnel <i>boolean</i>
Tree	create-mpls-tunnel
Description	When configured to true , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none">• evpn• ipv4• ipv6• label-ipv4• label-ipv6• vpn-ipv4• vpn-ipv6
Default	false
Introduced	21.10.R1
Platforms	All

create-udp-tunnel *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action create-udp-tunnel <i>boolean</i>
Tree	create-udp-tunnel
Default	false
Introduced	19.10.R1
Platforms	All

damping (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action damping (<i>keyword</i> <i>param-midstring</i> <i>string</i>)
Tree	damping
String Length	1 to 32
Options	none
Introduced	19.10.R1
Platforms	All

dest-class *number*

Synopsis	Default destination class for the policy statement
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action dest-class <i>number</i>
Tree	dest-class
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

egress-statistics *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action egress-statistics <i>boolean</i>
Tree	egress-statistics

Description	When configured to true , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to false , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

flex-algo (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action flex-algo (<i>string</i> <i>number</i>)
Tree	flex-algo
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

forwarding-class

Synopsis	Enter the forwarding-class context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action forwarding-class
Tree	forwarding-class
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class associated with the route
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action forwarding-class <i>fc</i> <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Route priority
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action forwarding-class <i>priority</i> <i>keyword</i>
Tree	priority
Options	low, high
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress-statistics *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action ingress-statistics <i>boolean</i>
Tree	ingress-statistics
Description	<p>When configured to true, this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.</p> <p>When configured to false, this command disables the allocation of statistical indexes to BGP-LU route entries.</p>
Default	false
Introduced	20.10.R1
Platforms	All

install-backup-path *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action install-backup-path <i>boolean</i>

Tree	install-backup-path
Default	false
Introduced	19.10.R1
Platforms	All

local-preference (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action local-preference (<i>number</i> <i>string</i>)
Tree	local-preference
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric
Tree	metric
Introduced	19.10.R1
Platforms	All

add (*number* | *string*)

Synopsis	Metric to add
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric add (<i>number</i> <i>string</i>)
Tree	add
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	19.10.R1
Platforms	All

set (*number* | *string*)

Synopsis	Metric to assign
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric set (<i>number</i> <i>string</i>)
Tree	set
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	19.10.R1
Platforms	All

subtract (*number* | *string*)

Synopsis	Metric to subtract
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action metric subtract (<i>number</i> <i>string</i>)
Tree	subtract
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: add , set , or subtract .
Introduced	19.10.R1
Platforms	All

multicast-redirection

Synopsis	Enter the multicast-redirection context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action multicast-redirection
Tree	multicast-redirection
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *string*

Synopsis	Service ID for multicast redirection
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action multicast-redirect fwd-service <i>string</i>
Tree	fwd-service
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-int-name *string*

Synopsis	Alternate interface where IGMP messages are redirected
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action multicast-redirect ip-int-name <i>string</i>
Tree	ip-int-name
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat-policy (*param-midstring* | *string*)

Synopsis	BGP-VPN imported route and a NAT policy association
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action nat-policy (<i>param-midstring</i> <i>string</i>)
Tree	nat-policy
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type accept regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action next-hop (<i>keyword</i> <i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>string</i>)
Tree	next-hop
String Length	1 to 32
Options	peer-address, self
Introduced	19.10.R1
Platforms	All

origin (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action origin (<i>keyword</i> <i>string</i>)
Tree	origin
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	19.10.R1
Platforms	All

origin-validation-state (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action origin-validation-state (<i>keyword</i> <i>string</i>)
Tree	origin-validation-state
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

preference (*number* | *string*)

Synopsis	Route preference applied to routes
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action preference (<i>number</i> <i>string</i>)
Tree	preference
String Length	1 to 32
Range	1 to 255
Introduced	19.10.R1
Platforms	All

resolve-static *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action resolve-static <i>boolean</i>
Tree	resolve-static
Default	false
Introduced	19.10.R1
Platforms	All

route-table-install *boolean*

Synopsis	Allow BGP route installation in the route table
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	19.10.R1
Platforms	All

source-class *number*

Synopsis	Default source class for the policy statement
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action source-class <i>number</i>
Tree	source-class
Description	This command specifies the policy accounting source class index to associate with matched routes.

Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

sr-label-index

Synopsis	Enter the sr-label-index context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sr-label-index
Tree	sr-label-index
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1
Platforms	All

prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sr-label-index prefer-igp <i>boolean</i>
Tree	prefer-igp
Description	<p>When configured to true, BGP obtains the SID index from the IGP route (if a SID index is present) and the configure router bgp segment-routing prefix-sid-range global command is set to true.</p> <p>This command applies only to route table import policies.</p> <p>When configured to false, or the SID index is not present in the IGP route, or the configure router bgp segment-routing prefix-sid-range global command is not set to true, BGP obtains the label index value from the value command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

value (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sr-label-index value (<i>string</i> <i>number</i>)
Tree	value
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

sr-maintenance-policy (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sr-maintenance-policy (<i>param-midstring</i> <i>string</i>)
Tree	sr-maintenance-policy
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

srv6-return-path-bfd-sid (*policy-var-name* | *ipv6-address*)

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action srv6-return-path-bfd-sid (<i>policy-var-name</i> <i>ipv6-address</i>)
Tree	srv6-return-path-bfd-sid

Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

sticky-ecmp *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action sticky-ecmp <i>boolean</i>
Tree	sticky-ecmp
Default	false
Introduced	19.10.R1
Platforms	All

tag (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action tag (<i>number</i> <i>string</i>)
Tree	tag
String Length	1 to 32
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

type (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> action type (<i>number</i> <i>string</i>)
Tree	type
String Length	1 to 32
Range	1 to 2
Introduced	19.10.R1

Platforms All

conditional-expression

Synopsis Enable the **conditional-expression** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [conditional-expression](#)

Tree [conditional-expression](#)

Introduced 19.10.R1

Platforms All

route-exists *string*

Synopsis Conditional expression to test route existence

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [conditional-expression](#) [route-exists](#) *string*

Tree [route-exists](#)

String Length 1 to 255

Introduced 19.10.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 19.10.R1

Platforms All

from

Synopsis Enable the **from** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from](#)

Tree [from](#)

Introduced 19.10.R1

Platforms All

aggregate-contributor *boolean*

Synopsis Enable aggregate route match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from aggregate-contributor](#) *boolean*

Tree [aggregate-contributor](#)

Description When configured to **true**, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.

This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, **vrf-export** policy or **vrf-import** policy, no routes are matched by that entry.

When configured to **false**, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.

Default false

Introduced 20.10.R1

Platforms All

area *string*

Synopsis OSPF area as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from area](#) *string*

Tree [area](#)

Introduced 19.10.R1

Platforms All

as-path

Synopsis Enter the **as-path** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#)

Tree [as-path](#)

Introduced 19.10.R1

Platforms All

group (*param-midstring* | *string*)

Synopsis	AS path group as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path group (<i>param-midstring</i> <i>string</i>)
Tree	group
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	19.10.R1
Platforms	All

length

Synopsis	Enter the length context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path length
Tree	length
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path length qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

unique *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path length unique <i>boolean</i>
Tree	unique

Default	false
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path length value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 255
Introduced	19.10.R1
Platforms	All

name (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from as-path name (param-midstring string)
Tree	name
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: group or name .
Introduced	19.10.R1
Platforms	All

cluster-id

Synopsis	Enter the cluster-id context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from cluster-id
Tree	cluster-id
Introduced	19.10.R1
Platforms	All

ip-address *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from cluster-id ip-address <i>string</i>
Tree	ip-address
Max. Instances	5
Notes	The following elements are part of a choice: ip-address or none-cluster-list . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

none-cluster-list *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from cluster-id none-cluster-list <i>boolean</i>
Tree	none-cluster-list
Default	false
Notes	The following elements are part of a choice: ip-address or none-cluster-list .
Introduced	19.10.R1
Platforms	All

color *number*

Synopsis	Color ID as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from color <i>number</i>
Tree	color
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

community

Synopsis	Enter the community context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community
Tree	community
Introduced	19.10.R1
Platforms	All

count

Synopsis	Enter the count context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count
Tree	count
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

type *keyword*

Synopsis	Community count to match the community count criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count type <i>keyword</i>
Tree	type
Options	standard, extended, large
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	Number of BGP communities to match the BGP route
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community count <i>value</i> (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 1024
Introduced	19.10.R1
Platforms	All

expression *string*

Synopsis	Community expression name as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community expression <i>string</i>
Tree	expression
String Length	1 to 900
Notes	The following elements are part of a choice: expression or name .
Introduced	19.10.R1
Platforms	All

name (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from community name (<i>param-midstring-64</i> <i>string</i>)
Tree	name
String Length	1 to 64
Notes	The following elements are part of a choice: expression or name .
Introduced	19.10.R1
Platforms	All

distinguisher *number*

Synopsis	SR policy distinguisher as a match criterion
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Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from distinguisher <i>number</i>
Tree	distinguisher
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

evpn-type *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from evpn-type <i>keyword</i>
Tree	evpn-type
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	19.10.R1
Platforms	All

external *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from external <i>boolean</i>

Tree	external
Default	false
Introduced	19.10.R1
Platforms	All

family *keyword*

Synopsis	Address family as the match condition
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	19.10.R1
Platforms	All

flowspec

Synopsis	Enter the flowspec context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from flowspec
Tree	flowspec
Introduced	19.10.R1
Platforms	All

dest (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from flowspec dest (<i>param-midstring</i> <i>string</i>)
Tree	dest
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

source (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from flowspec source (<i>param-midstring</i> <i>string</i>)
Tree	source
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

group-address (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from group-address (<i>param-midstring</i> <i>string</i>)
Tree	group-address
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

host-ip (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from host-ip (<i>param-midstring</i> <i>string</i>)
Tree	host-ip
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

interface (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from interface (<i>named-item</i> <i>interface-name</i> <i>interface-name</i> <i>interface-name</i>)
Tree	interface

String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

interface-subnets

Synopsis	Enter the interface-subnets context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from interface-subnets
Tree	interface-subnets
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> • export, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP • route-table-import, when used with BGP • vrf-export, when used with MP-BGP
Introduced	21.2.R1
Platforms	All

ip-int-name *string*

Synopsis	Interface name as the match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from interface-subnets ip-int-name <i>string</i>
Tree	ip-int-name
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1

Platforms All

service *string*

Synopsis Service ID of the interface subnets

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from interface-subnets](#) [service](#) *string*

Tree [service](#)

Default Base

Introduced 21.2.R1

Platforms All

level *number*

Synopsis IS-IS route level as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from level](#) *number*

Tree [level](#)

Range 1 to 2

Introduced 19.10.R1

Platforms All

local-preference

Synopsis Enter the **local-preference** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from local-preference](#)

Tree [local-preference](#)

Introduced 19.10.R1

Platforms All

qualifier *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from local-preference](#) [qualifier](#) *keyword*

Tree [qualifier](#)

Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from local-preference value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

metric

Synopsis	Enter the metric context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from metric
Tree	metric
Introduced	19.10.R1
Platforms	All

qualifier *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from metric qualifier <i>keyword</i>
Tree	qualifier
Default	equal
Options	equal, or-higher, or-lower
Introduced	19.10.R1
Platforms	All

value (*number* | *string*)

Synopsis	Local preference value or variable name
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from metric value (<i>number</i> <i>string</i>)
Tree	value
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

mvpn-type *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from mvpn-type keyword
Tree	mvpn-type
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	19.10.R1
Platforms	All

neighbor

Synopsis	Enter the neighbor context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from neighbor
Tree	neighbor
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from neighbor ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)

Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from neighbor prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

next-hop

Synopsis	Enter the next-hop context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from next-hop
Tree	next-hop
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from next-hop prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

origin *keyword*

Synopsis	Route origin match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from origin <i>keyword</i>
Tree	origin
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the sub-mgmt option for the protocol command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the direct option for the protocol command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the direct option for the protocol command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the managed option for the protocol command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	19.10.R1
Platforms	All

origin-validation-state *keyword*

Synopsis	Origin validation state used for match criteria
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from origin-validation-state <i>keyword</i>
Tree	origin-validation-state
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

ospf-type *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from ospf-type <i>number</i>
Tree	ospf-type
Range	1 to 2
Introduced	19.10.R1
Platforms	All

path-type *keyword*

Synopsis	Path type as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from path-type <i>keyword</i>
Tree	path-type
Options	ibgp, ebgp
Introduced	19.10.R1
Platforms	All

policy (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy (<i>string</i> <i>string</i>)

Tree	policy
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

policy-variables

Synopsis	Enter the policy-variables context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables
Tree	policy-variables
Introduced	19.10.R1
Platforms	All

name [[variable-name](#)] *string*

Synopsis	Enter the name list instance
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables name <i>string</i>
Tree	name
Description	Commands in this context configure global variables for use across BGP peers of a common type (transit, peer, customer, and so on).
Max. Instances	10
Introduced	19.10.R1
Platforms	All

[[variable-name](#)] *string*

Synopsis	Global variable name used to reference policy functions
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables name <i>string</i>
Tree	name
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the policy variable

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

decimal *decimal-number*

Synopsis Attribute decimal to which variable name is resolved

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **decimal** *decimal-number*

Tree [decimal](#)

Range 0.000 to 4294967295.000

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

number *number*

Synopsis Numerical value of the policy variable

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **number** *number*

Tree [number](#)

Range 0 to 4294967295

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, or **value**.

Introduced 19.10.R1

Platforms All

value string

Synopsis	Policy variable value
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from policy-variables <i>name string value string</i>
Tree	value
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: address , decimal , number , or value .
Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from prefix-list (<i>param-midstring-64</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

protocol

Synopsis	Enter the protocol context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from protocol
Tree	protocol
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	19.10.R1
Platforms	All

instance (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion. When this command is explicitly configured, the name command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Default	0
Options	all
Introduced	19.10.R1
Platforms	All

name *keyword*

Synopsis	List of protocol names as the match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from protocol name <i>keyword</i>
Tree	name
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none"> • direct • static • isis • aggregate • bgp • bgp-label • direct-interface If multiple protocols are specified, the instance command cannot be explicitly configured.
Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ifl, srv6, video
Max. Instances	5

Introduced	19.10.R1
Platforms	All

route-distinguisher-list (*param-midstring-64* | *string*)

Synopsis	Route Distinguisher list as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from route-distinguisher-list (<i>param-midstring-64</i> <i>string</i>)
Tree	route-distinguisher-list
Description	This command specifies the (possibly parameterized) name of a route distinguisher (RD) list. This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list. BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.
String Length	1 to 64
Introduced	23.3.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from source-address
Tree	source-address
Introduced	19.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from source-address ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Notes	The following elements are part of a choice: ip-address or prefix-list .

Introduced	19.10.R1
Platforms	All

prefix-list (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from source-address prefix-list (<i>param-midstring</i> <i>string</i>)
Tree	prefix-list
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address or prefix-list .
Introduced	19.10.R1
Platforms	All

state *keyword*

Synopsis	State used as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from state <i>keyword</i>
Tree	state
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tag (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> from tag (<i>number</i> <i>keyword</i>)
Tree	tag
Range	1 to 4294967295
Options	no-tag
Introduced	19.10.R1

Platforms All

to

Synopsis Enable the **to** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* **to**

Tree [to](#)

Introduced 19.10.R1

Platforms All

level number

Synopsis IS-IS route level as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* **to** [level](#) *number*

Tree [level](#)

Range 1 to 2

Introduced 19.10.R1

Platforms All

neighbor

Synopsis Enter the **neighbor** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* **to** [neighbor](#)

Tree [neighbor](#)

Introduced 19.10.R1

Platforms All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis IP address to match the neighbor

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* **to** [neighbor](#) [ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree [ip-address](#)

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 19.10.R1
Platforms All

prefix-list (*param-midstring* | *string*)

Synopsis Name to match the neighbor prefix list
Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to neighbor prefix-list](#) (*param-midstring* | *string*)
Tree [prefix-list](#)
String Length 1 to 32
Notes The following elements are part of a choice: **ip-address** or **prefix-list**.
Introduced 19.10.R1
Platforms All

prefix-list (*param-midstring-64* | *string*)

Synopsis Prefix list as match criterion
Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to prefix-list](#) (*param-midstring-64* | *string*)
Tree [prefix-list](#)
String Length 1 to 64
Max. Instances 28
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

protocol

Synopsis Enter the **protocol** context
Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to protocol](#)
Tree [protocol](#)
Introduced 19.10.R1
Platforms All

instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> to protocol instance (<i>keyword</i> <i>number</i>)
Tree	instance
Range	0 to 127
Default	0
Options	all
Introduced	19.10.R1
Platforms	All

name *keyword*

Synopsis	Protocol name to match
Context	configure policy-options policy-statement <i>string</i> named-entry <i>string</i> to protocol name <i>keyword</i>
Tree	name
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	19.10.R1
Platforms	All

prefix-list [[name](#)] *string*

Synopsis	Enter the prefix-list list instance
Context	configure policy-options prefix-list <i>string</i>
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Prefix list name
Context	configure policy-options prefix-list <i>string</i>
Tree	prefix-list

Description	This command specifies the name for a prefix list. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

prefix [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *type keyword*

Synopsis	Enter the prefix list instance
Context	configure <i>policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword</i>
Tree	<i>prefix</i>
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix associated with the prefix length
Context	configure <i>policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword</i>
Tree	<i>prefix</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Prefix list match type
Context	configure <i>policy-options prefix-list string prefix (ipv4-prefix ipv6-prefix) type keyword</i>
Tree	<i>prefix</i>
Options	exact, longer, through, range, to, address-mask
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end-length *number*

Synopsis	Prefix range end length
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> end-length <i>number</i>
Tree	end-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	16.0.R1
Platforms	All

mask-pattern [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for mask-pattern
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> mask-pattern (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	mask-pattern
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	20.7.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address mask for matching routes to the prefix entry
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> mask-pattern (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	mask-pattern
Description	<p>This command specifies the address mask to compare against the prefix entry to determine whether the route is considered a match.</p> <p>A route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> • The bitwise logical AND of the prefix address and its mask matches the bitwise logical AND of the route address and its mask. • The prefix length of the prefix entry matches the prefix length of the route. <p>For example, for a prefix entry of 17.1.0.0/32, routes with an address 17.1.x.0 (where x can be 0 through 255) and a prefix length of 32 match the entry.</p>

Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

start-length *number*

Synopsis	Start in the prefix range length
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> start-length <i>number</i>
Tree	start-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	16.0.R1
Platforms	All

through-length *number*

Synopsis	Prefix through length
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> through-length <i>number</i>
Tree	through-length
Range	0 to 128
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .
Introduced	16.0.R1
Platforms	All

to-prefix [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for to-prefix
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> to-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	to-prefix
Notes	The following elements are part of a choice: mask-pattern , (end-length and start-length), through-length , or to-prefix .

Introduced	20.7.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for "to" match type
Context	configure policy-options prefix-list <i>string</i> prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) type <i>keyword</i> to-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	to-prefix
Description	<p>This command configures an IP prefix to use in a route policy prefix list for the to match type. If the prefix entry is in the format <i>prefix1/length1</i>, and this command is configured in the format <i>prefix2/length2</i>, a route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> • The route shares the same most-significant bits (specified by <i>length1</i>) with the prefix entry • The route shares the same most-significant bits (specified by <i>length2</i>) with this IP prefix value • The prefix length of the route is in the range of <i>length1</i> to <i>length2</i> (inclusive) <p>For example, for a prefix entry of 10.0.0.8 with a to IP prefix value of 10.0.0.0/32, routes 10.0.0.0/8, 10.0.0.0/9, 10.0.0.0/10, and so on, to 10.0.0.0/32 are considered matches for the prefix entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

route-distinguisher-list [[name](#)] *string*

Synopsis	Enter the route-distinguisher-list list instance
Context	configure policy-options route-distinguisher-list <i>string</i>
Tree	route-distinguisher-list
Introduced	23.3.R1
Platforms	All

[[name](#)] *string*

Synopsis	Name of the route distinguisher list
Context	configure policy-options route-distinguisher-list <i>string</i>
Tree	route-distinguisher-list

Description	This command creates a list of entries used to match the RD in BGP routes of specific address families.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

rd-entry [**rd**] *string*

Synopsis	Add a list entry for rd-entry
Context	configure policy-options route-distinguisher-list <i>string</i> rd-entry <i>string</i>
Tree	rd-entry
Max. Instances	128
Introduced	23.3.R1
Platforms	All

[rd] *string*

Synopsis	RD containing IP address or ASN and assigned number
Context	configure policy-options route-distinguisher-list <i>string</i> rd-entry <i>string</i>
Tree	rd-entry
Description	<p>This command creates an RD matching entry containing an IPv4 address or ASN and the assigned number. The following formats are supported:</p> <ul style="list-style-type: none"> • <i>a.b.c.d/m:*</i> – RD in IPv4 format with a wildcard character (such as 10.0.0.0/16:*) • <i>a.b.c.d/m:n</i> – RD in IPv4 format with a specific number (such as 10.0.0.2/32:535) • <i>asn:*</i> – RD in ASN format with a wildcard character (such as 65000:*) • <i>asn:n</i> – RD in ASN format with a specific number (such as 65000:535) <p>See the "Route distinguishers" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Layer 3 Services Guide: IES and VPRN</i> for information about Type values.</p>
String Length	3 to 28
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

3.32 port commands

```

configure
- port string
- access
- apply-groups reference
- apply-groups-exclude reference
- egress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- ingress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- connector
- apply-groups reference
- apply-groups-exclude reference
- breakout keyword
- rs-fec-mode keyword
- ddm-events boolean
- description string
- dist-cpu-protection
- policy reference
- dwdm
- apply-groups reference
- apply-groups-exclude reference
- coherent
- apply-groups reference
- apply-groups-exclude reference
- compatibility keyword
- cpr-window-size number
- dispersion number
- mode keyword
- report-alarm
- hosttx boolean
- mod boolean
- modflt boolean
- netrx boolean
- nettx boolean
- rx-los-reaction keyword
- rx-los-thresh decimal-number

```

configure port dwdm coherent sweep

```

- sweep
  - end number
  - start number
  - target-power decimal-number
- frequency number
- ethernet
- access
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - booking-factor number
  - egress
    - queue-group reference instance-id number
      - accounting-policy reference
      - aggregate-rate
        - limit-unused-bandwidth boolean
        - queue-frame-based-accounting boolean
        - rate (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
      - description string
      - host-match
        - int-dest-id string
      - hs-turbo boolean
      - queue-overrides
        - queue reference
          - adaptation-rule
            - cir keyword
            - pir keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - burst-limit (number | keyword)
          - cbs (number | keyword)
          - drop-tail
            - low
              - percent-reduction-from-mbs (number | keyword)
          - mbs (number | keyword)
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - parent
          - cir-weight number
          - weight number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - scheduler-policy
        - overrides
          - scheduler string
          - apply-groups reference
          - apply-groups-exclude reference
          - parent
            - cir-weight number
            - weight number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
        - policy-name reference
    - virtual-port string
    - aggregate-rate

```

configure port ethernet access egress virtual-port aggregate-rate limit-unused-bandwidth

```

    - limit-unused-bandwidth boolean
    - rate (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - host-match
    - int-dest-id string
  - hw-agg-shaper-scheduler-policy reference
  - lag-per-link-hash
    - class number
    - weight number
  - monitor-hw-agg-shaper-scheduler boolean
  - monitor-port-scheduler boolean
  - multicast-hqos-adjustment boolean
  - port-scheduler-policy reference
  - scheduler-policy
    - policy-name reference
- ingress
  - queue-group reference
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description string
  - queue-overrides
    - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - mbs (number | keyword)
      - monitor-queue-depth
        - fast-polling boolean
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - scheduler-policy
      - overrides
        - scheduler string
        - apply-groups reference
        - apply-groups-exclude reference
        - parent
          - cir-weight number
          - weight number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - policy-name reference
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - autonegotiate keyword
  - collect-stats boolean
  - crc-monitor
    - signal-degrade
      - multiplier number
      - threshold number
    - signal-failure
      - multiplier number

```

configure port ethernet crc-monitor signal-failure threshold

```

    - threshold number
    - window-size number
  - dampening
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress-time number
    - reuse-threshold number
    - suppress-threshold number
  - discard-rx-pause-frames boolean
  - dot1q-etype string
  - dot1x
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - macsec
    - apply-groups reference
    - apply-groups-exclude reference
    - exclude-mac-policy reference
    - exclude-protocol
      - cdp boolean
      - eapol-start boolean
      - efm-oam boolean
      - eth-cfm boolean
      - lacp boolean
      - lldp boolean
      - ptp boolean
      - ubfd boolean
    - rx-must-be-encrypted boolean
  - sub-port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ca-name reference
    - eapol-destination-address string
    - encap-match
      - all-match boolean
      - double-tag string
      - single-tag string
      - untagged boolean
      - max-peers number
  - max-authentication-requests number
  - per-host-authentication
    - admin-state keyword
    - allowed-source-macs
      - mac-address string
    - authenticator-init boolean
  - port-control keyword
  - quiet-period number
  - radius-policy reference
  - radius-server-policy reference
  - radius-server-policy-acct reference
  - radius-server-policy-auth reference
  - re-authentication
    - period number
  - server-timeout number
  - supplicant-timeout number
  - transmit-period number
  - tunnel-dot1q boolean
  - tunnel-qinq boolean
  - tunneling boolean
  - down-on-internal-error
  - tx-laser keyword

```

configure port ethernet down-when-looped

- **down-when-looped**
 - **admin-state** *keyword*
 - **keep-alive** *number*
 - **retry-timeout** *number*
 - **use-broadcast-address** *boolean*
- **duplex** *keyword*
- **efm-oam**
 - **accept-remote-loopback** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **discovery**
 - **advertise-capabilities**
 - **link-monitoring** *boolean*
 - **dying-gasp-tx-on-reset** *boolean*
 - **grace-tx** *boolean*
 - **grace-vendor-oui** *string*
 - **hold-time** *number*
 - **ignore-efm-state** *boolean*
- **link-monitoring**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **errored-frame**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **errored-frame-period**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **errored-frame-seconds**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **errored-symbols**
 - **admin-state** *keyword*
 - **event-notification** *boolean*
 - **sd-threshold** *number*
 - **sf-threshold** *number*
 - **window** *number*
 - **local-sf-action**
 - **event-notification-burst** *number*
 - **info-notification**
 - **critical-event** *boolean*
 - **dying-gasp** *boolean*
 - **local-port-action** *keyword*
- **mode** *keyword*
- **multiplier** *number*
- **peer-rdi-rx**
 - **critical-event** *keyword*
 - **dying-gasp** *keyword*
 - **event-notification** *keyword*
 - **link-fault** *keyword*
- **transmit-interval** *number*
- **trigger-fault** *keyword*
- **tunneling** *boolean*
- **egress**

configure port ethernet egress apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **eth-bn-rate-changes** *boolean*
- **hs-port-pool-policy** *reference*
- **hs-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **max-rate** (*number* | *keyword*)
 - **scheduling-class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **weight** *number*
 - **policy-name** *reference*
- **hs-secondary-shaper** *string*
 - **aggregate**
 - **low-burst-max-class** *number*
 - **rate** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **description** *string*
- **hw-agg-shaper-scheduler**
 - **monitor** *boolean*
 - **policy-name** *reference*
- **monitor-port-scheduler** *boolean*
- **port-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **max-rate**
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policy-name** *reference*
 - **rate** *number*
- **elmi**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mode** *keyword*
 - **n393** *number*
 - **t391** *number*
 - **t392** *number*
- **encap-type** *keyword*
- **eth-cfm**
 - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**

configure port ethernet eth-cfm mep ais client-meg-level

```

- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- ccm-tlv-ignore keyword
- collect-lmm-stats boolean
- csf
- multiplier decimal-number
- description string
- eth-bn
- receive boolean
- rx-update-pacing number
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- facility-fault boolean
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- vlan (number | keyword)
- hold-time
- down number
- units keyword
- up number
- ingress
- rate number
- lacp-tunnel boolean
- lldp
- apply-groups reference
- apply-groups-exclude reference
- dest-mac keyword
- apply-groups reference
- apply-groups-exclude reference
- notification boolean
- port-id-subtype keyword
- receive boolean
- transmit boolean
- tunnel-nearest-bridge boolean
- tx-mgmt-address keyword
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- tx-tlvs
- port-desc boolean

```


configure port ethernet lldp dest-mac tx-tlvs sys-cap

```

    - sys-cap boolean
    - sys-desc boolean
    - sys-name boolean
- load-balancing-algorithm keyword
- mac-address string
- min-frame-length number
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - egress
    - port-queues
      - overrides
        - queue number
          - apply-groups reference
          - apply-groups-exclude reference
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - queue-group reference instance-id number
          - accounting-policy reference
          - aggregate-rate
            - limit-unused-bandwidth boolean
            - queue-frame-based-accounting boolean
            - rate (number | keyword)
          - apply-groups reference
          - apply-groups-exclude reference
          - collect-stats boolean
          - description string
          - hs-turbo boolean
          - policer-control-policy reference
          - queue-overrides
            - queue reference
              - adaptation-rule
                - cir keyword
                - pir keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - cbs (number | keyword)
              - drop-tail
                - low
                  - percent-reduction-from-mbs (number | keyword)
              - mbs (number | keyword)
              - monitor-queue-depth
                - fast-polling boolean
                - violation-threshold decimal-number
              - percent-rate
                - cir decimal-number
                - pir decimal-number
              - rate
                - cir (number | keyword)
                - pir (number | keyword)
            - scheduler-policy
              - policy-name reference
            - queue-policy reference
          - pbb-etype string
          - ptp-asymmetry number
          - qinq-etype string
        - report-alarm
          - alignment-marker-not-locked boolean
          - block-not-locked boolean

```

configure port ethernet report-alarm duplicate-lane

- **duplicate-lane** *boolean*
- **frame-not-locked** *boolean*
- **high-ber** *boolean*
- **local** *boolean*
- **remote** *boolean*
- **signal-fail** *boolean*
- **rs-fec-mode** *keyword*
- **single-fiber** *boolean*
- **speed** *number*
- **ssm**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **code-type** *keyword*
 - **esmc-tunnel** *boolean*
 - **tx-dus** *boolean*
- **symbol-monitor**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **signal-degrade**
 - **multiplier** *number*
 - **threshold** *number*
 - **signal-failure**
 - **multiplier** *number*
 - **threshold** *number*
 - **window-size** *number*
- **util-stats-interval** *number*
- **xgig** *keyword*
- **gnss**
 - **antenna-cable-delay** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **constellation**
 - **galileo** *boolean*
 - **glonass** *boolean*
 - **gps** *boolean*
 - **elevation-mask-angle** *number*
- **hybrid-buffer-allocation**
 - **egress-weight**
 - **access** *number*
 - **network** *number*
 - **ingress-weight**
 - **access** *number*
 - **network** *number*
- **modify-buffer-allocation**
 - **percentage-of-rate**
 - **egress** *number*
 - **ingress** *number*
- **monitor-agg-egress-queue-stats** *boolean*
- **monitor-oper-group** *reference*
- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **pool** *string*
 - **amber-alarm-threshold** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **red-alarm-threshold** *number*
 - **resv-cbs**
 - **amber-alarm-action**
 - **max** *number*
 - **step** *number*

configure port network egress pool resv-cbs cbs

```

    - cbs (number | keyword)
    - slope-policy reference
- oper-group reference
- otu
  - apply-groups reference
  - apply-groups-exclude reference
  - async-mapping boolean
  - fec keyword
  - fine-granularity-ber
    - signal-degrade
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
    - signal-failure
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
  - otu2-lan-data-rate keyword
  - path-monitoring
    - trail-trace-identifier
      - expected
        - auto-generated
        - bytes string
        - string string
      - mismatch-reaction keyword
      - transmit
        - auto-generated
        - bytes string
        - string string
    - payload-structure-identifier
      - payload
        - expected keyword
        - mismatch-reaction keyword
        - transmit keyword
  - report-alarm
    - fec-fail boolean
    - fec-sd boolean
    - fec-sf boolean
    - fec-uncorr boolean
    - loc boolean
    - lof boolean
    - lom boolean
    - los boolean
    - odu-ais boolean
    - odu-bdi boolean
    - odu-lck boolean
    - odu-oci boolean
    - odu-tim boolean
    - opu-plm boolean
    - otu-ais boolean
    - otu-bdi boolean
    - otu-ber-sd boolean
    - otu-ber-sf boolean
    - otu-biae boolean
    - otu-iae boolean
    - otu-tim boolean
  - sd-threshold number
  - section-monitoring

```

configure port otu section-monitoring trail-trace-identifier

- **trail-trace-identifier**
 - **expected**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
 - **mismatch-reaction** *keyword*
 - **transmit**
 - **auto-generated**
 - **bytes** *string*
 - **string** *string*
- **sf-sd-method** *keyword*
- **sf-threshold** *number*
- **sonet-sdh**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clock-source** *keyword*
 - **framing** *keyword*
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **payload** *keyword*
 - **hold-time**
 - **down** *number*
 - **up** *number*
 - **loopback** *keyword*
 - **path** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **crc** *number*
 - **description** *string*
 - **egress**
 - **port-scheduler-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **max-rate**
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policy-name** *reference*
 - **load-balancing-algorithm** *keyword*
 - **mac-address** *string*
 - **mode** *keyword*
 - **mtu** *number*
 - **network**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **queue-policy** *reference*
 - **payload** *keyword*
 - **report-alarm**
 - **pais** *boolean*
 - **plcd** *boolean*
 - **plop** *boolean*

configure port sonet-sdh path report-alarm pplm

```

    - pplm boolean
    - prdi boolean
    - prei boolean
    - puneq boolean
  - scramble boolean
  - signal-label string
  - trace-string (keyword | string)
- report-alarm
  - lais boolean
  - lb2er-sd boolean
  - lb2er-sf boolean
  - loc boolean
  - lrdi boolean
  - lrei boolean
  - slof boolean
  - slos boolean
  - ss1f boolean
- sd-threshold number
- section-trace
  - byte string
  - increment-z0
  - string string
- sf-threshold number
- single-fiber boolean
- speed keyword
- suppress-low-order-alarms boolean
- tx-dus boolean
- tdm
  - apply-groups reference
  - apply-groups-exclude reference
  - buildout keyword
  - dsl string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ber-threshold
      - signal-degrade number
      - signal-failure number
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - port-scheduler-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
            - apply-groups reference
            - apply-groups-exclude reference
          - percent-rate
            - cir decimal-number
            - pir decimal-number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - max-rate
            - percent-rate decimal-number
            - rate (number | keyword)
        - policy-name reference
      - encap-type keyword
      - idle-payload-fill
        - all-ones

```

configure port tdm ds1 channel-group idle-payload-fill pattern

```

- pattern number
- idle-signal-fill
- all-ones
- pattern number
- load-balancing-algorithm keyword
- mac-address string
- mode keyword
- mtu number
- network
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- queue-policy reference
- speed number
- timeslot number
- clock-source keyword
- framing keyword
- loopback keyword
- remote-loop-respond boolean
- report-alarm
- ais boolean
- ber-sd boolean
- ber-sf boolean
- looped boolean
- los boolean
- oof boolean
- rai boolean
- signal-mode keyword
- ds3 string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- channelized keyword
- clock-source keyword
- crc number
- description string
- egress
- port-scheduler-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- level number
- apply-groups reference
- apply-groups-exclude reference
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- max-rate
- percent-rate decimal-number
- rate (number | keyword)
- policy-name reference
- encap-type keyword
- feac-loop-respond boolean
- framing keyword
- idle-cycle-flag keyword
- load-balancing-algorithm keyword
- loopback keyword
- mac-address string
- maintenance-data-link
- equipment-id-code string

```

configure port tdm ds3 maintenance-data-link facility-id-code

```

- facility-id-code string
- frame-id-code string
- generator-string string
- location-id-code string
- port-string string
- transmit-message-type
  - idle-signal boolean
  - path boolean
  - test-signal boolean
- unit-id-code string
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - queue-policy reference
- report-alarm
  - ais boolean
  - looped boolean
  - los boolean
  - oof boolean
  - rai boolean
- scramble boolean
- subrate
  - csu-mode keyword
  - rate-step number
- e1 string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ber-threshold
    - signal-degrade number
    - signal-failure number
  - channel-group number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress
    - port-scheduler-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - max-rate
        - percent-rate decimal-number
        - rate (number | keyword)
    - policy-name reference
  - encap-type keyword
  - idle-payload-fill
    - all-ones
    - pattern number
  - idle-signal-fill
    - all-ones

```

configure port tdm e1 channel-group idle-signal-fill pattern

```

- pattern number
- load-balancing-algorithm keyword
- mac-address string
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - queue-policy reference
- speed number
- timeslot number
- clock-source keyword
- framing keyword
- loopback keyword
- national-bits
  - sa4 boolean
  - sa5 boolean
  - sa6 boolean
  - sa7 boolean
  - sa8 boolean
- report-alarm
  - ais boolean
  - ber-sd boolean
  - ber-sf boolean
  - looped boolean
  - los boolean
  - oof boolean
  - rai boolean
- signal-mode keyword
- e3 string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clock-source keyword
- crc number
- description string
- egress
  - port-scheduler-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - max-rate
      - percent-rate decimal-number
      - rate (number | keyword)
    - policy-name reference
- encap-type keyword
- framing keyword
- idle-cycle-flag keyword
- load-balancing-algorithm keyword
- loopback keyword
- mac-address string
- mode keyword
- mtu number

```

configure port tdm e3 network

- **network**
 - **accounting-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **queue-policy** *reference*
- **report-alarm**
 - **ais** *boolean*
 - **looped** *boolean*
 - **los** *boolean*
 - **oof** *boolean*
 - **rai** *boolean*
 - **scramble** *boolean*
- **hold-time**
 - **down** *number*
 - **up** *number*
- **transceiver**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **digital-coherent-optics** *boolean*

3.32.1 port command descriptions

port [*port-id*] *string*

Synopsis	Enter the port list instance
Context	configure port string
Tree	port
Introduced	16.0.R1
Platforms	All

[port-id] *string*

Synopsis	Port ID
Context	configure port string
Tree	port
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure port string access
Tree	access
Description	Commands in this context configure egress and ingress pool policy commands.
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port string access egress
Tree	egress

Description	Commands in this context specify the configuration of access egress buffer pools to determine how a CBS-reserved space is handled and the strategy for utilizing the shared buffer space.
Introduced	16.0.R1
Platforms	All

pool [*name*] *string*

Synopsis	Enter the pool list instance
Context	configure <i>port string access egress pool string</i>
Tree	<i>pool</i>
Description	Commands in this context configure pool policies for the pool instance.
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Pool name for the access port
Context	configure <i>port string access egress pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	configure <i>port string access egress pool string amber-alarm-threshold number</i>
Tree	<i>amber-alarm-threshold</i>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	configure <i>port string access egress pool string red-alarm-threshold number</i>
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure <i>port string access egress pool string resv-cbs</i>
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
Context	configure <i>port string access egress pool string resv-cbs amber-alarm-action</i>
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max *number*

Synopsis	Maximum percentage for reserved CBS of the pool
Context	configure <i>port string access egress pool string resv-cbs amber-alarm-action max number</i>
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p>

When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS of the pool
Context	configure port string access egress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the max , step , and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs (number | keyword)

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	configure port string access egress pool string resv-cbs cbs (number keyword)
Tree	cbs
Range	0 to 100
Default	auto
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	All

slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	configure port <i>string</i> access egress pool <i>string</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure port <i>string</i> access ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

pool [[name](#)] *string*

Synopsis	Enter the pool list instance
Context	configure port <i>string</i> access ingress pool <i>string</i>
Tree	pool
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Pool name for the access port
Context	configure port <i>string</i> access ingress pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

amber-alarm-threshold *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	configure port <i>string</i> access ingress pool <i>string</i> amber-alarm-threshold <i>number</i>
Tree	amber-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	configure port <i>string</i> access ingress pool <i>string</i> red-alarm-threshold <i>number</i>
Tree	red-alarm-threshold
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure port <i>string</i> access ingress pool <i>string</i> resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
Context	configure port <i>string</i> access ingress pool <i>string</i> resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max number

Synopsis	Maximum percentage for reserved CBS of the pool
Context	configure port string access ingress pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

step number

Synopsis	Step-size percentage for reserved CBS of the pool
Context	configure port string access ingress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command specifies the step-size percentage for the reserved CBS of the pool.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

cbs (number | keyword)

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	configure port string access ingress pool string resv-cbs cbs (number keyword)

Tree	cbs
Range	0 to 100
Default	auto
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	All

slope-policy *reference*

Synopsis	Policy for the RED slope and TAF values
Context	configure port <i>string</i> access ingress pool <i>string</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the port
Context	configure port <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

connector

Synopsis	Enter the connector context
Context	configure port <i>string</i> connector
Tree	connector
Description	Commands in this context configure connector ports and modes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

breakout keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port breakout of the transceiver used in the connector
Context	configure port string connector breakout keyword
Tree	breakout
Description	<p>This command defines the port breakout of the transceiver used in the connector. Specifying the type triggers the creation of the ports that will be accessible under the connector.</p> <p>When a QSFP28 connector uses an SFP+ optical module with the QSFP28-to-SFP+/SFP28 adapter, set this command to c1-10g. This value indicates the presence of the adapter.</p> <p>For some connectors (for example, QSPFDD), there can be overlap in the breakout for different host interfaces. The same port breakout can be supported on an optical modules that uses a host interface of CAUI-4 as another optical module that uses 100GAUI-2. To distinguish from the CAUI-4 host interface, the '-au2' suffix is used on some breakout options. This is only necessary where there is overlap. In other situations, the SR OS will set the host interface correctly without requiring the distinction in the breakout option.</p>
Options	c1-40g, c4-10g, c1-100g, c4-25g, c10-10g, c1-400g, c2-100g, c4-100g, c1-10g, c1-25g, c1-50g, c8-50g, c1-800g, c3-100g, c8-100g, c2-400g, c1-1g, c1-100g-au2, c2-100g-au2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rs-fec-mode keyword

Synopsis	RS-FEC mode for the Ethernet connector
Context	configure port string connector rs-fec-mode keyword
Tree	rs-fec-mode
Description	<p>This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet connector.</p> <p>See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.</p>
Options	cl91-514-528, cl91-514-544
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ddm-events *boolean*

Synopsis	Enable Digital Diagnostic Monitoring (DDM) events
Context	configure port string ddm-events <i>boolean</i>
Tree	ddm-events
Default	true
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port string description <i>string</i>
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

dist-cpu-protection

Synopsis	Enter the dist-cpu-protection context
Context	configure port string dist-cpu-protection
Tree	dist-cpu-protection
Introduced	21.5.R1
Platforms	All

policy *reference*

Synopsis	Distributed CPU protection policy name
Context	configure port string dist-cpu-protection policy <i>reference</i>
Tree	policy
Reference	configure system security dist-cpu-protection policy <i>string</i>
Introduced	21.5.R1
Platforms	All

dwdm

Synopsis	Enter the dwdm context
Context	configure port string dwdm
Tree	dwdm
Description	Commands in this context configure the Dense Wavelength Division Multiplexing (DWDM) parameters for the port.
Introduced	16.0.R1
Platforms	All

coherent

Synopsis	Enter the coherent context
Context	configure port string dwdm coherent
Tree	coherent
Description	Commands in this context configure the coherent optical module.
Introduced	16.0.R1
Platforms	All

compatibility *keyword*

Synopsis	Optical mode and rate of operation
Context	configure port string dwdm coherent compatibility keyword
Tree	compatibility
Default	long-haul
Options	long-haul, metro, access, interop, interop2, interop3, long-haul-non-differential, oif-400g-zr, open-zrp-ofec1, open-zrp-ofec2
Introduced	16.0.R1
Platforms	All

cpr-window-size *number*

Synopsis	Window size for the carrier phase recovery
Context	configure port string dwdm coherent cpr-window-size number
Tree	cpr-window-size

Description	This command configures the window size for the carrier phase recovery. When this command is changed, the link bounces because the receiver needs to be reconfigured.
Range	2 4 8 16 32 64
Default	32
Units	symbols
Introduced	16.0.R1
Platforms	All

dispersion number

Synopsis	Residual chromatic dispersion compensation
Context	configure port string dwdm coherent dispersion number
Tree	dispersion
Description	This command specifies the residual chromatic dispersion compensation when the coherent receiver is operating in manual dispersion control mode.
Range	-50000 to 50000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

mode keyword

Synopsis	Mode used to compensate for chromatic dispersion
Context	configure port string dwdm coherent mode keyword
Tree	mode
Default	automatic
Options	automatic, manual
Introduced	16.0.R1
Platforms	All

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string dwdm coherent report-alarm

Tree	report-alarm
Description	Commands in this context configure the alarms reported for the coherent module.
Introduced	16.0.R1
Platforms	All

hosttx *boolean*

Synopsis	Report the host (electrical side) transmit alarm
Context	configure port string dwdm coherent report-alarm hosttx <i>boolean</i>
Tree	hosttx
Default	true
Introduced	16.0.R1
Platforms	All

mod *boolean*

Synopsis	Report the module alarm
Context	configure port string dwdm coherent report-alarm mod <i>boolean</i>
Tree	mod
Default	true
Introduced	16.0.R1
Platforms	All

modflt *boolean*

Synopsis	Report the module fault alarm
Context	configure port string dwdm coherent report-alarm modflt <i>boolean</i>
Tree	modflt
Default	true
Introduced	16.0.R1
Platforms	All

netrx *boolean*

Synopsis	Report the network (optical side) receive alarm
----------	---

Context	configure port string dwdm coherent report-alarm netrx boolean
Tree	netrx
Default	true
Introduced	16.0.R1
Platforms	All

netrx *boolean*

Synopsis	Report the network (optical side) transmit alarm
Context	configure port string dwdm coherent report-alarm netrx boolean
Tree	netrx
Default	true
Introduced	16.0.R1
Platforms	All

rx-los-reaction *keyword*

Synopsis	Reaction to an RX LOS
Context	configure port string dwdm coherent rx-los-reaction keyword
Tree	rx-los-reaction
Description	This command configures the reaction to an RX LOS. Note: If this command is disabled for some coherent DWDM transceivers, the transceiver only reports local fault alarms when an RX LOS condition occurs; however, the port returns to service faster after the LOS condition is cleared. For these transceivers, if this command is enabled, there is better visibility of individual alarms (for example, signal-fail, local fault, no-am-lock), but the port takes longer to service after the LOS condition is cleared.
Default	squelch
Options	none, squelch
Introduced	16.0.R1
Platforms	All

rx-los-thresh *decimal-number*

Synopsis	Average input power LOS threshold
Context	configure port string dwdm coherent rx-los-thresh decimal-number
Tree	rx-los-thresh

Range	-30 to -13
Default	-23
Units	decibel-milliwatts
Introduced	16.0.R1
Platforms	All

sweep

Synopsis	Enter the sweep context
Context	configure port <i>string</i> dwdm coherent sweep
Tree	sweep
Description	Commands in this context allow users to configure the dispersion sweep start and end values for the automatic mode of coherent control. If the user knows the approximate or theoretical residual dispersion of the link, these commands can be used to limit the range of sweeping for the automatic control mode and therefore achieve a faster link up.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the dispersion compensation range
Context	configure port <i>string</i> dwdm coherent sweep end <i>number</i>
Tree	end
Range	-50000 to 50000
Default	2000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the dispersion compensation range
Context	configure port <i>string</i> dwdm coherent sweep start <i>number</i>
Tree	start
Range	-50000 to 50000
Default	-25500

Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

target-power *decimal-number*

Synopsis	Average output power target for the port
Context	configure port <i>string</i> dwdm coherent target-power <i>decimal-number</i>
Tree	target-power
Range	-20 to 3
Default	1
Units	decibel-milliwatts
Introduced	16.0.R1
Platforms	All

frequency *number*

Synopsis	Center frequency for tunable DWDM optical interface
Context	configure port <i>string</i> dwdm frequency <i>number</i>
Tree	frequency
Description	<p>This command configures the center frequency to use for a tunable DWDM optical interface. This command can be used to specify any frequency in the C band.</p> <p>To set the DWDM frequency, the port must be a physical port and the provisioned MDA type must have DWDM tunable optics (for example, p1-100g-tun-b), or the MDA must support the option of tunable DWDM optic modules.</p> <p>This command replaces the configure port dwdm channel command.</p>
Range	191100000 to 196150000
Units	megahertz
Introduced	21.10.R3
Platforms	All

ethernet

Synopsis	Enter the ethernet context
Context	configure port <i>string</i> ethernet
Tree	ethernet

Description	Commands in this context configure Ethernet port attributes. This context can only be used when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.
Introduced	16.0.R1
Platforms	All

access

Synopsis	Enter the access context
Context	configure port string ethernet access
Tree	access
Description	Commands in this context configure Ethernet access port commands.
Introduced	16.0.R1
Platforms	All

bandwidth number

Synopsis	Administrative bandwidth assigned to Ethernet ports
Context	configure port string ethernet access bandwidth number
Tree	bandwidth
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

booking-factor number

Synopsis	Booking factor applied to the Ethernet port
Context	configure port string ethernet access booking-factor number
Tree	booking-factor
Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> ethernet access egress
Tree	egress
Description	Commands in this context configure Ethernet access egress port commands.
Introduced	16.0.R1
Platforms	All

queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the queue-group list instance
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[\[queue-group-name\]](#) *reference*

Synopsis	Queue group name
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Reference	configure qos queue-group-templates egress queue-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for the egress queue group
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

accounting-policy *reference*

Synopsis Accounting policy for the Ethernet port

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* accounting-policy *reference*

Tree accounting-policy

Reference **configure** log accounting-policy *number*

Introduced 16.0.R1

Platforms All

aggregate-rate

Synopsis Enter the **aggregate-rate** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate

Tree aggregate-rate

Introduced 16.0.R1

Platforms All

limit-unused-bandwidth *boolean*

Synopsis Control unused bandwidth

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate limit-unused-bandwidth *boolean*

Tree limit-unused-bandwidth

Default false

Introduced 16.0.R1

Platforms All

queue-frame-based-accounting *boolean*

Synopsis Enable frame-based accounting on policers and queues

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* aggregate-rate queue-frame-based-accounting *boolean*

Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

host-match

Synopsis Enter the **host-match** context

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
host-match

Tree host-match

Introduced 16.0.R1

Platforms All

int-dest-id [*destination-string*] *string*

Synopsis Add a list entry for **int-dest-id**

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
host-match int-dest-id *string*

Tree int-dest-id

Introduced 16.0.R1

Platforms All

[*destination-string*] *string*

Synopsis Host match destination ID

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
host-match int-dest-id *string*

Tree int-dest-id

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

hs-turbo *boolean*

Synopsis Enable HS turbo queues for higher throughput

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number*
hs-turbo *boolean*

Tree	hs-turbo
Description	<p>When configured to true, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p> <p>When configured to false, HS turbo queues are disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port string ethernet access egress queue-group reference instance-id number queue-overrides
Tree	queue-overrides
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference
Tree	queue
Introduced	16.0.R1
Platforms	All

[[queue-id](#)] *reference*

Synopsis	Queue ID
Context	configure port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference
Tree	queue
Reference	configure qos queue-group-templates egress queue-group string queue number
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

burst-limit (number | keyword)

Synopsis	Override for the shaping burst size for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> burst-limit (<i>number</i> <i>keyword</i>)

Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low
Tree	low

Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
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Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> parent

Tree	parent
Description	<p>Commands in this context define the weight of the queue treatment by the parent scheduler that further governs the available bandwidth given to the queue, aside from the queue PIR setting.</p> <p>When multiple schedulers or queues share a child status with the parent scheduler, the weight or level commands define how the queue contends with the other children for the parent bandwidth.</p>
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent for the queue group
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR that overrides the parent for the queue group
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate
Tree	percent-rate
Description	Commands in this context specify percent rates.

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .

Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that</p>

the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the egress queue group.
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has

queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.

A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.

Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	configure <i>port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	PIR that overrides the parent
Context	configure <i>port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string weight number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure <i>port string ethernet access egress queue-group reference instance-id number scheduler-policy overrides scheduler string rate</i>
Tree	rate
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the rate command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to max , the CIR rate is set to infinity. The sum keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command specifies the PIR. When the rate command is executed, a valid PIR setting must be explicitly defined. Any other value will result in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy policy-name <i>reference</i>

Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

virtual-port [[vport-name](#)] *string*

Synopsis	Enter the virtual-port list instance
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i>
Tree	virtual-port
Introduced	16.0.R4
Platforms	All

[vport-name] *string*

Synopsis	Vport scheduling node name
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i>
Tree	virtual-port
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

aggregate-rate

Synopsis	Enter the aggregate-rate context
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R4
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
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Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R4
Platforms	All

rate (*number* | *keyword*)

Synopsis	Enforced aggregate rate for the queue
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

host-match

Synopsis	Enter the host-match context
Context	configure port <i>string</i> ethernet access egress virtual-port <i>string</i> host-match
Tree	host-match
Introduced	16.0.R4

Platforms All

int-dest-id [[destination-string](#)] *string*

Synopsis Add a list entry for **int-dest-id**

Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [virtual-port](#) *string* [host-match](#) [int-dest-id](#) *string*

Tree [int-dest-id](#)

Introduced 16.0.R4

Platforms All

[destination-string] *string*

Synopsis Host match destination ID

Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [virtual-port](#) *string* [host-match](#) [int-dest-id](#) *string*

Tree [int-dest-id](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

hw-agg-shaper-scheduler-policy *reference*

Synopsis Hardware aggregate shaper scheduler policy to apply

Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [virtual-port](#) *string* [hw-agg-shaper-scheduler-policy](#) *reference*

Tree [hw-agg-shaper-scheduler-policy](#)

Reference **configure** [qos](#) [hw-agg-shaper-scheduler-policy](#) *string*

Introduced 21.7.R1

Platforms 7750 SR-1, 7750 SR-s

lag-per-link-hash

Synopsis Enter the **lag-per-link-hash** context

Context **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [virtual-port](#) *string* [lag-per-link-hash](#)

Tree	lag-per-link-hash
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

class number

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure port string ethernet access egress virtual-port string lag-per-link-hash class number
Tree	class
Range	1 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight number

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure port string ethernet access egress virtual-port string lag-per-link-hash weight number
Tree	weight
Range	1 to 1024
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-hw-agg-shaper-scheduler boolean

Synopsis	Enable monitoring hardware aggregate shaper scheduler
Context	configure port string ethernet access egress virtual-port string monitor-hw-agg-shaper-scheduler boolean
Tree	monitor-hw-agg-shaper-scheduler
Description	When configured to true , enables congestion monitoring of the hardware aggregate shaper scheduler on the specified vport.
Default	false
Introduced	21.7.R1

Platforms 7750 SR-1, 7750 SR-s

monitor-port-scheduler *boolean*

Synopsis Enable congestion monitoring on egress port scheduler

Context **configure** port *string* ethernet access egress virtual-port *string* monitor-port-scheduler *boolean*

Tree [monitor-port-scheduler](#)

Description The command enables congestion monitoring on an EPS that is applied to a Vport. Congestion monitoring must be further configured under the port-scheduler CLI hierarchy. Once the congestion monitoring is in effect, the offered rate (incoming traffic) is compared to the configured port-scheduler congestion threshold. The results of these measurements are stored as the number of samples representing the number of times the offered rates exceeded the configured congestion threshold since the last clearing of the stats. Therefore, the results represent the number of times that the port-scheduler that is applied to a Vport was congested since the last reset of the stats using a **clear** command.

Default false

Introduced 16.0.R4

Platforms All

multicast-hqos-adjustment *boolean*

Synopsis Apply HQoS Adjustment (egress rate modification)

Context **configure** port *string* ethernet access egress virtual-port *string* multicast-hqos-adjustment *boolean*

Tree [multicast-hqos-adjustment](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-scheduler-policy *reference*

Synopsis Port scheduler policy name

Context **configure** port *string* ethernet access egress virtual-port *string* port-scheduler-policy *reference*

Tree [port-scheduler-policy](#)

Reference **configure** qos port-scheduler-policy *string*

Introduced 16.0.R4
 Platforms All

scheduler-policy

Synopsis Enter the **scheduler-policy** context
 Context **configure** [port string ethernet access egress virtual-port string scheduler-policy](#)
 Tree [scheduler-policy](#)
 Introduced 16.0.R4
 Platforms All

policy-name *reference*

Synopsis Egress scheduler policy
 Context **configure** [port string ethernet access egress virtual-port string scheduler-policy policy-name reference](#)
 Tree [policy-name](#)
 Reference **configure** [qos scheduler-policy string](#)
 Introduced 22.2.R1
 Platforms All

ingress

Synopsis Enter the **ingress** context
 Context **configure** [port string ethernet access ingress](#)
 Tree [ingress](#)
 Description Commands in this context configure Ethernet access ingress port commands.
 Introduced 16.0.R1
 Platforms All

queue-group [[queue-group-name](#)] *reference*

Synopsis Enter the **queue-group** list instance
 Context **configure** [port string ethernet access ingress queue-group reference](#)
 Tree [queue-group](#)

Description	<p>Commands in this context create an ingress queue group on the Ethernet port. Queue groups created on access ports are used as an alternative queue destination for SAPs.</p> <p>Queue groups can be created on both access and network oriented ports. When the port is in access mode, the queue groups must be created within the port access node. Access ingress queue groups can only be used by ingress SAP forwarding classes and only a single ingress queue group per port is supported. When the queue group is created in an ingress port context, the queue group name must be an existing ingress queue group template. Two ingress queue groups with the same name cannot be created on the same port.</p> <p>When creating a queue group, the system will attempt to allocate queue resources based on the queues defined in the queue group template. If the appropriate queue resources do not currently exist, the queue group will not be created. Ingress port queue groups do not support shared-queuing or multipoint shared queuing behavior.</p> <p>A port queue group cannot be removed from the port when a forwarding class is currently redirected to the group. All forwarding class redirections must first be removed prior to removing the queue group.</p>
Introduced	16.0.R1
Platforms	All

[queue-group-name] reference

Synopsis	Queue group name
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i>
Tree	queue-group
Description	This command specifies the queue group name. The specified queue group name must exist as an ingress or egress queue group template depending on the ingress or egress context of the port queue group. Only a single queue group may be created on an ingress port.
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy reference

Synopsis	Accounting policy for the Ethernet port
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>

Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port string ethernet access ingress queue-group reference collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port string ethernet access ingress queue-group reference description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port string ethernet access ingress queue-group reference queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
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Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference
Tree	queue
Description	Commands in this context associate a queue for use in a queue group template. The template queue is created on each queue group object that is created with the queue group template name. Each queue is identified within the template by a queue ID number. The template ensures that all queue groups created with the template's name have the same queue IDs, providing a uniform structure for the forwarding class redirection commands in the SAP egress QoS policies. The queue commands can be individually changed for each queue in each queue group using per queue overrides.
Introduced	16.0.R1
Platforms	All

[queue-id] reference

Synopsis	Queue ID for the queue group template
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group string queue number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference adaptation-rule cir keyword

Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which out-of-profile packets are accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto

Introduced 16.0.R1
 Platforms All

monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#)
 Tree [monitor-queue-depth](#)
 Introduced 21.7.R1
 Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#) [fast-polling](#) *boolean*
 Tree [fast-polling](#)
 Default false
 Introduced 21.7.R1
 Platforms All

rate

Synopsis Enter the **rate** context
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [rate](#)
 Tree [rate](#)
 Introduced 16.0.R1
 Platforms All

cir (*number* | *keyword*)

Synopsis CIR for the queue
 Context **configure** [port](#) [string](#) [ethernet](#) [access](#) [ingress](#) [queue-group](#) [reference](#) [queue-overrides](#) [queue](#) [reference](#) [rate](#) [cir](#) (*number* | *keyword*)
 Tree [cir](#)

Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure port string ethernet access ingress queue-group reference queue-overrides queue reference rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's adaptation-rule commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the ingress queue group.
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides
Tree	overrides
Description	Commands in this context specify the set of attributes specifying values specific to the given queue-group instance.
Introduced	16.0.R1
Platforms	All

scheduler [[scheduler-name](#)] *string*

Synopsis	Enter the scheduler list instance
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	<p>Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.</p> <p>A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.</p>
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent

Synopsis	Enter the parent context
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	parent
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	CIR that overrides the parent
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1

Platforms All

weight *number*

Synopsis PIR that overrides the parent

Context **configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* parent weight *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* rate

Tree [rate](#)

Description Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR for the scheduler

Context **configure** port *string* ethernet access ingress queue-group *reference* scheduler-policy overrides scheduler *string* rate cir (*number* | *keyword*)

Tree [cir](#)

Description This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	This command specifies the PIR. When the rate command is executed, a valid PIR setting must be explicitly defined. Any other value will result in an error without modifying the current PIR rate.
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy name
Context	configure port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
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Context	configure port string ethernet accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	16.0.R1
Platforms	All

autonegotiate *keyword*

Synopsis	Speed and duplex autonegotiation on the Ethernet port
Context	configure port string ethernet autonegotiate keyword
Tree	autonegotiate
Description	<p>This command enables speed and duplex autonegotiation on Fast Ethernet ports and enables far-end fault indicator support on Gb ports. When autonegotiation is enabled on a port, the link attempts to automatically negotiate the link speed and duplex commands. If autonegotiation is enabled, the configured duplex and speed commands are ignored.</p> <p>When autonegotiation is disabled on a port, the port does not attempt to autonegotiate and will only operate at the speed and duplex command settings configured for the port. Note that disabling autonegotiation on Gb ports is not allowed as the IEEE 802.3 specification for Gb Ethernet requires autonegotiation be enabled for far end fault indication.</p> <p>It is required for autonegotiation to be limited for ports in a LAG to guarantee a specific port speed.</p>
Options	true, false, limited
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port string ethernet collect-stats boolean
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

crc-monitor

Synopsis	Enter the crc-monitor context
Context	configure port <i>string</i> ethernet crc-monitor
Tree	crc-monitor
Description	Commands in this context configure Ethernet Cyclic Redundancy Check (CRC) monitoring.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-degrade

Synopsis	Enter the signal-degrade context
Context	configure port <i>string</i> ethernet crc-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the Signal Degrade (SD) condition on an Ethernet interface. The value represents $M \cdot 10^E - N$, which is the ratio of errored frames over the total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SD multiplier
Context	configure port <i>string</i> ethernet crc-monitor signal-degrade multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SD threshold
Context	configure port <i>string</i> ethernet crc-monitor signal-degrade threshold <i>number</i>
Tree	threshold

Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-failure

Synopsis	Enter the signal-failure context
Context	configure port <i>string</i> ethernet crc-monitor signal-failure
Tree	signal-failure
Description	Commands in this context specify the error rate at which to declare the Signal Fail (SF) condition on an Ethernet interface. The value represents M*10E-N errored frames over total frames received over W seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SF multiplier
Context	configure port <i>string</i> ethernet crc-monitor signal-failure multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SF threshold
Context	configure port <i>string</i> ethernet crc-monitor signal-failure threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	configure port <i>string</i> ethernet crc-monitor window-size <i>number</i>
Tree	window-size
Description	This command specifies the sliding window size over which the Ethernet frames are sampled to detect SF or SD conditions. The command is used jointly with the signal-failure and the signal-degrade commands to configure the sliding window size.
Range	5 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dampening

Synopsis	Enter the dampening context
Context	configure port <i>string</i> ethernet dampening
Tree	dampening
Description	Commands in this context configure Exponential Port Dampening (EPD) for the Ethernet port.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of exponential port dampening
Context	configure port <i>string</i> ethernet dampening admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

half-life *number*

Synopsis	Half-life decay time
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Context	configure port string ethernet dampening half-life number
Tree	half-life
Description	This command specifies the time that must pass before penalties decay to one-half the initial amount. The half-life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half-life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 2000
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

max-suppress-time number

Synopsis	Maximum suppression time
Context	configure port string ethernet dampening max-suppress-time number
Tree	max-suppress-time
Description	This command specifies the maximum suppression time, which is the time it can take after the physical link comes up before the worst case accumulated penalties have decayed to the reuse threshold. The maximum penalty is derived from the maximum suppression time, half life, and reuse threshold, using the following equation: $\text{maximum penalty} = (\text{reuse threshold})^2 \exp(-(\text{maximum suppression time}/\text{half life}))$ The half life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 43200
Default	20
Units	seconds
Introduced	16.0.R1
Platforms	All

reuse-threshold number

Synopsis	Threshold which port-up state is no longer suppressed
Context	configure port string ethernet dampening reuse-threshold number
Tree	reuse-threshold
Description	This command specifies the threshold at which the port-up state is no longer suppressed, after the port has been in a suppressed state and the accumulated

penalties decay drops below this threshold. The reuse threshold value must be less than the suppress threshold value.

Range	1 to 20000
Default	1000
Units	penalties
Introduced	16.0.R1
Platforms	All

suppress-threshold *number*

Synopsis	Threshold at which the port-up state is suppressed
Context	configure port <i>string</i> ethernet dampening suppress-threshold <i>number</i>
Tree	suppress-threshold
Description	This command specifies the threshold at which the port-up state is suppressed until the accumulated penalties drop below the reuse threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Default	2000
Units	penalties
Introduced	16.0.R1
Platforms	All

discard-rx-pause-frames *boolean*

Synopsis	Discard received pause frames
Context	configure port <i>string</i> ethernet discard-rx-pause-frames <i>boolean</i>
Tree	discard-rx-pause-frames
Description	When configured to true , the router discards received pause frames. Pause frames are used for local link flow control. When configured to false , pause frames are processed upon reception and the transmit side of the receiving port pauses in its transmissions.
Default	false
Introduced	20.10.R1
Platforms	All

dot1q-etype *string*

Synopsis	Ethertype expected if port encapsulation type is dot1q
Context	configure port <i>string</i> ethernet dot1q-etype <i>string</i>
Tree	dot1q-etype
Description	This command specifies the Ethertype expected when the port encapsulation type is dot1q. Dot1q encapsulation is supported only on Ethernet interfaces.
Default	33024
Introduced	16.0.R1
Platforms	All

dot1x

Synopsis	Enter the dot1x context
Context	configure port <i>string</i> ethernet dot1x
Tree	dot1x
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of dot1x packet extraction to CPM
Context	configure port <i>string</i> ethernet dot1x admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.10.R1
Platforms	All

macsec

Synopsis	Enter the macsec context
Context	configure port <i>string</i> ethernet dot1x macsec
Tree	macsec
Description	Commands in this context configure Media Access Control Security (MACsec) under the port.

Introduced 16.0.R1
Platforms All

exclude-mac-policy *reference*

Synopsis MAC policy excluded from MACsec encryption
Context **configure** port *string* ethernet dot1x macsec **exclude-mac-policy** *reference*
Tree [exclude-mac-policy](#)
Reference **configure** macsec mac-policy *number*
Introduced 16.0.R5
Platforms All

exclude-protocol

Synopsis Enter the **exclude-protocol** context
Context **configure** port *string* ethernet dot1x macsec **exclude-protocol**
Tree [exclude-protocol](#)
Introduced 16.0.R1
Platforms All

cdp *boolean*

Synopsis Disable MACsec for all packets on the link for CDP
Context **configure** port *string* ethernet dot1x macsec **exclude-protocol** **cdp** *boolean*
Tree [cdp](#)
Default false
Introduced 16.0.R1
Platforms All

eapol-start *boolean*

Synopsis Disable MACsec for all packets on the link for EAPOL
Context **configure** port *string* ethernet dot1x macsec **exclude-protocol** **eapol-start** *boolean*
Tree [eapol-start](#)
Default false

Introduced 16.0.R1
Platforms All

efm-oam *boolean*

Synopsis Disable MACsec for all packets on the link for EFM-OAM
Context **configure** port string ethernet dot1x macsec exclude-protocol efm-oam *boolean*
Tree [efm-oam](#)
Default false
Introduced 16.0.R1
Platforms All

eth-cfm *boolean*

Synopsis Disable MACsec for all packets on the link for ETH-CFM
Context **configure** port string ethernet dot1x macsec exclude-protocol eth-cfm *boolean*
Tree [eth-cfm](#)
Default false
Introduced 16.0.R1
Platforms All

lACP *boolean*

Synopsis Disable MACsec for all packets on the link for LACP
Context **configure** port string ethernet dot1x macsec exclude-protocol lACP *boolean*
Tree [lACP](#)
Default false
Introduced 16.0.R1
Platforms All

lldp *boolean*

Synopsis Disable MACsec for all packets on the link for LLDP
Context **configure** port string ethernet dot1x macsec exclude-protocol lldp *boolean*
Tree [lldp](#)

Default	false
Introduced	16.0.R1
Platforms	All

ptp *boolean*

Synopsis	Disable MACsec for all packets on the link for PTP
Context	configure port <i>string</i> ethernet dot1x macsec exclude-protocol ptp <i>boolean</i>
Tree	ptp
Default	false
Introduced	19.5.R1
Platforms	All

ubfd *boolean*

Synopsis	Disable MACsec for all packets on the link for uBFD
Context	configure port <i>string</i> ethernet dot1x macsec exclude-protocol ubfd <i>boolean</i>
Tree	ubfd
Default	false
Introduced	19.5.R1
Platforms	All

rx-must-be-encrypted *boolean*

Synopsis	Drop all port traffic that is not MACsec-secured
Context	configure port <i>string</i> ethernet dot1x macsec rx-must-be-encrypted <i>boolean</i>
Tree	rx-must-be-encrypted
Default	false
Introduced	16.0.R1
Platforms	All

sub-port [[sub-port-id](#)] *number*

Synopsis	Enter the sub-port list instance
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i>

Tree	sub-port
Introduced	16.0.R1
Platforms	All

[sub-port-id] *number*

Synopsis	Sub-port ID
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i>
Tree	sub-port
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MACsec on the port
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

ca-name *reference*

Synopsis	Connectivity association linked to the MACsec sub-port
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> ca-name <i>reference</i>
Tree	ca-name
Reference	configure macsec connectivity-association <i>string</i>
Introduced	16.0.R1
Platforms	All

eapol-destination-address *string*

Synopsis	EAPOL destination MAC address
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> eapol-destination-address <i>string</i>
Tree	eapol-destination-address
Introduced	16.0.R1
Platforms	All

encap-match

Synopsis	Enter the encap-match context
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> encap-match
Tree	encap-match
Introduced	19.5.R1
Platforms	All

all-match *boolean*

Synopsis	Match and encrypt all traffic patterns
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> encap-match all-match <i>boolean</i>
Tree	all-match
Default	true
Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	19.5.R1
Platforms	All

double-tag *string*

Synopsis	QinQ double tag traffic pattern to match
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> encap-match double-tag <i>string</i>
Tree	double-tag
String Length	1 to 11

Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	19.5.R1
Platforms	All

single-tag *string*

Synopsis	Dot1q single tag traffic pattern to match
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> encap-match single-tag <i>string</i>
Tree	single-tag
String Length	1 to 11
Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	19.5.R1
Platforms	All

untagged *boolean*

Synopsis	Match and encrypt untagged traffic only
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> encap-match untagged <i>boolean</i>
Tree	untagged
Notes	The following elements are part of a choice: all-match , double-tag , single-tag , or untagged .
Introduced	19.5.R1
Platforms	All

max-peers *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of peers supported on the port
Context	configure port <i>string</i> ethernet dot1x macsec sub-port <i>number</i> max-peers <i>number</i>
Tree	max-peers

Range	1 to 32
Introduced	16.0.R1
Platforms	All

max-authentication-requests *number*

Synopsis	Maximum number of RADIUS retries
Context	configure port string ethernet dot1x max-authentication-requests number
Tree	max-authentication-requests
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

per-host-authentication

Synopsis	Enter the per-host-authentication context
Context	configure port string ethernet dot1x per-host-authentication
Tree	per-host-authentication
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of per-host authentication
Context	configure port string ethernet dot1x per-host-authentication admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.2.R1
Platforms	All

allowed-source-macs

Synopsis	Enter the allowed-source-macs context
----------	--

Context	configure port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs
Tree	allowed-source-macs
Introduced	20.7.R1
Platforms	All

mac-address [*mac*] *string*

Synopsis	Add a list entry for mac-address
Context	configure port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>string</i>
Tree	mac-address
Introduced	20.7.R1
Platforms	All

[mac] *string*

Synopsis	Source MAC address of a host selected for authentication
Context	configure port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>string</i>
Tree	mac-address
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

authenticator-init *boolean*

Synopsis	Initiate per-host authentication
Context	configure port <i>string</i> ethernet dot1x per-host-authentication authenticator-init <i>boolean</i>
Tree	authenticator-init
Default	true
Introduced	21.2.R1
Platforms	All

port-control *keyword*

Synopsis	802.1x authentication mode
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Context	configure port string ethernet dot1x port-control keyword
Tree	port-control
Default	force-authorized
Options	force-unauthorized, auto, force-authorized
Introduced	16.0.R1
Platforms	All

quiet-period *number*

Synopsis	Time between two sessions when no EAPOL frames are sent
Context	configure port string ethernet dot1x quiet-period number
Tree	quiet-period
Range	1 to 3600
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	All

radius-policy *reference*

Synopsis	RADIUS policy used for 802.1x authentication
Context	configure port string ethernet dot1x radius-policy reference
Tree	radius-policy
Reference	configure system security dot1x radius-policy string
Introduced	16.0.R1
Platforms	All

radius-server-policy *reference*

Synopsis	RADIUS server policy name
Context	configure port string ethernet dot1x radius-server-policy reference
Tree	radius-server-policy
Reference	configure aaa radius server-policy string
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).

Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy-acct *reference*

Synopsis	RADIUS server policy name for accounting
Context	configure port string ethernet dot1x radius-server-policy-acct reference
Tree	radius-server-policy-acct
Reference	configure aaa radius server-policy string
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-server-policy-auth *reference*

Synopsis	RADIUS server policy name for authentication
Context	configure port string ethernet dot1x radius-server-policy-auth reference
Tree	radius-server-policy-auth
Reference	configure aaa radius server-policy string
Notes	The following elements are part of a choice: radius-server-policy or (radius-server-policy-acct and radius-server-policy-auth).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

re-authentication

Synopsis	Enable the re-authentication context
Context	configure port string ethernet dot1x re-authentication
Tree	re-authentication
Introduced	16.0.R1
Platforms	All

period *number*

Synopsis	Delay before re-authentication is performed
Context	configure port <i>string</i> ethernet dot1x re-authentication period <i>number</i>
Tree	period
Range	1 to 9000
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	All

server-timeout *number*

Synopsis	Wait time for a response from the RADIUS server
Context	configure port <i>string</i> ethernet dot1x server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

supplicant-timeout *number*

Synopsis	Wait time for a response to EAPOL messages
Context	configure port <i>string</i> ethernet dot1x supplicant-timeout <i>number</i>
Tree	supplicant-timeout
Range	1 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

transmit-period *number*

Synopsis	Time after which a new EAPOL request message is sent
----------	--

Context	configure port <i>string</i> ethernet dot1x transmit-period <i>number</i>
Tree	transmit-period
Range	1 to 3600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

tunnel-dot1q *boolean*

Synopsis	Enable dot1x tunneling for 802.1q tagged packets
Context	configure port <i>string</i> ethernet dot1x tunnel-dot1q <i>boolean</i>
Tree	tunnel-dot1q
Default	true
Introduced	21.2.R1
Platforms	All

tunnel-qinq *boolean*

Synopsis	Enable dot1x tunneling for QinQ tagged packets
Context	configure port <i>string</i> ethernet dot1x tunnel-qinq <i>boolean</i>
Tree	tunnel-qinq
Default	true
Introduced	21.2.R1
Platforms	All

tunneling *boolean*

Synopsis	Allow tunneling of untagged 802.1x frames
Context	configure port <i>string</i> ethernet dot1x tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

down-on-internal-error

Synopsis	Enable the down-on-internal-error context
Context	configure port string ethernet down-on-internal-error
Tree	down-on-internal-error
Introduced	16.0.R1
Platforms	All

tx-laser *keyword*

Synopsis	Remote laser state on internal MAC transmit error
Context	configure port string ethernet down-on-internal-error tx-laser <i>keyword</i>
Tree	tx-laser
Default	on
Options	off, on
Introduced	16.0.R1
Platforms	All

down-when-looped

Synopsis	Enter the down-when-looped context
Context	configure port string ethernet down-when-looped
Tree	down-when-looped
Description	Commands in this context configure Ethernet loop detection.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Ethernet loop detection
Context	configure port string ethernet down-when-looped admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

keep-alive *number*

Synopsis Time interval between keep-alive PDUs

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [keep-alive](#) *number*

Tree [keep-alive](#)

Range 1 to 120

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

retry-timeout *number*

Synopsis Wait time before re-enabling port after loop detection

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [retry-timeout](#) *number*

Tree [retry-timeout](#)

Range 0 | 10 to 160

Default 120

Units seconds

Introduced 16.0.R1

Platforms All

use-broadcast-address *boolean*

Synopsis Use broadcast MAC address for destination MAC address

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [use-broadcast-address](#) *boolean*

Tree [use-broadcast-address](#)

Default false

Introduced 16.0.R1

Platforms All

duplex *keyword*

Synopsis	Duplex type for the fast Ethernet port
Context	configure port <i>string</i> ethernet duplex <i>keyword</i>
Tree	duplex
Description	This command configures the duplex of a Fast Ethernet port when autonegotiation is disabled. This command setting is ignored if autonegotiation is enabled for the port.
Options	full, half
Introduced	16.0.R1
Platforms	All

efm-oam

Synopsis	Enter the efm-oam context
Context	configure port <i>string</i> ethernet efm-oam
Tree	efm-oam
Introduced	16.0.R1
Platforms	All

accept-remote-loopback *boolean*

Synopsis	Enable reactions to loopback control OAMPDUs from peers
Context	configure port <i>string</i> ethernet efm-oam accept-remote-loopback <i>boolean</i>
Tree	accept-remote-loopback
Default	false
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the EFM OAM operation
Context	configure port <i>string</i> ethernet efm-oam admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	16.0.R1
Platforms	All

discovery

Synopsis	Enter the discovery context
Context	configure port string ethernet efm-oam discovery
Tree	discovery
Introduced	16.0.R1
Platforms	All

advertise-capabilities

Synopsis	Enter the advertise-capabilities context
Context	configure port string ethernet efm-oam discovery advertise-capabilities
Tree	advertise-capabilities
Description	Commands in this context specify settings that enable the advertisement of specific capabilities.
Introduced	16.0.R1
Platforms	All

link-monitoring *boolean*

Synopsis	Advertise link monitoring capabilities to peer
Context	configure port string ethernet efm-oam discovery advertise-capabilities link-monitoring <i>boolean</i>
Tree	link-monitoring
Description	When configured to true , the link monitoring capability is advertised to the peer through the EFM-OAM protocol. When configured to false , this command suppresses the advertisement of capabilities to a remote peer.
Default	true
Introduced	16.0.R1
Platforms	All

dying-gasp-tx-on-reset *boolean*

Synopsis	Enable generation of the Information OAMPDU off-cycle
Context	configure port <i>string</i> ethernet efm-oam dying-gasp-tx-on-reset <i>boolean</i>
Tree	dying-gasp-tx-on-reset
Description	<p>When configured to true, this command enables the generation of the Information OAMPDU off-cycle when the soft reset notification is received by the EFM application.</p> <p>The local port state remains under the control of the soft reset application and does not change based on the EFM function. If the port is operationally up, then the local node will continue to consider the port as available for service data and forwarding. If the upstream node requires a notification to route around the local node undergoing the soft reset, then a notification must be sent to those nodes. This is a disruptive function.</p> <p>When both the grace-tx and dying-gasp-tx-on-reset commands are active on the same port, the grace-tx command takes precedence when a soft reset is invoked if the peer vendor OUI being received is 00:16:4D or the configured grace-vendor-oui value.</p> <p>When configured to false, the generation of the Information OAMPDU off-cycle is disabled.</p>
Default	true
Introduced	16.0.R1
Platforms	All

grace-tx *boolean*

Synopsis	Enable the sending of Grace TLV for EFM-OAM
Context	configure port <i>string</i> ethernet efm-oam grace-tx <i>boolean</i>
Tree	grace-tx
Description	<p>When configured to true, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to true, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to false, the Nokia Vendor Specific Grace TLV is not sent.</p>
Introduced	16.0.R1
Platforms	All

grace-vendor-oui *string*

Synopsis	Peer vendor OUI to support grace function
Context	configure port <i>string</i> ethernet efm-oam grace-vendor-oui <i>string</i>
Tree	grace-vendor-oui
Default	00:16:4D
Introduced	16.0.R1
Platforms	All

hold-time *number*

Synopsis	Wait time before protocol returns to operational state
Context	configure port <i>string</i> ethernet efm-oam hold-time <i>number</i>
Tree	hold-time
Range	1 to 50
Units	seconds
Introduced	16.0.R1
Platforms	All

ignore-efm-state *boolean*

Synopsis	Suppress port state changes for EFM-OAM faults
Context	configure port <i>string</i> ethernet efm-oam ignore-efm-state <i>boolean</i>
Tree	ignore-efm-state
Description	When configured to true , the ETH-OAM protocol does not impact the state of the port when there is a failure in the protocol state machine (discovery, configuration, timeout, loops, and so on). There is only a protocol warning message on the port. When configured to false , the port state is affected by any existing EFM-OAM protocol fault condition.
Default	false
Introduced	16.0.R1
Platforms	All

link-monitoring

Synopsis	Enter the link-monitoring context
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Context	configure port string ethernet efm-oam link-monitoring
Tree	link-monitoring
Introduced	16.0.R4
Platforms	All

admin-state keyword

Synopsis	Administrative state of link monitoring on the port
Context	configure port string ethernet efm-oam link-monitoring admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

errored-frame

Synopsis	Enter the errored-frame context
Context	configure port string ethernet efm-oam link-monitoring errored-frame
Tree	errored-frame
Introduced	16.0.R4
Platforms	All

admin-state keyword

Synopsis	Administrative state of link monitoring on the port
Context	configure port string ethernet efm-oam link-monitoring errored-frame admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame event-notification <i>boolean</i>
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame window <i>number</i>
Tree	window
Range	10 to 600

Default	10
Units	deciseconds
Introduced	16.0.R4
Platforms	All

errored-frame-period

Synopsis	Enter the errored-frame-period context
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period
Tree	errored-frame-period
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period event-notification <i>boolean</i>
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port string ethernet efm-oam link-monitoring errored-frame-period sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	configure port string ethernet efm-oam link-monitoring errored-frame-period sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	configure port string ethernet efm-oam link-monitoring errored-frame-period window <i>number</i>
Tree	window
Range	1 to 4294967295
Default	1488095
Units	packets
Introduced	16.0.R4
Platforms	All

errored-frame-seconds

Synopsis	Enter the errored-frame-seconds context
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds

Tree	errored-frame-seconds
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds event-notification <i>boolean</i>
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port string ethernet efm-oam link-monitoring errored-frame-seconds sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 900
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 900
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds window <i>number</i>
Tree	window
Range	100 to 9000
Default	600
Units	deciseconds
Introduced	16.0.R4
Platforms	All

errored-symbols

Synopsis	Enter the errored-symbols context
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols
Tree	errored-symbols
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

event-notification *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols event-notification <i>boolean</i>
Tree	event-notification
Default	true
Introduced	16.0.R4
Platforms	All

sd-threshold *number*

Synopsis	SD threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

sf-threshold *number*

Synopsis	SF threshold
Context	configure port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

window *number*

Synopsis	Window size
Context	configure port string ethernet efm-oam link-monitoring errored-symbols window <i>number</i>
Tree	window
Range	10 to 600
Default	10
Units	deciseconds
Introduced	16.0.R4
Platforms	All

local-sf-action

Synopsis	Enter the local-sf-action context
Context	configure port string ethernet efm-oam link-monitoring local-sf-action
Tree	local-sf-action
Introduced	16.0.R4
Platforms	All

event-notification-burst *number*

Synopsis	Number of OAMPDUs to send when SF threshold is reached
Context	configure port string ethernet efm-oam link-monitoring local-sf-action event-notification-burst <i>number</i>
Tree	event-notification-burst
Range	1 to 5
Default	1
Units	packets
Introduced	16.0.R4
Platforms	All

info-notification

Synopsis	Enter the info-notification context
Context	configure port string ethernet efm-oam link-monitoring local-sf-action info-notification

Tree	info-notification
Introduced	16.0.R4
Platforms	All

critical-event *boolean*

Synopsis	Set critical event flag when SF threshold is reached
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action info-notification critical-event <i>boolean</i>
Tree	critical-event
Default	false
Introduced	16.0.R4
Platforms	All

dying-gasp *boolean*

Synopsis	Set dying gasp flag when SF threshold is reached
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action info-notification dying-gasp <i>boolean</i>
Tree	dying-gasp
Default	false
Introduced	16.0.R4
Platforms	All

local-port-action *keyword*

Synopsis	Local port action when SF threshold is reached
Context	configure port <i>string</i> ethernet efm-oam link-monitoring local-sf-action local-port-action <i>keyword</i>
Tree	local-port-action
Default	port-out-of-service
Options	log-only, port-out-of-service
Introduced	16.0.R4
Platforms	All

mode *keyword*

Synopsis	Mode of OAM operation for the Ethernet port
Context	configure port <i>string</i> ethernet efm-oam mode <i>keyword</i>
Tree	mode
Default	active
Options	passive, active
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier for the transmit interval of OAMPDUs
Context	configure port <i>string</i> ethernet efm-oam multiplier <i>number</i>
Tree	multiplier
Range	2 to 5
Default	5
Introduced	16.0.R1
Platforms	All

peer-rdi-rx

Synopsis	Enter the peer-rdi-rx context
Context	configure port <i>string</i> ethernet efm-oam peer-rdi-rx
Tree	peer-rdi-rx
Introduced	16.0.R1
Platforms	All

critical-event *keyword*

Synopsis	Action taken upon receipt of critical event flag
Context	configure port <i>string</i> ethernet efm-oam peer-rdi-rx critical-event <i>keyword</i>
Tree	critical-event
Default	port-out-of-service
Options	log-only, port-out-of-service
Introduced	16.0.R1

Platforms All

dying-gasp *keyword*

Synopsis Action taken upon receipt of dying gasp flag

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **dying-gasp** *keyword*

Tree [dying-gasp](#)

Default port-out-of-service

Options log-only, port-out-of-service

Introduced 16.0.R1

Platforms All

event-notification *keyword*

Synopsis Action taken upon receipt of event TLVs

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **event-notification** *keyword*

Tree [event-notification](#)

Default log-only

Options log-only, port-out-of-service

Introduced 16.0.R1

Platforms All

link-fault *keyword*

Synopsis Action taken upon receipt of link fault flag

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **link-fault** *keyword*

Tree [link-fault](#)

Default port-out-of-service

Options log-only, port-out-of-service

Introduced 16.0.R1

Platforms All

transmit-interval *number*

Synopsis Transmit interval of OAMPDUs

Context	configure port <i>string</i> ethernet efm-oam transmit-interval <i>number</i>
Tree	transmit-interval
Range	1 to 600
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

trigger-fault *keyword*

Synopsis	Flag setting in the information OAMPDU
Context	configure port <i>string</i> ethernet efm-oam trigger-fault <i>keyword</i>
Tree	trigger-fault
Options	dying-gasp, critical-event
Introduced	16.0.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable EFM-OAM PDU tunneling
Context	configure port <i>string</i> ethernet efm-oam tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> ethernet egress
Tree	egress
Introduced	16.0.R1
Platforms	All

eth-bn-rate-changes *boolean*

Synopsis	Allow rate changes in ETH-BN messages on port-based MEP
Context	configure port <i>string</i> ethernet egress eth-bn-rate-changes <i>boolean</i>
Tree	eth-bn-rate-changes
Description	When configured to true , this command allows rate changes received in ETH-BN messages on a port-based MEP to update the egress rate used on the port. This command is not supported for all MDA types. When configured to false , rate changes in ETH-BN messages are denied.
Default	false
Introduced	16.0.R1
Platforms	All

hs-port-pool-policy *reference*

Synopsis	HS port pool policy
Context	configure port <i>string</i> ethernet egress hs-port-pool-policy <i>reference</i>
Tree	hs-port-pool-policy
Reference	configure qos hs-port-pool-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-scheduler-policy

Synopsis	Enter the hs-scheduler-policy context
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy
Tree	hs-scheduler-policy
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides
Tree	overrides
Introduced	19.10.R1

Platforms 7750 SR-7/12/12e

group [group-id] *number*

Synopsis Enter the **group** list instance

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*

Tree [group](#)

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

[group-id] *number*

Synopsis Group ID

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*

Tree [group](#)

Range 1

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Maximum rate

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number* rate (*number* | *keyword*)

Tree [rate](#)

Range 1 to 100000

Units megabps

Options max

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 100000
Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

scheduling-class [*class-number*] *number*

Synopsis	Enter the scheduling-class list instance
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i>
Tree	scheduling-class
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[class-number] *number*

Synopsis	Scheduling class value
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i>
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 100000

Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

weight *number*

Synopsis	Weight of the scheduling class within the group
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 127
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

policy-name *reference*

Synopsis	HS scheduler policy name
Context	configure port <i>string</i> ethernet egress hs-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos hs-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-secondary-shaper [**secondary-shaper-name**] *string*

Synopsis	Enter the hs-secondary-shaper list instance
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[**secondary-shaper-name**] *string*

Synopsis	Secondary shaper name
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Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

aggregate

Synopsis	Enter the aggregate context
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> aggregate
Tree	aggregate
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

low-burst-max-class *number*

Synopsis	Highest scheduling class mapped to the low burst limit
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> aggregate low-burst-max-class <i>number</i>
Tree	low-burst-max-class
Range	1 to 6
Default	6
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper aggregate
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> aggregate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 100000000
Default	max
Units	kilobps

Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

class [*class-number*] *number*

Synopsis	Enter the class list instance
Context	configure <i>port string ethernet egress hs-secondary-shaper string class number</i>
Tree	<i>class</i>
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

[class-number] *number*

Synopsis	HS secondary shaper class ID
Context	configure <i>port string ethernet egress hs-secondary-shaper string class number</i>
Tree	<i>class</i>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper class
Context	configure <i>port string ethernet egress hs-secondary-shaper string class number rate (number keyword)</i>
Tree	<i>rate</i>
Range	1 to 100000000
Default	max
Units	kilobps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

hw-agg-shaper-scheduler

Synopsis	Enter the hw-agg-shaper-scheduler context
Context	configure port <i>string</i> ethernet egress hw-agg-shaper-scheduler
Tree	hw-agg-shaper-scheduler
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

monitor *boolean*

Synopsis	Allow monitoring of the HW aggregate shaper scheduler
Context	configure port <i>string</i> ethernet egress hw-agg-shaper-scheduler monitor <i>boolean</i>
Tree	monitor
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

policy-name *reference*

Synopsis	Name of HW aggregate shaper scheduler policy
Context	configure port <i>string</i> ethernet egress hw-agg-shaper-scheduler policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos hw-agg-shaper-scheduler-policy <i>string</i>
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

monitor-port-scheduler *boolean*

Synopsis	Enable monitoring of egress scheduler
Context	configure port <i>string</i> ethernet egress monitor-port-scheduler <i>boolean</i>
Tree	monitor-port-scheduler
Default	false
Introduced	16.0.R1
Platforms	All

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	16.0.R1
Platforms	All

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides
Tree	overrides
Description	Commands in this context configure egress scheduler overrides.
Introduced	16.0.R4
Platforms	All

level [[priority-level](#)] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	16.0.R4
Platforms	All

[priority-level] number

Synopsis	Port priority level to be overridden
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

cir decimal-number

Synopsis	CIR for the port scheduler policy
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

pir decimal-number

Synopsis	PIR for the the port scheduler policy
Context	configure port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port string ethernet egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR
Context	configure port string ethernet egress port-scheduler-policy overrides level number rate cir (number keyword)
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R4
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR
Context	configure port string ethernet egress port-scheduler-policy overrides level number rate pir (number keyword)
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max

Introduced	16.0.R4
Platforms	All

max-rate

Synopsis	Enter the max-rate context
Context	configure port string ethernet egress port-scheduler-policy overrides max-rate
Tree	max-rate
Description	Commands in this context override the max-rate command found in the port scheduler policy associated with the port. When a maximum rate is defined at the port or channel level, the port scheduler's policy max-rate command is ignored.
Introduced	16.0.R4
Platforms	All

percent-rate *decimal-number*

Synopsis	PIR rate
Context	configure port string ethernet egress port-scheduler-policy overrides max-rate percent-rate decimal-number
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

rate (*number* | *keyword*)

Synopsis	PIR rate
Context	configure port string ethernet egress port-scheduler-policy overrides max-rate rate (number keyword)
Tree	rate
Range	1 to 6400000000
Default	max
Units	kilobps

Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R4
Platforms	All

policy-name *reference*

Synopsis	Egress scheduler policy name
Context	configure port <i>string</i> ethernet egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Rate of egress traffic
Context	configure port <i>string</i> ethernet egress rate <i>number</i>
Tree	rate
Description	This command configures the rate of traffic leaving the network. An event log is generated each time the egress rate is modified unless the port is part of a LAG. This command is not supported for all MDA types.
Max. Range	-2147483648 to 2147483647
Units	kilobps
Introduced	16.0.R1
Platforms	All

elmi

Synopsis	Enter the elmi context
Context	configure port <i>string</i> ethernet elmi
Tree	elmi
Introduced	16.0.R4
Platforms	All

mode *keyword*

Synopsis	Ethernet LMI mode
Context	configure <i>port string ethernet elmi mode keyword</i>
Tree	mode
Options	uni-n
Introduced	16.0.R4
Platforms	All

n393 *number*

Synopsis	Monitored count of consecutive errors
Context	configure <i>port string ethernet elmi n393 number</i>
Tree	n393
Range	2 to 10
Default	4
Introduced	16.0.R4
Platforms	All

t391 *number*

Synopsis	Polling timer for UNI-C
Context	configure <i>port string ethernet elmi t391 number</i>
Tree	t391
Range	5 to 30
Default	10
Units	seconds
Introduced	16.0.R4
Platforms	All

t392 *number*

Synopsis	Polling verification timer for UNI-N
Context	configure <i>port string ethernet elmi t392 number</i>
Tree	t392

Range	5 to 30
Default	15
Units	seconds
Introduced	16.0.R4
Platforms	All

encap-type *keyword*

Synopsis	Encapsulation method for the Ethernet port
Context	configure port <i>string</i> ethernet encap-type <i>keyword</i>
Tree	encap-type
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure port <i>string</i> ethernet eth-cfm
Tree	eth-cfm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number*

Synopsis	Enter the mep list instance
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i>
Tree	mep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
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Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis	Maintenance Association (MA) name
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	mep
Reference	configure eth-cfm domain <i>string</i> association <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the MEP
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais

Synopsis	Enable the ais context
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais
Tree	ais
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level <i>number</i>
Tree	client-meg-level
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support <i>boolean</i>
Tree	interface-support
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval number

Synopsis	Transmission interval for AIS messages
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1 60
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect keyword

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect keyword
Tree	low-priority-defect
Default	all-def
Options	all-def, mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Priority of the AIS messages generated by the node
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
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Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number alarm-notification
Tree	alarm-notification
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number alarm-notification fng-alarm-time <i>number</i>
Tree	fng-alarm-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number alarm-notification fng-reset-time <i>number</i>
Tree	fng-reset-time
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis	Generate CCM messages
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Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
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Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number ccm-tlv-ignore keyword
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine. When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number collect-lmm-stats <i>boolean</i>
Tree	collect-lmm-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis	Enable the csf context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number csf
Tree	csf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number csf multiplier <i>decimal-number</i>

Tree	multiplier
Range	0.0 2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-bn

Synopsis	Enter the eth-bn context
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-bn
Tree	eth-bn
Description	Commands in this context configure Ethernet Bandwidth Notification (ETH-BN) message handling.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

receive *boolean*

Synopsis	Enable the reception and processing of ETH-BN messages
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-bn receive boolean
Tree	receive
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-update-pacing *number*

Synopsis	Pace of messages to and from ETH-CFM to QoS subsystems
Context	configure <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-bn rx-update-pacing number</i>
Tree	rx-update-pacing
Range	1 to 600
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i>
Tree	pattern
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
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Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number facility-fault boolean
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window number

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number

Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed priority number
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed boolean

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed rx-eth-ed boolean
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed boolean

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure port string ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed tx-eth-ed boolean
Tree	tx-eth-ed
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace boolean

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace boolean

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers.

The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number mac-address <i>string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold

Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan (*number* | *keyword*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	configure port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number vlan (<i>number</i> <i>keyword</i>)
Tree	vlan
Range	1 to 4094
Default	none
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the hold-time context
Context	configure port <i>string</i> ethernet hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

down *number*

Synopsis	Delay after interface goes from up state to down state
Context	configure port <i>string</i> ethernet hold-time down <i>number</i>
Tree	down
Description	This command specifies the delay to notify the upper layers after an interface transitions from an up state to a down state.

When an interface transitions from an up state to a down state, it is immediately advertised to the rest of the system if the down interval is zero, but if the down interval is greater than zero, interface down transitions are not advertised to upper layers until the down interval has expired.

Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

units *keyword*

Synopsis	Hold time units
Context	configure port string ethernet hold-time units keyword
Tree	units
Default	seconds
Options	seconds, centiseconds
Introduced	16.0.R1
Platforms	All

up *number*

Synopsis	Delay after interface goes from down state to up state
Context	configure port string ethernet hold-time up number
Tree	up
Description	This command specifies the delay to notify the upper layers after an interface transitions from a down state to an up state. When an interface transitions from a down state to an up state, it is immediately advertised as up to the rest of the system if the up interval is zero, but if the up interval is greater than zero, up transitions are not advertised until the up interval has expired.
Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure port string ethernet ingress
Tree	ingress

Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Maximum ingress bandwidth
Context	configure port string ethernet ingress rate number
Tree	rate
Max. Range	-2147483648 to 2147483647
Units	megabps
Introduced	16.0.R1
Platforms	All

lACP-tunnel boolean

Synopsis	Enable LACP packet tunneling for the Ethernet port
Context	configure port string ethernet lACP-tunnel boolean
Tree	lACP-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

lldp

Synopsis	Enter the lldp context
Context	configure port string ethernet lldp
Tree	lldp
Description	Commands in this context configure the Link Layer Discovery Protocol (LLDP) on the port.
Introduced	16.0.R1
Platforms	All

dest-mac [mac-type] keyword

Synopsis	Enter the dest-mac list instance
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Context	configure port <i>string</i> ethernet lldp dest-mac keyword
Tree	dest-mac
Description	Commands in this context configure destination MAC address commands.
Introduced	16.0.R1
Platforms	All

[mac-type] keyword

Synopsis	Destination MAC address type
Context	configure port <i>string</i> ethernet lldp dest-mac keyword
Tree	dest-mac
Options	nearest-bridge, nearest-non-tpmr, nearest-customer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

notification boolean

Synopsis	Enable LLDP notifications
Context	configure port <i>string</i> ethernet lldp dest-mac keyword notification boolean
Tree	notification
Default	false
Introduced	16.0.R1
Platforms	All

port-id-subtype keyword

Synopsis	Port ID TLV encoding method for transmission to peer
Context	configure port <i>string</i> ethernet lldp dest-mac keyword port-id-subtype keyword
Tree	port-id-subtype
Default	tx-local
Options	tx-if-alias, tx-if-name, tx-local
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Enable LLDP agent to receive but not transmit frames
Context	configure <i>port string ethernet lldp dest-mac keyword receive boolean</i>
Tree	receive
Default	false
Introduced	16.0.R1
Platforms	All

transmit *boolean*

Synopsis	Enable the LLDP agent to transmit frames
Context	configure <i>port string ethernet lldp dest-mac keyword transmit boolean</i>
Tree	transmit
Default	false
Introduced	16.0.R1
Platforms	All

tunnel-nearest-bridge *boolean*

Synopsis	Allow received LLDP packets to be tunneled
Context	configure <i>port string ethernet lldp dest-mac keyword tunnel-nearest-bridge boolean</i>
Tree	tunnel-nearest-bridge
Default	false
Introduced	16.0.R1
Platforms	All

tx-mgmt-address [[mgmt-address-system-type](#)] *keyword*

Synopsis	Enter the tx-mgmt-address list instance
Context	configure <i>port string ethernet lldp dest-mac keyword tx-mgmt-address keyword</i>
Tree	tx-mgmt-address
Introduced	16.0.R1
Platforms	All

[mgmt-address-system-type] keyword

Synopsis	Management address to transmit
Context	configure port string ethernet lldp dest-mac keyword tx-mgmt-address keyword
Tree	tx-mgmt-address
Options	oob, system, system-ipv6, oob-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of transmitting management address
Context	configure port string ethernet lldp dest-mac keyword tx-mgmt-address keyword admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

tx-tlvs

Synopsis	Enter the tx-tlvs context
Context	configure port string ethernet lldp dest-mac keyword tx-tlvs
Tree	tx-tlvs
Introduced	16.0.R1
Platforms	All

port-desc boolean

Synopsis	Transmit port description TLVs
Context	configure port string ethernet lldp dest-mac keyword tx-tlvs port-desc boolean
Tree	port-desc
Default	false

Introduced 16.0.R1
Platforms All

sys-cap *boolean*

Synopsis Transmit system capabilities TLVs
Context **configure** port *string* ethernet lldp dest-mac keyword tx-tlvs sys-cap *boolean*
Tree [sys-cap](#)
Default false
Introduced 16.0.R1
Platforms All

sys-desc *boolean*

Synopsis Transmit system description TLVs
Context **configure** port *string* ethernet lldp dest-mac keyword tx-tlvs sys-desc *boolean*
Tree [sys-desc](#)
Default false
Introduced 16.0.R1
Platforms All

sys-name *boolean*

Synopsis Transmit system name TLVs
Context **configure** port *string* ethernet lldp dest-mac keyword tx-tlvs sys-name *boolean*
Tree [sys-name](#)
Default false
Introduced 16.0.R1
Platforms All

load-balancing-algorithm *keyword*

Synopsis Load balancing algorithm for the Ethernet port
Context **configure** port *string* ethernet load-balancing-algorithm *keyword*
Tree [load-balancing-algorithm](#)

Options	default, include-l4, exclude-l4
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address of the Ethernet port
Context	configure port <i>string</i> ethernet mac-address <i>string</i>
Tree	mac-address
Description	This command specifies the MAC address of the Ethernet port. Allowed values are any non-broadcast, non-multicast MAC, and non-IEEE reserved MAC addresses. The default value indicates that an operation MAC address is to be assigned from the chassis MAC address pool.
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

min-frame-length *number*

Synopsis	Minimum transmitted frame length
Context	configure port <i>string</i> ethernet min-frame-length <i>number</i>
Tree	min-frame-length
Range	64 68 72
Default	64
Units	bytes
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Operation mode for the Ethernet port
Context	configure port <i>string</i> ethernet mode <i>keyword</i>
Tree	mode
Options	access, network, hybrid
Introduced	16.0.R1

Platforms All

mtu number

Synopsis Maximum payload MTU size for the Ethernet port

Context **configure** port string ethernet mtu number

Tree [mtu](#)

Description This command configures the maximum payload MTU size for the Ethernet port. This command indirectly defines the largest physical packet the port can transmit or the far-end Ethernet port can receive. Packets that cannot be fragmented at egress and exceed the MTU size are discarded.

The MTU size includes the destination MAC address, source MAC address, the Ethertype or length field, and the complete Ethernet payload. This value does not include the preamble, start of frame delimiter, or the trailing CRC.

Range 512 to 9800

Units bytes

Introduced 16.0.R1

Platforms All

network

Synopsis Enter the **network** context

Context **configure** port string ethernet network

Tree [network](#)

Introduced 16.0.R1

Platforms All

accounting-policy reference

Synopsis Accounting policy that applies to the network port

Context **configure** port string ethernet network accounting-policy reference

Tree [accounting-policy](#)

Reference **configure** log accounting-policy number

Introduced 16.0.R1

Platforms All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>string</i> ethernet network collect-stats <i>boolean</i>
Tree	collect-stats
Description	<p>When configured to true, this command enables the collection of accounting and statistical data for the network interface. When applying accounting policies, by default the data is collected in the appropriate records and written to the designated billing file.</p> <p>When configured to false, the statistics are still accumulated by the XCM or IOM cards. However, the CPU does not obtain the results and write them to the billing file.</p>
Default	false
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> ethernet network egress
Tree	egress
Introduced	16.0.R1
Platforms	All

port-queues

Synopsis	Enter the port-queues context
Context	configure port <i>string</i> ethernet network egress port-queues
Tree	port-queues
Introduced	20.10.R1
Platforms	All

overrides

Synopsis	Enter the overrides context
Context	configure port <i>string</i> ethernet network egress port-queues overrides
Tree	overrides
Description	Commands in this context configure Ethernet network egress port queue override parameters.

Introduced 20.10.R1
 Platforms All

queue [[queue-id](#)] *number*

Synopsis Enter the **queue** list instance
 Context **configure** [port](#) *string* [ethernet network egress port-queues overrides queue number](#)
 Tree [queue](#)
 Description Commands in this context configure an Ethernet network queue.
 Introduced 20.10.R1
 Platforms All

[queue-id] *number*

Synopsis Queue ID
 Context **configure** [port](#) *string* [ethernet network egress port-queues overrides queue number](#)
 Tree [queue](#)
 Range 1 to 16
 Notes This element is part of a list key.
 Introduced 20.10.R1
 Platforms All

monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context
 Context **configure** [port](#) *string* [ethernet network egress port-queues overrides queue number](#)
[monitor-queue-depth](#)
 Tree [monitor-queue-depth](#)
 Introduced 20.10.R1
 Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth
 Context **configure** [port](#) *string* [ethernet network egress port-queues overrides queue number](#)
[monitor-queue-depth fast-polling boolean](#)

Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure port <i>string</i> ethernet network egress port-queues overrides queue number monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

queue-group [[queue-group-name](#)] *reference instance-id number*

Synopsis	Enter the queue-group list instance
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference instance-id number</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[queue-group-name] *reference*

Synopsis	Queue group name
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference instance-id number</i>
Tree	queue-group
Reference	configure qos queue-group-templates egress queue-group <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for the egress queue group
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i>
Tree	queue-group
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy for the Ethernet port
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

aggregate-rate

Synopsis	Enter the aggregate-rate context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Control unused bandwidth
Context	configure port string ethernet network egress queue-group reference instance-id number aggregate-rate limit-unused-bandwidth <i>boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

queue-frame-based-accounting *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	configure port string ethernet network egress queue-group reference instance-id number aggregate-rate queue-frame-based-accounting <i>boolean</i>
Tree	queue-frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

rate (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	configure port string ethernet network egress queue-group reference instance-id number aggregate-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
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Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

hs-turbo *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <i>hs-turbo</i> <i>boolean</i>
Tree	hs-turbo
Description	<p>When configured to true, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p> <p>When configured to false, HS turbo queues are disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer-control-policy *reference*

Synopsis	Policer control policy for the QoS egress queue group
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <i>policer-control-policy</i> <i>reference</i>

Tree	policer-control-policy
Reference	configure qos policer-control-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-overrides

Synopsis	Enter the queue-overrides context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides
Tree	queue-overrides
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *reference*

Synopsis	Enter the queue list instance
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[[queue-id](#)] *reference*

Synopsis	Queue ID
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Description	<p>Commands in this context specify the method used by the system to derive the operational CIR and PIR settings when the queue is provisioned in hardware. For the CIR and PIR commands individually, the system attempts to find the best operational rate depending on the defined constraint.</p> <p>Commands in this context are ignored for egress HSQ queue group queues that are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the adaptation rule is performed under the hs-wrr-group command within the egress queue group template.</p>
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number queue-overrides queue <i>reference</i> adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	configure port string ethernet network egress queue-group reference instance-id number queue-overrides queue reference cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure port string ethernet network egress queue-group reference instance-id number queue-overrides queue reference drop-tail
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure port string ethernet network egress queue-group reference instance-id number queue-overrides queue reference drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
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Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, then the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

monitor-queue-depth

Synopsis	Enable the monitor-queue-depth context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Introduced	20.10.R1
Platforms	All

fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	configure port string ethernet network egress queue-group reference instance-id number queue-overrides queue reference monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to false , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	configure port string ethernet network egress queue-group reference instance-id number queue-overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port string ethernet network egress queue-group reference instance-id number queue-overrides queue reference percent-rate
Tree	percent-rate
Description	Commands in this context specify percent rates. This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the hs-wrr-group command within the egress queue group template.
Notes	The following elements are part of a choice: percent-rate or rate .

Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	CIR for the queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	PIR for the queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate
Tree	rate
Description	<p>Commands in this context specify the administrative PIR and CIR for the queue. Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p> <p>This command can be executed at anytime, altering the PIR and CIR rates for all queues created through the association of the SAP egress QoS policy with the queue ID.</p>

This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the rate is performed under the **hs-wrr-group** command within the egress queue group template.

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the rate command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent cir-level and cir-weight commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the rate command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is</p>

dependent on the queue's **adaptation-rule** commands and the actual hardware where the queue is provisioned.

The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-policy

Synopsis	Enter the scheduler-policy context
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Scheduler policy for the QoS egress queue group
Context	configure port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos scheduler-policy <i>string</i>
Introduced	22.2.R1
Platforms	All

queue-policy *reference*

Synopsis	Network queue policy
Context	configure port <i>string</i> ethernet network egress queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>

Introduced	16.0.R1
Platforms	All

pbb-etype *string*

Synopsis	Ethertype for PBB encapsulation
Context	configure port <i>string</i> ethernet pbb-etype <i>string</i>
Tree	pbb-etype
Default	35047
Introduced	16.0.R1
Platforms	All

ptp-asymmetry *number*

Synopsis	PTP asymmetry delay on the Ethernet port
Context	configure port <i>string</i> ethernet ptp-asymmetry <i>number</i>
Tree	ptp-asymmetry
Description	This command configures the PTP asymmetry delay on the Ethernet port. This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.
Max. Range	-2147483648 to 2147483647
Units	nanoseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qinq-etype *string*

Synopsis	Ethertype for QinQ encapsulation
Context	configure port <i>string</i> ethernet qinq-etype <i>string</i>
Tree	qinq-etype
Default	33024
Introduced	16.0.R1
Platforms	All

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port <i>string</i> ethernet report-alarm
Tree	report-alarm
Description	Commands in this context specify the settings for alarm generation and alarm clear notifications for the port. Note: For some DWDM transceivers, if the configure port dwdm coherent rx-los-reaction squelch command is disabled, the signal-fail and no-am-lock alarm conditions are not reported when the media side of the transceiver has an RX LOS condition.
Introduced	16.0.R1
Platforms	All

alignment-marker-not-locked *boolean*

Synopsis	Report 40G/100G PCS Alignment Marker Loss of Lock
Context	configure port <i>string</i> ethernet report-alarm alignment-marker-not-locked <i>boolean</i>
Tree	alignment-marker-not-locked
Description	When configured to true , Alignment Marker Loss of Lock alarms are reported for this port.
Introduced	16.0.R2
Platforms	All

block-not-locked *boolean*

Synopsis	Report 40G/100G PCS Lanes Not Block Locked
Context	configure port <i>string</i> ethernet report-alarm block-not-locked <i>boolean</i>
Tree	block-not-locked
Introduced	16.0.R2
Platforms	All

duplicate-lane *boolean*

Synopsis	Report 40G/100G PCS Duplicate Lane Marker alarm
Context	configure port <i>string</i> ethernet report-alarm duplicate-lane <i>boolean</i>
Tree	duplicate-lane
Introduced	16.0.R1

Platforms All

frame-not-locked *boolean*

Synopsis Report "not locked on the Ethernet framing sequence"

Context **configure** port string ethernet report-alarm frame-not-locked boolean

Tree [frame-not-locked](#)

Introduced 16.0.R2

Platforms All

high-ber *boolean*

Synopsis Report High Bit Error Rate

Context **configure** port string ethernet report-alarm high-ber boolean

Tree [high-ber](#)

Introduced 16.0.R1

Platforms All

local *boolean*

Synopsis Report local faults

Context **configure** port string ethernet report-alarm local boolean

Tree [local](#)

Introduced 16.0.R1

Platforms All

remote *boolean*

Synopsis Report remote faults

Context **configure** port string ethernet report-alarm remote boolean

Tree [remote](#)

Introduced 16.0.R1

Platforms All

signal-fail *boolean*

Synopsis	Report Ethernet signal lost alarm
Context	configure port <i>string</i> ethernet report-alarm signal-fail <i>boolean</i>
Tree	signal-fail
Introduced	16.0.R1
Platforms	All

rs-fec-mode *keyword*

Synopsis	RS-FEC mode on the Ethernet port
Context	configure port <i>string</i> ethernet rs-fec-mode <i>keyword</i>
Tree	rs-fec-mode
Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet port. See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.
Options	cl91-514-528, cl74, cl108
Introduced	16.0.R1
Platforms	All

single-fiber *boolean*

Synopsis	Enable packet gathering from a single fiber port
Context	configure port <i>string</i> ethernet single-fiber <i>boolean</i>
Tree	single-fiber
Description	When configured to true , this command enables packet gathering and redirection of IP packets from a single fiber (Rx) port of the Ethernet or SONET/SDH interface and redistributes packets to other interfaces through static routes or policy-based forwarding. Traffic is no longer transmitted out of the port. When configured to false , packet gathering is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

speed number

Synopsis	Ethernet port speed
Context	configure port string ethernet speed number
Tree	speed
Description	<p>This command configures the port speed for ports that support multiple speeds. This applies to the following:</p> <ul style="list-style-type: none"> • Fast Ethernet when autonegotiation is not enabled • 10/100/1000 Mb/s Ethernet when autonegotiation is not enabled • 10/1G ports supporting 10G SFP+ or 1G SFP • 40/100G ports supporting QSFP28s on non connector-based MDAs <p>If autonegotiation is enabled for the port, this command setting is ignored. Speed cannot be configured for ports that are part of a LAG.</p>
Range	10 100 1000 10000 25000 40000 50000 100000
Units	megabps
Introduced	16.0.R1
Platforms	All

ssm

Synopsis	Enter the ssm context
Context	configure port string ethernet ssm
Tree	ssm
Description	<p>Commands in this context configure the Ethernet Synchronization Messaging Channel (ESMC) for the Ethernet port. The ESMC carries the Synchronization Status Message (SSM) code representing the quality level of the source of the frequency of the central clock of the node.</p>
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the ESMC for the Ethernet port
Context	configure port string ethernet ssm admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced	16.0.R1
Platforms	All

code-type *keyword*

Synopsis	Encoding of synchronization status messages
Context	configure port string ethernet ssm code-type <i>keyword</i>
Tree	code-type
Default	sdh
Options	sonet, sdh
Introduced	16.0.R1
Platforms	All

esmc-tunnel *boolean*

Synopsis	Tunnel ESMC frames in Epipe or VPLS services
Context	configure port string ethernet ssm esmc-tunnel <i>boolean</i>
Tree	esmc-tunnel
Description	<p>When configured to true, ESMC frames that are received into the Ethernet port can be tunneled in an Epipe or VPLS service. This is not recommended because it breaks the concepts inherent in Synchronous Ethernet, however it is required for compliance to MEF 6.1.1 EPL Option 2.</p> <p>When configured to false, ESMC frames are extracted upon reception by the port and are not tunneled through the service.</p>
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-dus *boolean*

Synopsis	Force QL value transmitted be set to QL-DNU or QL-DUS
Context	configure port string ethernet ssm tx-dus <i>boolean</i>
Tree	tx-dus
Introduced	16.0.R1
Platforms	All

symbol-monitor

Synopsis	Enter the symbol-monitor context
Context	configure port <i>string</i> ethernet symbol-monitor
Tree	symbol-monitor
Description	Commands in this context configure Ethernet symbol monitoring. Support for symbol monitoring is hardware dependent. An error message indicating that the port setting cannot be modified is presented when attempting to enable the feature or configure the individual commands on unsupported hardware.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of symbol monitoring on the port
Context	configure port <i>string</i> ethernet symbol-monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-degrade

Synopsis	Enter the signal-degrade context
Context	configure port <i>string</i> ethernet symbol-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the SD condition on an Ethernet interface. The value represents $M*10E-N$, which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SD multiplier used to scale the symbol error ratio
Context	configure port <i>string</i> ethernet symbol-monitor signal-degrade multiplier <i>number</i>

Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SD threshold for symbol errors
Context	configure port <i>string</i> ethernet symbol-monitor signal-degrade threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-failure

Synopsis	Enter the signal-failure context
Context	configure port <i>string</i> ethernet symbol-monitor signal-failure
Tree	signal-failure
Description	Commands in this context specify the error rate at which to declare the SF condition on an Ethernet interface. The value represents $M \cdot 10E-N$, which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *number*

Synopsis	SF multiplier used to scale the symbol error ratio
Context	configure port <i>string</i> ethernet symbol-monitor signal-failure multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

threshold *number*

Synopsis	SF threshold for symbol errors
Context	configure port string ethernet symbol-monitor signal-failure threshold <i>number</i>
Tree	threshold
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

window-size *number*

Synopsis	Sliding window size over which errors are measured
Context	configure port string ethernet symbol-monitor window-size <i>number</i>
Tree	window-size
Description	This command specifies the sliding window size over which the symbols are sampled to detect SF or SD conditions.
Range	5 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

util-stats-interval *number*

Synopsis	Interval to calculate utilization statistics
Context	configure port string ethernet util-stats-interval <i>number</i>
Tree	util-stats-interval
Range	30 to 600
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	All

xgig *keyword*

Synopsis	Ethernet port mode
Context	configure port string ethernet xgig keyword
Tree	xgig
Description	This command configures a 10 Gb/s interface to be in LAN or WAN mode. When configuring the port to be in WAN mode, certain SONET/SDH commands can be changed to reflect the SONET/SDH requirements for the port. When configuring the port to be in LAN mode, all SONET/SDH commands are pre-determined and not configurable.
Options	lan, wan
Introduced	16.0.R1
Platforms	All

gnss

Synopsis	Enter the gnss context
Context	configure port string gnss
Tree	gnss
Description	Commands in this context configure GNSS port attributes.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

antenna-cable-delay *number*

Synopsis	Signal delay resulting from GNSS antenna cable length
Context	configure port string gnss antenna-cable-delay number
Tree	antenna-cable-delay
Description	This command configures the expected signal delay resulting from the length of the GNSS antenna cable. Note: 7750 SR FP5 GNSS platforms support a value range of 0 to 1000.
Range	0 to 32767
Default	0
Units	nanoseconds
Introduced	22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

constellation

Synopsis Enter the **constellation** context

Context **configure port string gnss constellation**

Tree [constellation](#)

Description Commands in this context configure the GNSS systems that are used by the GNSS receiver.

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

galileo boolean

Synopsis Enable GNSS receiver to use GALILEO constellation type

Context **configure port string gnss constellation galileo boolean**

Tree [galileo](#)

Description When configured to **true**, this command enables the use of the European Galileo GNSS system.

Default false

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

glonass boolean

Synopsis Enable GNSS receiver to use GLONASS constellation type

Context **configure port string gnss constellation glonass boolean**

Tree [glonass](#)

Description When configured to **true**, the system enables the use of the Russian GLONASS GNSS system.

Note: The **glonass** command is currently not supported.

Default false

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

gps boolean

Synopsis Enable GNSS receiver to use GPS constellation type

Context **configure** port string gns constellation gps boolean

Tree [gps](#)

Description When configured to **true**, this command enables the use of the American GPS GNSS system.
When configured to **false**, this command disables the use of the American GPS GNSS system.

Default true

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

elevation-mask-angle number

Synopsis Minimum elevation mask angle

Context **configure** port string gns elevation-mask-angle number

Tree [elevation-mask-angle](#)

Description This command configures the elevation mask angle, which provides a method of filtering satellites used by the system.
Satellites with low elevation may provide degraded accuracy because of the long signal path through the atmosphere. Signals from satellites below the configured minimum satellite elevation are not used.
Nokia does not recommend configuring an elevation mask angle below 10.

Range 0 to 89

Default 10

Units degrees angle

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

hybrid-buffer-allocation

Synopsis Enter the **hybrid-buffer-allocation** context

Context	configure port <i>string</i> hybrid-buffer-allocation
Tree	hybrid-buffer-allocation
Introduced	16.0.R1
Platforms	All

egress-weight

Synopsis	Enter the egress-weight context
Context	configure port <i>string</i> hybrid-buffer-allocation egress-weight
Tree	egress-weight
Introduced	16.0.R1
Platforms	All

access number

Synopsis	Access weight for the hybrid port
Context	configure port <i>string</i> hybrid-buffer-allocation egress-weight access <i>number</i>
Tree	access
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

network number

Synopsis	Access weight for the hybrid port
Context	configure port <i>string</i> hybrid-buffer-allocation egress-weight network <i>number</i>
Tree	network
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

ingress-weight

Synopsis	Enter the ingress-weight context
Context	configure port <i>string</i> hybrid-buffer-allocation ingress-weight
Tree	ingress-weight
Introduced	16.0.R1
Platforms	All

access number

Synopsis	Access weight for the hybrid port
Context	configure port <i>string</i> hybrid-buffer-allocation ingress-weight access number
Tree	access
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

network number

Synopsis	Access weight for the hybrid port
Context	configure port <i>string</i> hybrid-buffer-allocation ingress-weight network number
Tree	network
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

modify-buffer-allocation

Synopsis	Enter the modify-buffer-allocation context
Context	configure port <i>string</i> modify-buffer-allocation
Tree	modify-buffer-allocation
Description	Commands in this context to configure ingress and egress percentage of rate commands. These commands only apply to physical ports (for example, it does not work on APS or similar logical ports). The percentage of rate commands are used to define

a percentage value that affects the amount of buffers used by ingress and egress port managed buffer space.

Introduced 16.0.R1
 Platforms All

percentage-of-rate

Synopsis Enter the **percentage-of-rate** context
 Context **configure** port *string* modify-buffer-allocation percentage-of-rate
 Tree [percentage-of-rate](#)
 Description Commands in this context increase or decrease the active bandwidth associated with the egress or ingress port that affects the amount of egress or ingress buffer space managed by the port. Changing a ports active bandwidth using the commands in this context are an effective means of artificially lowering the buffers managed by one egress or ingress port and giving them to the other egress or ingress ports on the same MDA.
 Introduced 16.0.R1
 Platforms All

egress number

Synopsis Egress rate percentage
 Context **configure** port *string* modify-buffer-allocation percentage-of-rate egress *number*
 Tree [egress](#)
 Range 1 to 1000
 Introduced 16.0.R1
 Platforms All

ingress number

Synopsis Ingress rate percentage
 Context **configure** port *string* modify-buffer-allocation percentage-of-rate ingress *number*
 Tree [ingress](#)
 Range 1 to 1000
 Default 100
 Introduced 16.0.R1
 Platforms All

monitor-agg-egress-queue-stats *boolean*

Synopsis	Monitor aggregate queue statistics
Context	configure <i>port string</i> monitor-agg-egress-queue-stats <i>boolean</i>
Tree	monitor-agg-egress-queue-stats
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	configure <i>port string</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures the operational group to monitor the operational group state. The state of the operational group affects the state of this port. When the operational group is inactive, the state of the port goes down and powers off the port to signal to the CE that the connected port is not available.
Reference	configure <i>service oper-group string</i>
Introduced	22.7.R1
Platforms	All

network

Synopsis	Enter the network context
Context	configure <i>port string</i> network
Tree	network
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure <i>port string</i> network egress
Tree	egress
Introduced	16.0.R1

Platforms All

pool [*name*] *string*

Synopsis Enter the **pool** list instance
 Context **configure** *port string network egress pool string*
 Tree *pool*
 Introduced 16.0.R1
 Platforms All

[name] *string*

Synopsis Pool name
 Context **configure** *port string network egress pool string*
 Tree *pool*
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

amber-alarm-threshold *number*

Synopsis Threshold for the amber alarm on oversubscription
 Context **configure** *port string network egress pool string amber-alarm-threshold number*
 Tree *amber-alarm-threshold*
 Range 1 to 1000
 Units percent
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

red-alarm-threshold *number*

Synopsis Threshold for the red alarm on oversubscription
 Context **configure** *port string network egress pool string red-alarm-threshold number*
 Tree *red-alarm-threshold*

Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

resv-cbs

Synopsis	Enter the resv-cbs context
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs
Tree	resv-cbs
Introduced	16.0.R1
Platforms	All

amber-alarm-action

Synopsis	Enter the amber-alarm-action context
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs amber-alarm-action
Tree	amber-alarm-action
Introduced	16.0.R1
Platforms	All

max number

Synopsis	Maximum percentage for reserved CBS of the pool
Context	configure port <i>string</i> network egress pool <i>string</i> resv-cbs amber-alarm-action max <i>number</i>
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the max, step, and cbs commands must be configured. The cbs command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1

Platforms All

step number

Synopsis Step-size percentage for reserved CBS of the pool

Context **configure** port string network egress pool string resv-cbs amber-alarm-action step number

Tree [step](#)

Description This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.

Range 1 to 100

Units percent

Introduced 16.0.R1

Platforms All

cbs (number | keyword)

Synopsis Percentage of the pool buffer space reserved for CBS

Context **configure** port string network egress pool string resv-cbs cbs (number | keyword)

Tree [cbs](#)

Range 0 to 100

Default auto

Units percent

Options auto

Introduced 16.0.R1

Platforms All

slope-policy reference

Synopsis Policy for the RED slope and TAF values

Context **configure** port string network egress pool string slope-policy reference

Tree [slope-policy](#)

Reference **configure** qos slope-policy string

Introduced 16.0.R1
Platforms All

oper-group *reference*

Synopsis Operational group ID
Context **configure** [port string oper-group reference](#)
Tree [oper-group](#)
Reference **configure** [service oper-group string](#)
Introduced 22.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

otu

Synopsis Enable the **otu** context
Context **configure** [port string otu](#)
Tree [otu](#)
Introduced 16.0.R1
Platforms All

async-mapping *boolean*

Synopsis Allow asynchronous mapping of the payload inside the OTU
Context **configure** [port string otu async-mapping boolean](#)
Tree [async-mapping](#)
Introduced 16.0.R1
Platforms All

fec *keyword*

Synopsis Forwarding Error Correction (FEC) encapsulation on the port
Context **configure** [port string otu fec keyword](#)
Tree [fec](#)
Options none, g709, enhanced
Introduced 16.0.R1

Platforms All

fine-granularity-ber

Synopsis Enter the **fine-granularity-ber** context
Context **configure** port *string* otu [fine-granularity-ber](#)
Tree [fine-granularity-ber](#)
Introduced 16.0.R1
Platforms All

signal-degrade

Synopsis Enter the **signal-degrade** context
Context **configure** port *string* otu [fine-granularity-ber](#) [signal-degrade](#)
Tree [signal-degrade](#)
Introduced 16.0.R1
Platforms All

clear

Synopsis Enter the **clear** context
Context **configure** port *string* otu [fine-granularity-ber](#) [signal-degrade](#) [clear](#)
Tree [clear](#)
Introduced 16.0.R1
Platforms All

multiplier *number*

Synopsis Multiplier of the SD clear threshold
Context **configure** port *string* otu [fine-granularity-ber](#) [signal-degrade](#) [clear](#) [multiplier](#) *number*
Tree [multiplier](#)
Range 10 to 99
Default 10
Introduced 16.0.R1
Platforms All

threshold *number*

Synopsis	SD clear threshold
Context	configure port string otu fine-granularity-ber signal-degrade clear threshold <i>number</i>
Tree	threshold
Range	3 to 10
Default	8
Introduced	16.0.R1
Platforms	All

raise

Synopsis	Enter the raise context
Context	configure port string otu fine-granularity-ber signal-degrade raise
Tree	raise
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Multiplier of the SD raise threshold
Context	configure port string otu fine-granularity-ber signal-degrade raise multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	SD raise threshold
Context	configure port string otu fine-granularity-ber signal-degrade raise threshold <i>number</i>
Tree	threshold
Range	3 to 9
Default	7

Introduced 16.0.R1
Platforms All

signal-failure

Synopsis Enter the **signal-failure** context
Context **configure** port *string* otu *fine-granularity-ber* signal-failure
Tree [signal-failure](#)
Introduced 16.0.R1
Platforms All

clear

Synopsis Enter the **clear** context
Context **configure** port *string* otu *fine-granularity-ber* signal-failure clear
Tree [clear](#)
Introduced 16.0.R1
Platforms All

multiplier *number*

Synopsis Threshold for the Multiplier of SD clear
Context **configure** port *string* otu *fine-granularity-ber* signal-failure clear multiplier *number*
Tree [multiplier](#)
Range 10 to 99
Default 10
Introduced 16.0.R1
Platforms All

threshold *number*

Synopsis Threshold for the Multiplier of SD clear
Context **configure** port *string* otu *fine-granularity-ber* signal-failure clear threshold *number*
Tree [threshold](#)
Range 3 to 9

Default	6
Introduced	16.0.R1
Platforms	All

raise

Synopsis	Enter the raise context
Context	configure port string otu fine-granularity-ber signal-failure raise
Tree	raise
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	SF raise threshold
Context	configure port string otu fine-granularity-ber signal-failure raise multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	SF raise threshold
Context	configure port string otu fine-granularity-ber signal-failure raise threshold <i>number</i>
Tree	threshold
Range	3 to 8
Default	5
Introduced	16.0.R1
Platforms	All

otu2-lan-data-rate *keyword*

Synopsis	Data rate for 10GE LAN OTU2 on the port
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Context	configure port <i>string</i> otu otu2-lan-data-rate <i>keyword</i>
Tree	otu2-lan-data-rate
Units	gigabps
Options	11.049, 11.096
Introduced	16.0.R1
Platforms	All

path-monitoring

Synopsis	Enter the path-monitoring context
Context	configure port <i>string</i> otu path-monitoring
Tree	path-monitoring
Introduced	16.0.R4
Platforms	All

trail-trace-identifier

Synopsis	Enter the trail-trace-identifier context
Context	configure port <i>string</i> otu path-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	16.0.R4
Platforms	All

expected

Synopsis	Enter the expected context
Context	configure port <i>string</i> otu path-monitoring trail-trace-identifier expected
Tree	expected
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	configure port <i>string</i> otu path-monitoring trail-trace-identifier expected auto-generated

Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port string otu path-monitoring trail-trace-identifier expected bytes string
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port string otu path-monitoring trail-trace-identifier expected string string
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched TTI
Context	configure port string otu path-monitoring trail-trace-identifier mismatch-reaction keyword
Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit

Synopsis	Enter the transmit context
Context	configure port string otu path-monitoring trail-trace-identifier transmit
Tree	transmit
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	configure port string otu path-monitoring trail-trace-identifier transmit auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port string otu path-monitoring trail-trace-identifier transmit bytes <i>string</i>
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port string otu path-monitoring trail-trace-identifier transmit string <i>string</i>
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4

Platforms All

payload-structure-identifier

Synopsis Enter the **payload-structure-identifier** context
 Context **configure** [port](#) [string](#) [otu](#) [payload-structure-identifier](#)
 Tree [payload-structure-identifier](#)
 Introduced 16.0.R4
 Platforms All

payload

Synopsis Enter the **payload** context
 Context **configure** [port](#) [string](#) [otu](#) [payload-structure-identifier](#) [payload](#)
 Tree [payload](#)
 Introduced 16.0.R4
 Platforms All

expected *keyword*

Synopsis Configure the port's PSI payload expected parameters.
 Context **configure** [port](#) [string](#) [otu](#) [payload-structure-identifier](#) [payload](#) [expected](#) *keyword*
 Tree [expected](#)
 Default auto
 Options auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
 Introduced 16.0.R4
 Platforms All

mismatch-reaction *keyword*

Synopsis Reaction to a mismatched payload
 Context **configure** [port](#) [string](#) [otu](#) [payload-structure-identifier](#) [payload](#) [mismatch-reaction](#) *keyword*

Tree	mismatch-reaction
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit *keyword*

Synopsis	Transmit payload type
Context	configure port string otu payload-structure-identifier payload transmit <i>keyword</i>
Tree	transmit
Default	auto
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Introduced	16.0.R4
Platforms	All

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string otu report-alarm
Tree	report-alarm
Introduced	16.0.R1
Platforms	All

fec-fail *boolean*

Synopsis	Report FEC mode mismatch alarm
Context	configure port string otu report-alarm fec-fail <i>boolean</i>
Tree	fec-fail
Default	false
Introduced	16.0.R1
Platforms	All

fec-sd *boolean*

Synopsis	Report Signal Degrade alarm
Context	configure port string otu report-alarm fec-sd <i>boolean</i>
Tree	fec-sd
Default	false
Introduced	16.0.R1
Platforms	All

fec-sf *boolean*

Synopsis	Report Signal Fail alarm
Context	configure port string otu report-alarm fec-sf <i>boolean</i>
Tree	fec-sf
Default	true
Introduced	16.0.R1
Platforms	All

fec-uncorr *boolean*

Synopsis	Report one or more Uncorrectable FEC errors alarm
Context	configure port string otu report-alarm fec-uncorr <i>boolean</i>
Tree	fec-uncorr
Default	false
Introduced	16.0.R1
Platforms	All

loc *boolean*

Synopsis	Report alarm for a loss of clock that causes the port to shut down
Context	configure port string otu report-alarm loc <i>boolean</i>
Tree	loc
Default	true
Introduced	16.0.R1
Platforms	All

lof *boolean*

Synopsis	Report alarm for the loss of OTU framing
Context	configure <i>port string otu report-alarm lof boolean</i>
Tree	<i>lof</i>
Default	true
Introduced	16.0.R1
Platforms	All

lom *boolean*

Synopsis	Report alarm for the loss of multi-frame
Context	configure <i>port string otu report-alarm lom boolean</i>
Tree	<i>lom</i>
Default	true
Introduced	16.0.R1
Platforms	All

los *boolean*

Synopsis	Report alarm for the loss of signal transitions on data
Context	configure <i>port string otu report-alarm los boolean</i>
Tree	<i>los</i>
Default	true
Introduced	16.0.R1
Platforms	All

odu-ais *boolean*

Synopsis	Report ODU Alarm Indication Signal alarm
Context	configure <i>port string otu report-alarm odu-ais boolean</i>
Tree	<i>odu-ais</i>
Default	false
Introduced	16.0.R1
Platforms	All

odu-bdi *boolean*

Synopsis	Report PM Backward Defect Indication alarm
Context	configure <i>port string otu report-alarm odu-bdi boolean</i>
Tree	odu-bdi
Default	false
Introduced	16.0.R1
Platforms	All

odu-lck *boolean*

Synopsis	Report ODU Locked alarm
Context	configure <i>port string otu report-alarm odu-lck boolean</i>
Tree	odu-lck
Default	false
Introduced	16.0.R1
Platforms	All

odu-oci *boolean*

Synopsis	Report ODU Open Connection Indication alarm
Context	configure <i>port string otu report-alarm odu-oci boolean</i>
Tree	odu-oci
Default	false
Introduced	16.0.R1
Platforms	All

odu-tim *boolean*

Synopsis	Report PM Trace ID Mismatch alarm
Context	configure <i>port string otu report-alarm odu-tim boolean</i>
Tree	odu-tim
Default	false
Introduced	16.0.R1
Platforms	All

opu-plm *boolean*

Synopsis	Report PSI Payload Type Mismatch alarm
Context	configure <i>port string otu report-alarm opu-plm boolean</i>
Tree	<i>opu-plm</i>
Default	false
Introduced	16.0.R1
Platforms	All

otu-ais *boolean*

Synopsis	Report OTU Alarm Indication Signal alarm
Context	configure <i>port string otu report-alarm otu-ais boolean</i>
Tree	<i>otu-ais</i>
Default	false
Introduced	16.0.R1
Platforms	All

otu-bdi *boolean*

Synopsis	Report SM Backward Defect Indication alarm
Context	configure <i>port string otu report-alarm otu-bdi boolean</i>
Tree	<i>otu-bdi</i>
Default	true
Introduced	16.0.R1
Platforms	All

otu-ber-sd *boolean*

Synopsis	Report SM Signal Degrade alarm
Context	configure <i>port string otu report-alarm otu-ber-sd boolean</i>
Tree	<i>otu-ber-sd</i>
Default	false
Introduced	16.0.R1
Platforms	All

otu-ber-sf *boolean*

Synopsis	Report SM Signal Fail alarm
Context	configure <i>port string</i> <i>otu report-alarm</i> <i>otu-ber-sf</i> <i>boolean</i>
Tree	<i>otu-ber-sf</i>
Default	true
Introduced	16.0.R1
Platforms	All

otu-biae *boolean*

Synopsis	Report SM Backward Incoming Alignment Error alarm
Context	configure <i>port string</i> <i>otu report-alarm</i> <i>otu-biae</i> <i>boolean</i>
Tree	<i>otu-biae</i>
Default	false
Introduced	16.0.R1
Platforms	All

otu-iae *boolean*

Synopsis	Report SM Incoming Alignment Error alarm
Context	configure <i>port string</i> <i>otu report-alarm</i> <i>otu-iae</i> <i>boolean</i>
Tree	<i>otu-iae</i>
Default	false
Introduced	16.0.R1
Platforms	All

otu-tim *boolean*

Synopsis	Report SM Trace ID Mismatch alarm
Context	configure <i>port string</i> <i>otu report-alarm</i> <i>otu-tim</i> <i>boolean</i>
Tree	<i>otu-tim</i>
Default	false
Introduced	16.0.R1
Platforms	All

sd-threshold *number*

Synopsis	Error rate at which to declare the signal fail condition for the signal degrade (SD)
Context	configure port string otu sd-threshold <i>number</i>
Tree	sd-threshold
Range	5 to 9
Default	7
Introduced	16.0.R1
Platforms	All

section-monitoring

Synopsis	Enter the section-monitoring context
Context	configure port string otu section-monitoring
Tree	section-monitoring
Introduced	16.0.R4
Platforms	All

trail-trace-identifier

Synopsis	Enter the trail-trace-identifier context
Context	configure port string otu section-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	16.0.R4
Platforms	All

expected

Synopsis	Enter the expected context
Context	configure port string otu section-monitoring trail-trace-identifier expected
Tree	expected
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	configure port string otu section-monitoring trail-trace-identifier expected auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port string otu section-monitoring trail-trace-identifier expected bytes string
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port string otu section-monitoring trail-trace-identifier expected string string
Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

mismatch-reaction *keyword*

Synopsis	Reaction to a mismatched TTI
Context	configure port string otu section-monitoring trail-trace-identifier mismatch-reaction keyword
Tree	mismatch-reaction

Options	squelch-rx
Introduced	16.0.R4
Platforms	All

transmit

Synopsis	Enter the transmit context
Context	configure port string otu section-monitoring trail-trace-identifier transmit
Tree	transmit
Introduced	16.0.R4
Platforms	All

auto-generated

Synopsis	Use the system generated TTI
Context	configure port string otu section-monitoring trail-trace-identifier transmit auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

bytes *string*

Synopsis	TTI as a sequence of bytes
Context	configure port string otu section-monitoring trail-trace-identifier transmit bytes <i>string</i>
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	configure port string otu section-monitoring trail-trace-identifier transmit string <i>string</i>

Tree	string
String Length	0 to 64
Notes	The following elements are part of a choice: auto-generated , bytes , or string .
Introduced	16.0.R4
Platforms	All

sf-sd-method *keyword*

Synopsis	Method used to determine the signal fail and signal degrade alarms
Context	configure port string otu sf-sd-method <i>keyword</i>
Tree	sf-sd-method
Default	fec
Options	fec, bip8
Introduced	16.0.R1
Platforms	All

sf-threshold *number*

Synopsis	Error rate at which to declare the signal fail condition for the signal fail (SF)
Context	configure port string otu sf-threshold <i>number</i>
Tree	sf-threshold
Range	3 to 6
Default	5
Introduced	16.0.R1
Platforms	All

sonet-sdh

Synopsis	Enter the sonet-sdh context
Context	configure port string sonet-sdh
Tree	sonet-sdh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

clock-source *keyword*

Synopsis	Clock used for transmitted data
Context	configure port <i>string</i> sonet-sdh clock-source <i>keyword</i>
Tree	clock-source
Options	loop-timed, node-timed
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

framing *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET or SDH framing
Context	configure port <i>string</i> sonet-sdh framing <i>keyword</i>
Tree	framing
Default	sonet
Options	sonet, sdh
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group [[group-index](#)] *string*

Synopsis	Enter the group list instance
Context	configure port <i>string</i> sonet-sdh group <i>string</i>
Tree	group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[group-index] *string*

Synopsis	Components making up the specified SONET/SDH path
Context	configure port <i>string</i> sonet-sdh group <i>string</i>
Tree	group
Notes	This element is part of a list key.

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload *keyword*

Synopsis SONET/SDH group payload
Context **configure** port string sonet-sdh group string payload keyword
Tree payload
Default tu3
Options vt15, vt2, tu3
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis Enter the **hold-time** context
Context **configure** port string sonet-sdh hold-time
Tree hold-time
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

down *number*

Synopsis Hold timer for link down event dampening
Context **configure** port string sonet-sdh hold-time down number
Tree down
Range 0 to 100
Units deciseconds
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

up *number*

Synopsis Hold timer for link up event dampening
Context **configure** port string sonet-sdh hold-time up number

Tree	up
Range	0 to 100
Default	5
Units	deciseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loopback *keyword*

Synopsis	Loopback to activate on SONET port
Context	configure port <i>string</i> sonet-sdh loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

path [[path-index](#)] *string*

Synopsis	Enter the path list instance
Context	configure port <i>string</i> sonet-sdh path <i>string</i>
Tree	path
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[path-index] *string*

Synopsis	SONET/SDH path index
Context	configure port <i>string</i> sonet-sdh path <i>string</i>
Tree	path
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the SONET/SDH path
Context	configure port <i>string</i> sonet-sdh path <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc *number*

Synopsis	Cyclic redundancy check
Context	configure port <i>string</i> sonet-sdh path <i>string</i> crc <i>number</i>
Tree	crc
Range	16 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure port <i>string</i> sonet-sdh path <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level [[priority-level](#)] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[\[priority-level\]](#) *number*

Synopsis	Port priority levels override
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir decimal-number

Synopsis	CIR for the priority level
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir decimal-number

Synopsis	PIR for the priority level
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate

Synopsis	Enter the max-rate context
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate (*number* | *keyword*)

Synopsis	PIR
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	configure port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm
Context	configure port <i>string</i> sonet-sdh path <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address for the SONET/SDH path
Context	configure port <i>string</i> sonet-sdh path <i>string</i> mac-address <i>string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation port mode for the SONET/SDH path
Context	configure port <i>string</i> sonet-sdh path <i>string</i> mode <i>keyword</i>
Tree	mode

Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mtu number

Synopsis	Maximum payload MTU size
Context	configure port string sonet-sdh path string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis	Enter the network context
Context	configure port string sonet-sdh path string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accounting-policy reference

Synopsis	Accounting policy
Context	configure port string sonet-sdh path string network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-stats boolean

Synopsis	Collect accounting and statistical data
Context	configure port string sonet-sdh path string network collect-stats boolean

Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

queue-policy *reference*

Synopsis	Queue policy on the SONET/SDH network path
Context	configure port string sonet-sdh path string network queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

payload *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH path payload
Context	configure port string sonet-sdh path string payload keyword
Tree	payload
Options	sts3, tug3, vt15, vt2, ds3, e3, ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string sonet-sdh path string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pais *boolean*

Synopsis	Report path alarm indication signal errors
Context	configure port string sonet-sdh path string report-alarm pais boolean
Tree	pais
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

plcd *boolean*

Synopsis	Report path loss of code group delineation errors
Context	configure port string sonet-sdh path string report-alarm plcd boolean
Tree	plcd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

plop *boolean*

Synopsis	Report path loss of pointer errors as a trap
Context	configure port string sonet-sdh path string report-alarm plop boolean
Tree	plop
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pplm *boolean*

Synopsis	Report a path payload mismatch trap
Context	configure port string sonet-sdh path string report-alarm pplm boolean
Tree	pplm
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prdi *boolean*

Synopsis	Report path remote defect indication errors
Context	configure <i>port string sonet-sdh path string report-alarm prdi boolean</i>
Tree	<i>prdi</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prei *boolean*

Synopsis	Report a path error condition as a result of b3 error
Context	configure <i>port string sonet-sdh path string report-alarm prei boolean</i>
Tree	<i>prei</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

puneq *boolean*

Synopsis	Report path unequipped errors
Context	configure <i>port string sonet-sdh path string report-alarm puneq boolean</i>
Tree	<i>puneq</i>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scramble *boolean*

Synopsis	Enable SONET/SDH payload scrambling
Context	configure <i>port string sonet-sdh path string scramble boolean</i>
Tree	<i>scramble</i>
Description	When configured to true , the SONET/SDH frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking.

When configured to **false**, the strings of all 1s or all 0s are continuous.

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

signal-label *string*

Synopsis C2 byte value that communicates the payload type
 Context **configure** *port string sonet-sdh path string signal-label string*
 Tree [signal-label](#)
 String Length 1 to 4
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

trace-string (*keyword | string*)

Synopsis J1 path-trace string that identifies the circuit
 Context **configure** *port string sonet-sdh path string trace-string (keyword | string)*
 Tree [trace-string](#)
 String Length 0 to 62
 Options zeros
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

report-alarm

Synopsis Enter the **report-alarm** context
 Context **configure** *port string sonet-sdh report-alarm*
 Tree [report-alarm](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lais *boolean*

Synopsis Report Line Indication Signal Errors alarm
 Context **configure** *port string sonet-sdh report-alarm lais boolean*

Tree	lais
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lb2er-sd *boolean*

Synopsis	Report alarm for line signal degradation BER (bit interleaved parity) errors
Context	configure port string sonet-sdh report-alarm lb2er-sd <i>boolean</i>
Tree	lb2er-sd
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lb2er-sf *boolean*

Synopsis	Report alarm line signal failure BER errors
Context	configure port string sonet-sdh report-alarm lb2er-sf <i>boolean</i>
Tree	lb2er-sf
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

loc *boolean*

Synopsis	Report alarm for a loss of clock that causes the port to shut down
Context	configure port string sonet-sdh report-alarm loc <i>boolean</i>
Tree	loc
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lrdi *boolean*

Synopsis	Report Line Remote Defect Indication Errors alarm
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Context	configure <i>port string sonet-sdh report-alarm lrdi</i> <i>boolean</i>
Tree	<i>lrdi</i>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lrei boolean

Synopsis	Report alarm for a line error condition
Context	configure <i>port string sonet-sdh report-alarm lrei</i> <i>boolean</i>
Tree	<i>lrei</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slof boolean

Synopsis	Report alarm for section loss of frame errors
Context	configure <i>port string sonet-sdh report-alarm slof</i> <i>boolean</i>
Tree	<i>slof</i>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

slos boolean

Synopsis	Report alarm for section loss of signal error on the transmit side
Context	configure <i>port string sonet-sdh report-alarm slos</i> <i>boolean</i>
Tree	<i>slos</i>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ss1f *boolean*

Synopsis	Report alarm for section synchronization failure
Context	configure port string sonet-sdh report-alarm ss1f boolean
Tree	ss1f
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sd-threshold *number*

Synopsis	Threshold for line signal failure BER
Context	configure port string sonet-sdh sd-threshold number
Tree	sd-threshold
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

section-trace

Synopsis	Enter the section-trace context
Context	configure port string sonet-sdh section-trace
Tree	section-trace
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

byte *string*

Synopsis	Section trace bytes in the SONET section header
Context	configure port string sonet-sdh section-trace byte string
Tree	byte
String Length	1 to 4
Default	1
Notes	The following elements are part of a choice: byte , increment-z0 , or string .
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

increment-z0

Synopsis Configure incrementing STM ID instead of a static value
 Context **configure** port *string* sonet-sdh section-trace increment-z0
 Tree [increment-z0](#)
 Notes The following elements are part of a choice: **byte**, **increment-z0**, or **string**.
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

string *string*

Synopsis Text string that identifies the section
 Context **configure** port *string* sonet-sdh section-trace string *string*
 Tree [string](#)
 String Length 0 to 16
 Notes The following elements are part of a choice: **byte**, **increment-z0**, or **string**.
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sf-threshold *number*

Synopsis Threshold for line signal failure BER
 Context **configure** port *string* sonet-sdh sf-threshold *number*
 Tree [sf-threshold](#)
 Range 3 to 6
 Default 3
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

single-fiber *boolean*

Synopsis Allow packet gathering and redirection of IP packets from a single fiber (RX) port
 Context **configure** port *string* sonet-sdh single-fiber *boolean*

Tree	single-fiber
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

speed *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH port speed
Context	configure port <i>string</i> sonet-sdh speed <i>keyword</i>
Tree	speed
Options	oc3, oc12, oc48, oc192, oc768, oc1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

suppress-low-order-alarms *boolean*

Synopsis	Suppress low order alarms
Context	configure port <i>string</i> sonet-sdh suppress-low-order-alarms <i>boolean</i>
Tree	suppress-low-order-alarms
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-dus *boolean*

Synopsis	Force the QL value to be set to QL-DUS/QL-DNU
Context	configure port <i>string</i> sonet-sdh tx-dus <i>boolean</i>
Tree	tx-dus
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tdm

Synopsis	Enter the tdm context
Context	configure port string tdm
Tree	tdm
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

buildout *keyword*

Synopsis	Line buildout for physical DS1/DS3 ports
Context	configure port string tdm buildout keyword
Tree	buildout
Default	short
Options	short, long
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ds1 [*ds1-index*] *string*

Synopsis	Enter the ds1 list instance
Context	configure port string tdm ds1 string
Tree	ds1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[*ds1-index*] *string*

Synopsis	DS-1 channel ID
Context	configure port string tdm ds1 string
Tree	ds1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS1 channel
Context	configure port string tdm ds1 string admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-threshold

Synopsis	Enter the ber-threshold context
Context	configure port string tdm ds1 string ber-threshold
Tree	ber-threshold
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-degrade *number*

Synopsis	BER signal degradation threshold
Context	configure port string tdm ds1 string ber-threshold signal-degrade <i>number</i>
Tree	signal-degrade
Range	1 5 10 50 100
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-failure *number*

Synopsis	BER signal failure threshold
Context	configure port string tdm ds1 string ber-threshold signal-failure <i>number</i>
Tree	signal-failure
Range	1 5 10 50 100
Default	50

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channel-group [*ds0-index*] *number*

Synopsis Enter the **channel-group** list instance
 Context **configure** *port string tdm ds1 string channel-group number*
 Tree [channel-group](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[ds0-index] *number*

Synopsis Channel group ID
 Context **configure** *port string tdm ds1 string channel-group number*
 Tree [channel-group](#)
 Range 1 to 24
 Notes This element is part of a list key.
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis Administrative state of the DS1 channel group
 Context **configure** *port string tdm ds1 string channel-group number admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis Text description
 Context **configure** *port string tdm ds1 string channel-group number description string*

Tree	description
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [[priority-level](#)] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>

Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[priority-level] *number*

Synopsis	Port priority levels override
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis	CIR for the priority level
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis	PIR for the priority level
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the max-rate context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis	PIR
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> encap-type <i>keyword</i>
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-payload-fill

Synopsis	Enter the idle-payload-fill context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	idle-payload-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill <i>pattern</i> <i>number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal-fill

Synopsis	Enter the idle-signal-fill context
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill pattern <i>number</i>
Tree	pattern
Range	0 to 15
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	configure port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> mac-address <i>string</i>
Tree	mac-address

Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode for the TDM channel group
Context	configure port string tdm ds1 string channel-group number mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU size for the port
Context	configure port string tdm ds1 string channel-group number mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port string tdm ds1 string channel-group number network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure port string tdm ds1 string channel-group number network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port string tdm ds1 string channel-group number network collect-stats boolean
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM DS0 network channel group
Context	configure port string tdm ds1 string channel-group number network queue-policy reference
Tree	queue-policy
Reference	configure qos network-queue string
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

speed *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the DS0 channels in the channel group
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Context	configure port string tdm ds1 string channel-group number speed number
Tree	speed
Range	56 64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timeslot *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Timeslot for the channel group
Context	configure port string tdm ds1 string channel-group number timeslot number
Tree	timeslot
Range	1 to 24
Max.	24
Instances	
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission
Context	configure port string tdm ds1 string clock-source keyword
Tree	clock-source
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS1 channel
Context	configure port string tdm ds1 string framing keyword
Tree	framing
Default	extended-super-frame
Options	extended-super-frame, super-frame, ds1-unframed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback keyword

Synopsis	Loopback mode for the port
Context	configure port string tdm ds1 string loopback keyword
Tree	loopback
Options	line, internal, fdl-ansi, fdl-bellcore, payload-ansi, inband-ansi, inband-bellcore
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

remote-loop-respond boolean

Synopsis	Respond to requests for remote loopbacks
Context	configure port string tdm ds1 string remote-loop-respond boolean
Tree	remote-loop-respond
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string tdm ds1 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais boolean

Synopsis	Report alarm indication signal errors
Context	configure port string tdm ds1 string report-alarm ais boolean
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sd boolean

Synopsis	Report the BER that specifies signal degradation
Context	configure port string tdm ds1 string report-alarm ber-sd boolean
Tree	ber-sd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf boolean

Synopsis	Report the BER that species signal failure
Context	configure port string tdm ds1 string report-alarm ber-sf boolean
Tree	ber-sf
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped boolean

Synopsis	Report looped packet errors
Context	configure port string tdm ds1 string report-alarm looped boolean
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port string tdm ds1 string report-alarm los boolean
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port string tdm ds1 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure port string tdm ds1 string report-alarm rai boolean
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	configure port string tdm ds1 string signal-mode keyword
Tree	signal-mode

Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ds3 [[ds3-index](#)] *string*

Synopsis	Enter the ds3 list instance
Context	configure port <i>string</i> tdm ds3 <i>string</i>
Tree	ds3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[ds3-index] *string*

Synopsis	TDM DS3 index
Context	configure port <i>string</i> tdm ds3 <i>string</i>
Tree	ds3
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the DS3 port
Context	configure port <i>string</i> tdm ds3 <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channelized *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channelization of the DS3
Context	configure port string tdm ds3 string channelized keyword
Tree	channelized
Options	ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis	Clock for data transmission
Context	configure port string tdm ds3 string clock-source keyword
Tree	clock-source
Default	node-timed
Options	loop-timed, node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the cyclic redundancy check (CRC)
Context	configure port string tdm ds3 string crc number
Tree	crc
Range	16 32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis	Text description
Context	configure port string tdm ds3 string description string
Tree	description
String Length	1 to 160
Default	DS3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port string tdm ds3 string egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port string tdm ds3 string egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [*priority-level*] *number*

Synopsis	Enter the level list instance
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[priority-level] *number*

Synopsis	Port priority levels override
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir *decimal-number*

Synopsis	CIR for the priority level
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Default	100

Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir *decimal-number*

Synopsis	PIR for the priority level
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port string tdm ds3 string egress port-scheduler-policy overrides level number rate cir (number keyword)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis PIR for the priority level
 Context **configure** [port string tdm ds3 string egress port-scheduler-policy overrides level number rate pir](#) (*number* | *keyword*)
 Tree [pir](#)
 Range 1 to 3200000000
 Default max
 Units kilobps
 Options max
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis Enter the **max-rate** context
 Context **configure** [port string tdm ds3 string egress port-scheduler-policy overrides max-rate](#)
 Tree [max-rate](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis PIR
 Context **configure** [port string tdm ds3 string egress port-scheduler-policy overrides max-rate percent-rate decimal-number](#)
 Tree [percent-rate](#)
 Range 0.01 to 100
 Default 100
 Units percent
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis PIR

Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate rate (*number* | *keyword*)

Tree rate

Range 1 to 3200000000

Default max

Units kilobps

Options max

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis Port egress scheduler policy name

Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy policy-name *reference*

Tree policy-name

Reference **configure** qos port-scheduler-policy *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Encapsulation method

Context **configure** port *string* tdm ds3 *string* encap-type *keyword*

Tree encap-type

Options cem

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

feac-loop-respond *boolean*

Synopsis Enable DS-3 interface to respond to remote loop signals
 Context **configure** *port string tdm ds3 string feac-loop-respond boolean*
 Tree [feac-loop-respond](#)
 Default false
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Framing for the DS3 channel
 Context **configure** *port string tdm ds3 string framing keyword*
 Tree [framing](#)
 Default c-bit
 Options c-bit, m23, ds3-unframed
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag *keyword*

Synopsis Value transmitted during idle cycles
 Context **configure** *port string tdm ds3 string idle-cycle-flag keyword*
 Tree [idle-cycle-flag](#)
 Options flags, ones
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	configure port string tdm ds3 string load-balancing-algorithm keyword
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode on the channel
Context	configure port string tdm ds3 string loopback keyword
Tree	loopback
Options	line, internal, remote
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
Context	configure port string tdm ds3 string mac-address string
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

maintenance-data-link

Synopsis	Enter the maintenance-data-link context
Context	configure port string tdm ds3 string maintenance-data-link
Tree	maintenance-data-link
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

equipment-id-code *string*

Synopsis	Equipment ID Code (EIC) of the MDL
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link equipment-id-code <i>string</i>
Tree	equipment-id-code
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

facility-id-code *string*

Synopsis	Facility ID Code sent in the MDL Path message
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link facility-id-code <i>string</i>
Tree	facility-id-code
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

frame-id-code *string*

Synopsis	Frame ID Code (FIC) of the MDL
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link frame-id-code <i>string</i>
Tree	frame-id-code
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

generator-string *string*

Synopsis	Generator number string sent in MDL test signal message
Context	configure port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link generator-string <i>string</i>
Tree	generator-string
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

location-id-code *string*

Synopsis	Location ID Code (LIC) of the MDL
Context	configure port string tdm ds3 string maintenance-data-link location-id-code string
Tree	location-id-code
String Length	0 to 11
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-string *string*

Synopsis	Port number string sent in the MDL idle signal message
Context	configure port string tdm ds3 string maintenance-data-link port-string string
Tree	port-string
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

transmit-message-type

Synopsis	Enter the transmit-message-type context
Context	configure port string tdm ds3 string maintenance-data-link transmit-message-type
Tree	transmit-message-type
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal *boolean*

Synopsis	Enable transmission of MDL idle signal messages
Context	configure port string tdm ds3 string maintenance-data-link transmit-message-type idle-signal boolean
Tree	idle-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

path *boolean*

Synopsis	Enable transmission of MDL path messages
Context	configure <i>port string tdm ds3 string maintenance-data-link transmit-message-type path boolean</i>
Tree	<i>path</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

test-signal *boolean*

Synopsis	Enable transmission of MDL test signal messages
Context	configure <i>port string tdm ds3 string maintenance-data-link transmit-message-type test-signal boolean</i>
Tree	<i>test-signal</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

unit-id-code *string*

Synopsis	Unit ID Code (UIC) of the MDL
Context	configure <i>port string tdm ds3 string maintenance-data-link unit-id-code string</i>
Tree	<i>unit-id-code</i>
String Length	0 to 6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	configure <i>port string tdm ds3 string mode keyword</i>

Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu number

Synopsis	Maximum payload MTU size for the port
Context	configure port string tdm ds3 string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port string tdm ds3 string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy reference

Synopsis	Accounting policy
Context	configure port string tdm ds3 string network accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats boolean

Synopsis	Collect accounting and statistical data
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Context	configure port <i>string</i> tdm ds3 <i>string</i> network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM DS3 network channel
Context	configure port <i>string</i> tdm ds3 <i>string</i> network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port <i>string</i> tdm ds3 <i>string</i> report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port <i>string</i> tdm ds3 <i>string</i> report-alarm ais <i>boolean</i>
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
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Context	configure port string tdm ds3 string report-alarm looped boolean
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los boolean

Synopsis	Report loss of signal errors
Context	configure port string tdm ds3 string report-alarm los boolean
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof boolean

Synopsis	Report out-of-frame errors
Context	configure port string tdm ds3 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai boolean

Synopsis	Report resource availability indicator events
Context	configure port string tdm ds3 string report-alarm rai boolean
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scramble *boolean*

Synopsis	Enable TDM DS3 payload scrambling
Context	configure port string tdm ds3 string scramble <i>boolean</i>
Tree	scramble
Description	When configured to true , the TDM DS3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to false , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

subrate

Synopsis	Enter the subrate context
Context	configure port string tdm ds3 string subrate
Tree	subrate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

csu-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channel Service Unit (CSU) compatibility mode
Context	configure port string tdm ds3 string subrate csu-mode <i>keyword</i>
Tree	csu-mode
Options	digital-link, larscom
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate-step *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subrate for the associated DS3
Context	configure port string tdm ds3 string subrate rate-step number
Tree	rate-step
Range	0 to 147
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

e1 [[e1-index](#)] *string*

Synopsis	Enter the e1 list instance
Context	configure port string tdm e1 string
Tree	e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[e1-index] *string*

Synopsis	E-1 channel
Context	configure port string tdm e1 string
Tree	e1
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the E1 channel
Context	configure port string tdm e1 string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-threshold

Synopsis Enter the **ber-threshold** context
Context **configure** port string tdm e1 string ber-threshold
Tree [ber-threshold](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-degrade *number*

Synopsis BER signal degradation threshold
Context **configure** port string tdm e1 string ber-threshold signal-degrade *number*
Tree [signal-degrade](#)
Range 1 | 5 | 10 | 50 | 100
Default 5
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-failure *number*

Synopsis BER signal failure threshold
Context **configure** port string tdm e1 string ber-threshold signal-failure *number*
Tree [signal-failure](#)
Range 1 | 5 | 10 | 50 | 100
Default 50
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

channel-group [[ds0-index](#)] *number*

Synopsis Enter the **channel-group** list instance
Context **configure** port string tdm e1 string channel-group *number*

Tree	channel-group
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[ds0-index] number

Synopsis	DS0 channel group in a channelized DS1 or E1 circuit
Context	configure port string tdm e1 string channel-group number
Tree	channel-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state keyword

Synopsis	Administrative state of the E1 channel group
Context	configure port string tdm e1 string channel-group number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description string

Synopsis	Text description
Context	configure port string tdm e1 string channel-group number description string
Tree	description
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [*priority-level*] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[*priority-level*] *number*

Synopsis	Port priority levels override
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Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir decimal-number

Synopsis	CIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir decimal-number

Synopsis	PIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir decimal-number
Tree	pir

Range	0.01 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000

Default	max
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the max-rate context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate *decimal-number*

Synopsis	PIR
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (*number* | *keyword*)

Synopsis	PIR
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 3200000000
Default	max

Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy <i>policy-name reference</i>
Tree	<i>policy-name</i>
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> encap-type <i>keyword</i>
Tree	<i>encap-type</i>
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-payload-fill

Synopsis	Enter the idle-payload-fill context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	<i>idle-payload-fill</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8 bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill pattern <i>number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-signal-fill

Synopsis	Enter the idle-signal-fill context
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

all-ones

Synopsis	Define the 8-bit value to be transmitted as 11111111
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: all-ones or pattern .
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pattern *number*

Synopsis User-defined pattern to be transmitted

Context **configure** port *string* tdm e1 *string* channel-group *number* idle-signal-fill pattern *number*

Tree [pattern](#)

Range 0 to 15

Notes The following elements are part of a choice: **all-ones** or **pattern**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis Load balancing algorithm to be used on this port

Context **configure** port *string* tdm e1 *string* channel-group *number* load-balancing-algorithm *keyword*

Tree [load-balancing-algorithm](#)

Options default, include-l4, exclude-l4

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis MAC address for the port

Context **configure** port *string* tdm e1 *string* channel-group *number* mac-address *string*

Tree [mac-address](#)

Default 00:00:00:00:00:00

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	configure port string tdm e1 string channel-group number mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu *number*

Synopsis	Maximum payload MTU
Context	configure port string tdm e1 string channel-group number mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port string tdm e1 string channel-group number network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure port string tdm e1 string channel-group number network accounting-policy reference
Tree	accounting-policy

Reference	configure log accounting-policy <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Network queue policy on TDM E0 network channel group
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

speed *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the E0 channels in this channel group
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> speed <i>number</i>
Tree	speed
Range	56 64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

timeslot *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure timeslot for this channel group.
Context	configure port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> timeslot <i>number</i>
Tree	timeslot
Range	1 to 32
Max.	32
Instances	
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clock for data transmission
Context	configure port <i>string</i> tdm e1 <i>string</i> clock-source <i>keyword</i>
Tree	clock-source
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing on the E1 channel
Context	configure port <i>string</i> tdm e1 <i>string</i> framing <i>keyword</i>
Tree	framing
Default	g704

Options	no-crc-g704, g704, e1-unframed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode
Context	configure port <i>string</i> tdm e1 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

national-bits

Synopsis	Enter the national-bits context
Context	configure port <i>string</i> tdm e1 <i>string</i> national-bits
Tree	national-bits
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa4 *boolean*

Synopsis	Enable bit Sa4
Context	configure port <i>string</i> tdm e1 <i>string</i> national-bits sa4 <i>boolean</i>
Tree	sa4
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa5 *boolean*

Synopsis	Enable bit Sa5
Context	configure port <i>string</i> tdm e1 <i>string</i> national-bits sa5 <i>boolean</i>
Tree	sa5

Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa6 *boolean*

Synopsis	Enable bit Sa6
Context	configure port <i>string</i> tdm e1 <i>string</i> national-bits sa6 <i>boolean</i>
Tree	sa6
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa7 *boolean*

Synopsis	Enable bit Sa7
Context	configure port <i>string</i> tdm e1 <i>string</i> national-bits sa7 <i>boolean</i>
Tree	sa7
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

sa8 *boolean*

Synopsis	Enable bit Sa8
Context	configure port <i>string</i> tdm e1 <i>string</i> national-bits sa8 <i>boolean</i>
Tree	sa8
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port <i>string</i> tdm e1 <i>string</i> report-alarm

Tree [report-alarm](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais boolean

Synopsis Report alarm indication signal errors
 Context **configure** [port](#) *string* [tdm e1](#) *string* [report-alarm](#) [ais](#) *boolean*
 Tree [ais](#)
 Default true
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sd boolean

Synopsis Enable/disable ber-sd alarm.
 Context **configure** [port](#) *string* [tdm e1](#) *string* [report-alarm](#) [ber-sd](#) *boolean*
 Tree [ber-sd](#)
 Default false
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ber-sf boolean

Synopsis Enable/disable ber-sf alarm.
 Context **configure** [port](#) *string* [tdm e1](#) *string* [report-alarm](#) [ber-sf](#) *boolean*
 Tree [ber-sf](#)
 Default false
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped boolean

Synopsis Report looped packet errors
 Context **configure** [port](#) *string* [tdm e1](#) *string* [report-alarm](#) [looped](#) *boolean*

Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port <i>string</i> tdm e1 <i>string</i> report-alarm los <i>boolean</i>
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port <i>string</i> tdm e1 <i>string</i> report-alarm oof <i>boolean</i>
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure port <i>string</i> tdm e1 <i>string</i> report-alarm rai <i>boolean</i>
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

signal-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	configure port string tdm e1 string signal-mode keyword
Tree	signal-mode
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

e3 [[e3-index](#)] *string*

Synopsis	Enter the e3 list instance
Context	configure port string tdm e3 string
Tree	e3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[e3-index] *string*

Synopsis	Components making up the SONET/SDH Path
Context	configure port string tdm e3 string
Tree	e3
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

admin-state *keyword*

Synopsis	Administrative state of the E3 channel
Context	configure port string tdm e3 string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

clock-source *keyword*

Synopsis Clock for data transmission
 Context **configure** *port string tdm e3 string clock-source keyword*
 Tree [clock-source](#)
 Default node-timed
 Options loop-timed, node-timed
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

crc *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Precision of the CRC
 Context **configure** *port string tdm e3 string crc number*
 Tree [crc](#)
 Range 16 | 32
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

description *string*

Synopsis Text description
 Context **configure** *port string tdm e3 string description string*
 Tree [description](#)
 String Length 1 to 160
 Default E3
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

egress

Synopsis	Enter the egress context
Context	configure port <i>string</i> tdm e3 <i>string</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

port-scheduler-policy

Synopsis	Enter the port-scheduler-policy context
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

overrides

Synopsis	Enable the overrides context
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

level [[priority-level](#)] *number*

Synopsis	Enter the level list instance
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

[\[priority-level\]](#) *number*

Synopsis	Port priority levels override
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Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate

Synopsis	Enter the percent-rate context
Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir decimal-number

Synopsis	CIR for the priority level
Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir decimal-number

Synopsis	PIR for the priority level
Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100

Default	100
Units	percent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate

Synopsis	Enter the rate context
Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 3200000000
Default	max
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

pir (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	configure port string tdm e3 string egress port-scheduler-policy overrides level number rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 3200000000
Default	max

Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

max-rate

Synopsis	Enter the max-rate context
Context	configure port string tdm e3 string egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

percent-rate decimal-number

Synopsis	PIR
Context	configure port string tdm e3 string egress port-scheduler-policy overrides max-rate percent-rate decimal-number
Tree	percent-rate
Range	0.01 to 100
Default	100
Units	percent
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rate (number | keyword)

Synopsis	PIR
Context	configure port string tdm e3 string egress port-scheduler-policy overrides max-rate rate (number keyword)
Tree	rate
Range	1 to 3200000000
Default	max
Units	kilobps

Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

policy-name *reference*

Synopsis	Port egress scheduler policy name
Context	configure port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy <i>policy-name</i> <i>reference</i>
Tree	policy-name
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

encap-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	configure port <i>string</i> tdm e3 <i>string</i> encap-type <i>keyword</i>
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

framing *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the E3 channel
Context	configure port <i>string</i> tdm e3 <i>string</i> framing <i>keyword</i>
Tree	framing

Default	g751
Options	g751, g832, e3-unframed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

idle-cycle-flag *keyword*

Synopsis	Value transmitted by channel group during idle cycle
Context	configure port <i>string</i> tdm e3 <i>string</i> idle-cycle-flag <i>keyword</i>
Tree	idle-cycle-flag
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

load-balancing-algorithm *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	configure port <i>string</i> tdm e3 <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

loopback *keyword*

Synopsis	Loopback mode
Context	configure port <i>string</i> tdm e3 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mac-address *string*

Synopsis	MAC address for the port
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Context	configure port string tdm e3 string mac-address string
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mode keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	configure port string tdm e3 string mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

mtu number

Synopsis	Maximum payload MTU size
Context	configure port string tdm e3 string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

network

Synopsis	Enter the network context
Context	configure port string tdm e3 string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

accounting-policy *reference*

Synopsis	Accounting policy
Context	configure port string tdm e3 string network accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

collect-stats *boolean*

Synopsis	Collect accounting and statistical data
Context	configure port string tdm e3 string network collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

queue-policy *reference*

Synopsis	Queue policy on the TDM E3 network channel
Context	configure port string tdm e3 string network queue-policy <i>reference</i>
Tree	queue-policy
Reference	configure qos network-queue <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

report-alarm

Synopsis	Enter the report-alarm context
Context	configure port string tdm e3 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

ais *boolean*

Synopsis	Report alarm indication signal errors
Context	configure port string tdm e3 string report-alarm ais boolean
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

looped *boolean*

Synopsis	Report looped packet errors
Context	configure port string tdm e3 string report-alarm looped boolean
Tree	looped
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

los *boolean*

Synopsis	Report loss of signal errors
Context	configure port string tdm e3 string report-alarm los boolean
Tree	los
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

oof *boolean*

Synopsis	Report out-of-frame errors
Context	configure port string tdm e3 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

rai *boolean*

Synopsis	Report resource availability indicator events
Context	configure <i>port string tdm e3 string report-alarm rai boolean</i>
Tree	<i>rai</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

scramble *boolean*

Synopsis	Enable TDM E3 payload scrambling
Context	configure <i>port string tdm e3 string scramble boolean</i>
Tree	<i>scramble</i>
Description	When configured to true , the TDM E3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to false , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>port string tdm hold-time</i>
Tree	<i>hold-time</i>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

down *number*

Synopsis	Hold timer for link down event dampening
Context	configure <i>port string tdm hold-time down number</i>
Tree	<i>down</i>
Range	0 to 100
Default	5

Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

up number

Synopsis	Hold timer for link up event dampening
Context	configure port string tdm hold-time up number
Tree	up
Range	1 to 100
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

transceiver

Synopsis	Enter the transceiver context
Context	configure port string transceiver
Tree	transceiver
Introduced	16.0.R4
Platforms	All

digital-coherent-optics boolean

Synopsis	Enable digital coherent optics module for transceiver
Context	configure port string transceiver digital-coherent-optics boolean
Tree	digital-coherent-optics
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.33 port-policy commands

```
configure
- port-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-port-scheduler-policy reference
```

3.33.1 port-policy command descriptions

port-policy [[name](#)] *string*

Synopsis	Enter the port-policy list instance
Context	configure port-policy <i>string</i>
Tree	port-policy
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Port policy name
Context	configure port-policy <i>string</i>
Tree	port-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure port-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress-port-scheduler-policy *reference*

Synopsis	Policy for egress port scheduler
Context	configure port-policy <i>string</i> egress-port-scheduler-policy <i>reference</i>

Tree	egress-port-scheduler-policy
Reference	configure qos port-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

3.34 port-xc commands

```
configure
- port-xc
  - apply-groups reference
  - apply-groups-exclude reference
  - pxc number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port-id reference
```

3.34.1 port-xc command descriptions

port-xc

Synopsis	Enter the port-xc context
Context	configure port-xc
Tree	port-xc
Description	Commands in this context configure port cross-connect (PXC) functionality.
Introduced	16.0.R1
Platforms	All

pxc [[pxc-id](#)] *number*

Synopsis	Enter the pxc list instance
Context	configure port-xc pxc number
Tree	pxc
Description	Commands in this context configure port cross-connect (PXC) information.
Introduced	16.0.R1
Platforms	All

[\[pxc-id\]](#) *number*

Synopsis	PXC ID
Context	configure port-xc pxc number
Tree	pxc
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PXC
Context	configure port-xc pxc number admin-state keyword

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure port-xc pxc number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

port-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PXC port ID
Context	configure port-xc pxc number port-id reference
Tree	port-id
Reference	configure port string
Introduced	16.0.R1
Platforms	All

3.35 pw-port commands

```

configure
- pw-port number
- apply-groups reference
- apply-groups-exclude reference
- description string
- dot1q-etype string
- encap-type keyword
- epipe reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- down-on-peer-tldp-pw-status-faults boolean
- egress
- shaper
  - intermediate-destination-id string
  - virtual-port string
- fpe-id reference
- monitor-oper-group reference
- oper-up-on-mh-standby boolean
- oper-group reference
- qinq-etype string
- sdp reference
- admin-state keyword
- adv-service-mtu number
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- shaper
  - intermediate-destination-id string
  - pw-sap-secondary-shaper string
  - virtual-port string
- vc-label number
- entropy-label boolean
- ingress
- vc-label number
- monitor-oper-group reference
- vc-id number
- vc-type keyword
- vlan-vc-tag number

```


3.35.1 pw-port command descriptions

pw-port [*pw-port-id*] *number*

Synopsis	Enter the pw-port list instance
Context	configure <i>pw-port number</i>
Tree	pw-port
Introduced	16.0.R4
Platforms	All

[pw-port-id] *number*

Synopsis	Pseudowire port ID
Context	configure <i>pw-port number</i>
Tree	pw-port
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>pw-port number description string</i>
Tree	description
String Length	1 to 255
Default	PW Port
Introduced	16.0.R4
Platforms	All

dot1q-etype *string*

Synopsis	Dot1q Ethertype on the PW port
Context	configure <i>pw-port number dot1q-etype string</i>
Tree	dot1q-etype

Default	33024
Introduced	16.0.R4
Platforms	All

encap-type *keyword*

Synopsis	Encap type of the pseudo-wire port
Context	configure pw-port number encap-type keyword
Tree	encap-type
Default	dot1q
Options	dot1q, qinq
Introduced	16.0.R4
Platforms	All

epipe [[service-name](#)] *reference*

Synopsis	Enter the epipe list instance
Context	configure pw-port number epipe reference
Tree	epipe
Max. Instances	1
Notes	The following elements are part of a choice: epipe or sdp .
Introduced	16.0.R4
Platforms	All

[service-name] *reference*

Synopsis	Administrative service name
Context	configure pw-port number epipe reference
Tree	epipe
Reference	configure service epipe string
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the pseudowire port
Context	configure pw-port <i>number</i> epipe <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

down-on-peer-tldp-pw-status-faults *boolean*

Synopsis	Force PW port to go down for certain PW status bits
Context	configure pw-port <i>number</i> epipe <i>reference</i> down-on-peer-tldp-pw-status-faults <i>boolean</i>
Tree	down-on-peer-tldp-pw-status-faults
Description	<p>When configured to true, the router causes the PW port configured on an Epipe to go locally operationally down if any of the following status bits are received on a mate spoke SDP across an FPE:</p> <ul style="list-style-type: none"> • 0x00000001 - Pseudowire Not Forwarding • 0x00000002 - Local Attachment Circuit (ingress) Receive Fault • 0x00000004 - Local Attachment Circuit (egress) Transmit Fault • 0x00000008 - Local PSN-facing PW (ingress) Receive Fault • 0x00000010 - Local PSN-facing PW (egress) Transmit Fault <p>When configured to false, the mate PW status fault bits are not taken into account in the operational state of the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure pw-port <i>number</i> epipe <i>reference</i> egress
Tree	egress
Introduced	16.0.R4
Platforms	All

shaper

Synopsis	Enter the shaper context
Context	configure pw-port number epipe reference egress shaper
Tree	shaper
Introduced	16.0.R4
Platforms	All

intermediate-destination-id *string*

Synopsis	Intermediate destination ID for ESM PW SAPs
Context	configure pw-port number epipe reference egress shaper intermediate-destination-id string
Tree	intermediate-destination-id
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

virtual-port *string*

Synopsis	Virtual port name of the egress shaper
Context	configure pw-port number epipe reference egress shaper virtual-port string
Tree	virtual-port
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

fpe-id *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding Path Extension ID
Context	configure pw-port number epipe reference fpe-id reference
Tree	fpe-id

Reference	configure fwd-path-ext fpe number
Introduced	16.0.R4
Platforms	All

monitor-oper-group reference

Synopsis	Name of the operational group to monitor
Context	configure pw-port number epipe reference monitor-oper-group reference
Tree	monitor-oper-group
Reference	configure service oper-group string
Introduced	16.0.R4
Platforms	All

oper-up-on-mh-standby boolean

Synopsis	Sets PW port to operationally up on MH standby
Context	configure pw-port number epipe reference oper-up-on-mh-standby boolean
Tree	oper-up-on-mh-standby
Description	<p>When configured to true, this command allows the PW port to remain operationally up on the non-DF PE and all the PW SAPs contained in the PW port.</p> <p>The PW port status shows operationally up status with a flag MH Standby.</p> <p>When configured to false, this command causes the PW port to remain operationally down on the non-DF PE and all the PW SAPs contained in the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

oper-group reference

Synopsis	Operational group ID
Context	configure pw-port number oper-group reference
Tree	oper-group
Reference	configure service oper-group string
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qinq-etype *string*

Synopsis	QinQ Ethertype encapsulation on the PW port
Context	configure pw-port <i>number</i> qinq-etype <i>string</i>
Tree	qinq-etype
Default	33024
Introduced	16.0.R4
Platforms	All

sdp [[sdp-id](#)] *reference*

Synopsis	Enter the sdp list instance
Context	configure pw-port <i>number</i> sdp <i>reference</i>
Tree	sdp
Max. Instances	1
Notes	The following elements are part of a choice: epipe or sdp .
Introduced	16.0.R4
Platforms	All

[sdp-id] *reference*

Synopsis	SDP ID
Context	configure pw-port <i>number</i> sdp <i>reference</i>
Tree	sdp
Reference	configure service sdp <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the pseudowire port
Context	configure pw-port <i>number</i> sdp <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

adv-service-mtu *number*

Synopsis	Service MTU size to be used
Context	configure pw-port number sdp reference adv-service-mtu number
Tree	adv-service-mtu
Range	0 to 9782
Units	bytes
Introduced	21.7.R1
Platforms	All

control-word *boolean*

Synopsis	Allow control word bit setting in the label message
Context	configure pw-port number sdp reference control-word boolean
Tree	control-word
Default	false
Introduced	19.10.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure pw-port number sdp reference egress
Tree	egress
Introduced	16.0.R4
Platforms	All

shaper

Synopsis	Enter the shaper context
----------	---------------------------------

Context	configure pw-port number sdp reference egress shaper
Tree	shaper
Introduced	16.0.R4
Platforms	All

intermediate-destination-id *string*

Synopsis	Intermediate destination ID applicable to ESM PW SAPs
Context	configure pw-port number sdp reference egress shaper intermediate-destination-id string
Tree	intermediate-destination-id
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

pw-sap-secondary-shaper *string*

Synopsis	Secondary shaper applicable to PW SAPs
Context	configure pw-port number sdp reference egress shaper pw-sap-secondary-shaper string
Tree	pw-sap-secondary-shaper
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

virtual-port *string*

Synopsis	Virtual port applicable to all PW SAPs
Context	configure pw-port number sdp reference egress shaper virtual-port string
Tree	virtual-port
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress VC label representing the PW port
Context	configure pw-port number sdp reference egress vc-label number
Tree	vc-label
Range	16 to 1048575
Introduced	16.0.R4
Platforms	All

entropy-label *boolean*

Synopsis	Enable entropy level insertion on the PW port
Context	configure pw-port number sdp reference entropy-label boolean
Tree	entropy-label
Description	<p>When configured to true, the entropy label and ELI are inserted in packets for which at least one LSP in the stack for the far-end of the tunnel used by the service has advertised entropy label capability.</p> <ul style="list-style-type: none"> For RSVP or SR-TE tunnels, the entropy-label command must be set to true under the configure router mpls or configure router mpls lsp context. For SR-ISIS, SR-OSPF, or SR-TE tunnels, the override-tunnel-elic command must be set to true under the configure router isis entropy-label or configure router ospf entropy-label context. For LDP tunnels, the entropy-label-capability command must be set to true under the configure router ldp context. <p>When configured to false, entropy label insertion on the PW port is not allowed.</p> <p>The entropy label is only applicable to PW ports bound to a static port; it is not applicable to ports using an FPE.</p>
Default	false
Introduced	21.5.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure pw-port number sdp reference ingress

Tree	ingress
Introduced	16.0.R4
Platforms	All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress VC label representing the PW-port
Context	configure pw-port <i>number</i> sdp <i>reference</i> ingress vc-label <i>number</i>
Tree	vc-label
Range	1 to 1048575
Introduced	16.0.R4
Platforms	All

monitor-oper-group *reference*

Synopsis	Name of the operational group to monitor
Context	configure pw-port <i>number</i> sdp <i>reference</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R4
Platforms	All

vc-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual Circuit ID signaled to the peer
Context	configure pw-port <i>number</i> sdp <i>reference</i> vc-id <i>number</i>
Tree	vc-id
Range	1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

vc-type *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding mode for the PW-port
Context	configure <i>pw-port number sdp reference vc-type keyword</i>
Tree	vc-type
Default	ether
Options	ether, vlan
Introduced	16.0.R4
Platforms	All

vlan-vc-tag *number*

Synopsis	VLAN VC tag
Context	configure <i>pw-port number sdp reference vlan-vc-tag number</i>
Tree	vlan-vc-tag
Range	0 to 4094
Introduced	16.0.R4
Platforms	All

3.36 python commands

```

configure
- python
  - apply-groups reference
  - apply-groups-exclude reference
  - python-policy string
    - apply-groups reference
    - apply-groups-exclude reference
  - cache
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - entry-size number
    - max-entries number
    - max-entry-lifetime number
    - mcs-peer
      - apply-groups reference
      - apply-groups-exclude reference
      - ip-address reference
      - sync-tag string
    - minimum-lifetimes
      - high-availability number
      - multi-chassis-redundancy number
      - persistence number
    - persistence boolean
  - description string
  - dhcp keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - dhcp6 keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - diameter keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - gtpv1-c keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - gtpv2-c keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - nat-group reference
  - pfc keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - pppoe keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - radius keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - syslog

```

configure python python-policy syslog apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **script** *reference*
- **wlan-gw-group** *reference*
- **python-script** *string*
- **action-on-fail** *keyword*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **protection**
 - **hmac-sha256** *string*
- **run-as-user** *string*
- **urls** *string*
- **version** *keyword*

3.36.1 python command descriptions

python

Synopsis	Enter the python context
Context	configure python
Tree	python
Introduced	16.0.R1
Platforms	All

python-policy [[name](#)] *string*

Synopsis	Enter the python-policy list instance
Context	configure python python-policy <i>string</i>
Tree	python-policy
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[\[name\]](#) *string*

Synopsis	Python policy name
Context	configure python python-policy <i>string</i>
Tree	python-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cache

Synopsis	Enable the cache context
Context	configure python python-policy <i>string</i> cache
Tree	cache

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Python cache
Context	configure python python-policy <i>string</i> cache admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

entry-size *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum data structure size for Python cache entry
Context	configure python python-policy <i>string</i> cache entry-size <i>number</i>
Tree	entry-size
Range	32 to 2048
Default	256
Units	bytes
Introduced	16.0.R1
Platforms	All

max-entries *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of Python cache entries to be stored
Context	configure python python-policy <i>string</i> cache max-entries <i>number</i>
Tree	max-entries

Range	1 to 1000000
Default	128000
Introduced	16.0.R1
Platforms	All

max-entry-lifetime *number*

Synopsis	Maximum lifetime allowed for each entry of the Python cache of this Python policy
Context	configure python python-policy <i>string</i> cache max-entry-lifetime <i>number</i>
Tree	max-entry-lifetime
Range	1 to 604800
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	All

mcs-peer

Synopsis	Enable the mcs-peer context
Context	configure python python-policy <i>string</i> cache mcs-peer
Tree	mcs-peer
Introduced	16.0.R1
Platforms	All

ip-address *reference*

Synopsis	IP address of the MCS peer
Context	configure python python-policy <i>string</i> cache mcs-peer ip-address <i>reference</i>
Tree	ip-address
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

Synopsis	Python policy cache that is uniquely identified within the scope of MCS peer
Context	configure python python-policy <i>string</i> cache mcs-peer sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

minimum-lifetimes

Synopsis	Enter the minimum-lifetimes context
Context	configure python python-policy <i>string</i> cache minimum-lifetimes
Tree	minimum-lifetimes
Introduced	16.0.R1
Platforms	All

high-availability *number*

Synopsis	Minimum lifetime of a cache entry to be synced with CPM
Context	configure python python-policy <i>string</i> cache minimum-lifetimes high-availability <i>number</i>
Tree	high-availability
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

multi-chassis-redundancy *number*

Synopsis	Minimum lifetime for synchronization with the MCS peer
Context	configure python python-policy <i>string</i> cache minimum-lifetimes multi-chassis-redundancy <i>number</i>
Tree	multi-chassis-redundancy
Range	1 to 600

Units	seconds
Introduced	16.0.R1
Platforms	All

persistence *number*

Synopsis	Minimum lifetime for cache entry to be made persistent
Context	configure python python-policy <i>string</i> cache minimum-lifetimes persistence <i>number</i>
Tree	persistence
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

persistence *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow persistence for cached entries
Context	configure python python-policy <i>string</i> cache persistence <i>boolean</i>
Tree	persistence
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure python python-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp [message-type] keyword direction keyword

Synopsis	Enter the dhcp list instance
Context	configure python python-policy string dhcp keyword direction keyword
Tree	dhcp
Introduced	16.0.R1
Platforms	All

[message-type] keyword

Synopsis	DHCP message type
Context	configure python python-policy string dhcp keyword direction keyword
Tree	dhcp
Options	discover, offer, request, decline, ack, nak, release, inform, force-renew, lease-query, lease-unassigned, lease-unknown, lease-active
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction keyword

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy string dhcp keyword direction keyword
Tree	dhcp
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script reference

Synopsis	Python script to handle the message
Context	configure python python-policy string dhcp keyword direction keyword script reference
Tree	script
Reference	configure python python-script string

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dhcp6 [*message-type*] *keyword direction keyword*

Synopsis	Enter the dhcp6 list instance
Context	configure <i>python python-policy string dhcp6 keyword direction keyword</i>
Tree	<i>dhcp6</i>
Introduced	16.0.R1
Platforms	All

[message-type] *keyword*

Synopsis	DHCPv6 message type
Context	configure <i>python python-policy string dhcp6 keyword direction keyword</i>
Tree	<i>dhcp6</i>
Options	solicit, advertise, request, confirm, renew, rebind, reply, release, decline, reconfigure, info-request, relay-forward, relay-reply
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure <i>python python-policy string dhcp6 keyword direction keyword</i>
Tree	<i>dhcp6</i>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> dhcp6 <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

diameter [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the diameter list instance
Context	configure python python-policy <i>string</i> diameter <i>keyword</i> direction <i>keyword</i>
Tree	diameter
Introduced	16.0.R1
Platforms	All

[message-type] *keyword*

Synopsis	Diameter message type
Context	configure python python-policy <i>string</i> diameter <i>keyword</i> direction <i>keyword</i>
Tree	diameter
Options	ccr, cca, rar, raa, cer, cea, dwr, dwa, dpr, dpa, asr, asa, aar, aaa
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string</i> diameter <i>keyword</i> direction <i>keyword</i>
Tree	diameter
Options	ingress, egress
Notes	This element is part of a list key.

Introduced 16.0.R1
 Platforms All

script *reference*

Synopsis Python script to handle the message
 Context **configure** [python](#) [python-policy](#) *string* [diameter](#) *keyword* [direction](#) *keyword* [script](#) *reference*
 Tree [script](#)
 Reference **configure** [python](#) [python-script](#) *string*
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

gtpv1-c [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis Enter the **gtpv1-c** list instance
 Context **configure** [python](#) [python-policy](#) *string* [gtpv1-c](#) *keyword* [direction](#) *keyword*
 Tree [gtpv1-c](#)
 Introduced 16.0.R1
 Platforms All

[message-type] *keyword*

Synopsis GTPv1-C message type
 Context **configure** [python](#) [python-policy](#) *string* [gtpv1-c](#) *keyword* [direction](#) *keyword*
 Tree [gtpv1-c](#)
 Options echo-request, echo-response, version-not-supported, create-pdp-context-request, create-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, error-indication, end-marker
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string</i> gtpv1-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv1-c
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> gtpv1-c <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

gtpv2-c [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the gtpv2-c list instance
Context	configure python python-policy <i>string</i> gtpv2-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv2-c
Introduced	16.0.R1
Platforms	All

[message-type] *keyword*

Synopsis	GTPv2-C message type
Context	configure python python-policy <i>string</i> gtpv2-c <i>keyword</i> direction <i>keyword</i>
Tree	gtpv2-c
Options	echo-request, echo-response, version-not-supported, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, delete-bearer-request,

delete-bearer-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-ack, change-notification-request, change-notification-response, stop-paging-indication

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

direction *keyword*

Synopsis Event that is either incoming or outgoing

Context **configure** [python](#) [python-policy](#) *string* [gtpv2-c](#) *keyword* [direction](#) *keyword*

Tree [gtpv2-c](#)

Options ingress, egress

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

script *reference*

Synopsis Python script to handle the message

Context **configure** [python](#) [python-policy](#) *string* [gtpv2-c](#) *keyword* [direction](#) *keyword* [script](#) *reference*

Tree [script](#)

Reference **configure** [python](#) [python-script](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

nat-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis NAT ISA group for this Python policy

Context **configure** [python](#) [python-policy](#) *string* [nat-group](#) *reference*

Tree	nat-group
Reference	configure isa nat-group <i>number</i>
Notes	The following elements are part of a choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

pfcp [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the pfcp list instance
Context	configure python python-policy <i>string</i> pfcp <i>keyword</i> direction <i>keyword</i>
Tree	pfcp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[message-type] *keyword*

Synopsis	Message type applied to the script
Context	configure python python-policy <i>string</i> pfcp <i>keyword</i> direction <i>keyword</i>
Tree	pfcp
Options	heartbeat-request, heartbeat-response, association-setup-request, association-setup-response, association-update-request, association-update-response, association-release-request, association-release-response, node-report-request, node-report-response, session-estab-request, session-estab-response, session-mod-request, session-mod-response, session-del-request, session-del-response, session-report-request, session-report-response
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

direction *keyword*

Synopsis	Event that is either incoming or outgoing
Context	configure python python-policy <i>string</i> pfcp <i>keyword</i> direction <i>keyword</i>
Tree	pfcp
Options	ingress, egress
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> pfc <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the pppoe list instance
Context	configure python python-policy <i>string</i> pppoe <i>keyword</i> direction <i>keyword</i>
Tree	pppoe
Introduced	16.0.R1
Platforms	All

[message-type] *keyword*

Synopsis	PPPoE message type
Context	configure python python-policy <i>string</i> pppoe <i>keyword</i> direction <i>keyword</i>
Tree	pppoe
Options	session-lcp, session-pap, session-chap, session-ipcp, session-ip6cp, pado, padi, padr, pads, padt
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Event that is either incoming or outgoing
----------	---

Context	configure python python-policy <i>string</i> pppoe <i>keyword</i> direction <i>keyword</i>
Tree	pppoe
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

script *reference*

Synopsis	Python script to handle the message
Context	configure python python-policy <i>string</i> pppoe <i>keyword</i> direction <i>keyword</i> script <i>reference</i>
Tree	script
Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

radius [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the radius list instance
Context	configure python python-policy <i>string</i> radius <i>keyword</i> direction <i>keyword</i>
Tree	radius
Introduced	16.0.R1
Platforms	All

[[message-type](#)] *keyword*

Synopsis	RADIUS message type
Context	configure python python-policy <i>string</i> radius <i>keyword</i> direction <i>keyword</i>
Tree	radius
Options	access-request, access-accept, access-reject, accounting-request, accounting-response, access-challenge, disconnect-request, change-of-authorization-request
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

direction *keyword*

Synopsis Event that is either incoming or outgoing

Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* [direction](#) *keyword*

Tree [radius](#)

Options ingress, egress

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

script *reference*

Synopsis Python script to handle the message

Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* [direction](#) *keyword* [script](#) *reference*

Tree [script](#)

Reference **configure** [python](#) [python-script](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

syslog

Synopsis Enable the **syslog** context

Context **configure** [python](#) [python-policy](#) *string* [syslog](#)

Tree [syslog](#)

Introduced 16.0.R1

Platforms All

script *reference*

Synopsis Python script name for outgoing syslog messages

Context **configure** [python](#) [python-policy](#) *string* [syslog](#) [script](#) *reference*

Tree [script](#)

Reference	configure python python-script <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN ISA group for this Python policy
Context	configure python python-policy <i>string</i> wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Notes	The following elements are part of a choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

python-script [[name](#)] *string*

Synopsis	Enter the python-script list instance
Context	configure python python-script <i>string</i>
Tree	python-script
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Python script policy name
Context	configure python python-script <i>string</i>
Tree	python-script
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
 Platforms All

action-on-fail *keyword*

Synopsis Action taken when Python fails to modify the given message
 Context **configure** [python](#) [python-script](#) *string* **action-on-fail** *keyword*
 Tree [action-on-fail](#)
 Default drop
 Options passthrough, drop
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the Python script
 Context **configure** [python](#) [python-script](#) *string* **admin-state** *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [python](#) [python-script](#) *string* **description** *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

protection

Synopsis Enter the **protection** context

Context	configure python python-script <i>string</i> protection
Tree	protection
Introduced	16.0.R1
Platforms	All

hmac-sha256 *string*

Synopsis	Python script to consist of the hash value as obtained by the hmac-sha256 hashing algorithm
Context	configure python python-script <i>string</i> protection hmac-sha256 <i>string</i>
Tree	hmac-sha256
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

run-as-user *string*

Synopsis	User authenticated for scripts
Context	configure python python-script <i>string</i> run-as-user <i>string</i>
Tree	run-as-user
Description	This command configures a user that is different from the current user of the session. Script authentication, authorization, accounting, and any activity within the script, is run as the specified user. If this command is not configured, the current user of the session is used.
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

urls *string*

Synopsis	Script location in URL format
Context	configure python python-script <i>string</i> urls <i>string</i>
Tree	urls
String Length	1 to 180
Max. Instances	3

Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

version *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Python version the script is written for
Context	configure python python-script <i>string</i> version <i>keyword</i>
Tree	version
Default	python2
Options	python2, python3
Introduced	21.2.R1
Platforms	All

3.37 qos commands

```

configure
- qos
- adv-config-policy string
- apply-groups reference
- apply-groups-exclude reference
- child-control
- bandwidth-distribution
  - above-offered-allowance
    - delta-consumed-agg-rate
      - percent decimal-number
    - delta-consumed-higher-tier-rate
      - percent decimal-number
    - unconsumed-agg-rate
      - percent decimal-number
    - unconsumed-higher-tier-rate
      - percent decimal-number
  - above-offered-cap
    - percent decimal-number
    - rate (number | keyword)
  - enqueue-on-pir-zero boolean
  - granularity
    - percent decimal-number
    - rate number
  - internal-scheduler-weight-mode keyword
  - limit-pir-zero-drain boolean
  - lub-init-min-pir boolean
- offered-measurement
  - add
    - active-min-only boolean
    - min-only boolean
    - percent decimal-number
    - rate number
    - fast-start boolean
    - fast-stop boolean
    - granularity
      - percent decimal-number
      - rate number
    - hold-time
      - active-min-only boolean
      - high-rate number
    - max-decrement
      - percent decimal-number
      - rate number
    - sample-interval number
    - time-average-factor
      - dec-only boolean
      - weighting-factor number
  - description string
- apply-groups reference
- apply-groups-exclude reference
- fp-resource-policy string
- aggregate-shapers
  - auto-creation boolean
  - hw-agg-shapers
    - saps boolean
    - subscribers boolean
- queue-sets
  - default-size
    - queue-groups (number | keyword)

```

configure qos fp-resource-policy aggregate-shapers queue-sets default-size saps

- **saps** *(number | keyword)*
- **subscribers** *(number | keyword)*
- **size** *number*
- **allocation-weight** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **reserved-non-shaper-queues** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **ports**
- **hqos-mode** *keyword*
- **queues**
- **ingress-percent-of-total** *decimal-number*
- **hs-attachment-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **low-burst-max-class** *number*
- **queue** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **sched-class** *number*
- **unattached**
- **wrr-group** *number*
- **wrr-group** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **sched-class** *number*
- **unattached**
- **hs-pool-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **mid-tier**
- **mid-pool** *number*
- **allocation-percent** *decimal-number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **parent-root-pool**
- **none**
- **pool-id** *reference*
- **port-bw-oversubscription-factor** *number*
- **slope-policy** *reference*
- **root-tier**
- **root-pool** *number*
- **allocation-weight** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **slope-policy** *reference*
- **system-reserve** *decimal-number*
- **hs-port-pool-policy** *string*
- **alt-port-class-pools**
- **class-pool** *number*
- **allocation**
- **explicit-percent** *decimal-number*
- **port-bw-weight** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **parent-mid-pool**
- **none**
- **pool-id** *number*
- **slope-policy** *reference*
- **apply-groups** *reference*

configure qos hs-port-pool-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **std-port-class-pools**
 - **class-pool** *number*
 - **allocation**
 - **explicit-percent** *decimal-number*
 - **port-bw-weight** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent-mid-pool**
 - **none**
 - **pool-id** *number*
 - **slope-policy** *reference*
- **hs-scheduler-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate** (*number* | *keyword*)
 - **max-rate** (*number* | *keyword*)
 - **scheduling-class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group**
 - **group-id** *number*
 - **weight** *number*
 - **rate** (*number* | *keyword*)
- **hw-agg-shaper-scheduler-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **congestion-threshold** *number*
 - **description** *string*
 - **group** *string*
 - **max-percent-rate** *decimal-number*
 - **max-rate** (*number* | *keyword*)
 - **monitor-threshold** *number*
 - **sched-class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *reference*
 - **weight** *number*
- **match-list**
 - **ip-prefix-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **prefix** *string*
 - **ipv6-prefix-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **prefix** *string*
 - **port-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **port** *number*
 - **range** *number* **end** *number*
- **md-auto-id**
 - **qos-policy-id-range**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure qos md-auto-id qos-policy-id-range end

- **end** *number*
- **start** *number*
- **network** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress**
 - **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **de-mark**
 - **force** *number*
 - **dotlp-in-profile** *number*
 - **dotlp-out-profile** *number*
 - **dscp-in-profile** *keyword*
 - **dscp-out-profile** *keyword*
 - **lsp-exp-in-profile** *number*
 - **lsp-exp-out-profile** *number*
 - **port-redirect-group**
 - **policer** *number*
 - **queue** *number*
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **port-redirect-group**
 - **policer** *number*
 - **queue** *number*
 - **profile** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **icmp-type** *number*
 - **protocol** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*

configure qos network egress ip-criteria entry match src-port range start

- **start** *number*
- **ipv6-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **port-redirect-group**
 - **policer** *number*
 - **queue** *number*
 - **profile** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **icmp-type** *number*
 - **next-header** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **prec** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **remark-trusted**
 - **force-egress-marking** *boolean*
- **ingress**
 - **default-action**
 - **fc** *keyword*
 - **profile** *keyword*
 - **dot1p** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
 - **dscp** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure qos network ingress fc fp-redirect-group

- **fp-redirect-group**
 - **broadcast-policer** *number*
 - **multicast-policer** *number*
 - **policer** *number*
 - **unknown-policer** *number*
- **ip-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **profile** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **fragment** *keyword*
 - **protocol** (*number* | *keyword*)
 - **src-ip**
 - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
- **ipv6-criteria**
 - **entry** *number*
 - **action**
 - **fc** *keyword*
 - **profile** *keyword*
 - **type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **dscp** *keyword*
 - **dst-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **dst-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **port-list** *reference*
 - **range**
 - **end** *number*

configure qos network ingress ipv6-criteria entry match dst-port range start

```

    - start number
  - fragment keyword
  - next-header (number | keyword)
  - src-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - ler-use-dscp boolean
  - lsp-exp number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
    - profile keyword
  - policy-id number
  - scope keyword
- network-queue string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - multicast-queue reference
    - queue reference
  - hs-attachment-policy reference
  - hs-wrr-group number
    - adaptation-rule
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - rate number
  - queue number
    - adaptation-rule
      - cir keyword
      - fir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
  - cbs decimal-number
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - hs-alt-port-class-pool boolean
  - hs-class-weight number
  - hs-mbs decimal-number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs decimal-number
  - multipoint boolean
  - port-parent
    - cir-level number
    - cir-weight number
    - level number

```

configure qos network-queue queue port-parent weight

- **weight** *number*
- **queue-type** *keyword*
- **rate**
 - **cir** *number*
 - **fir** *number*
 - **pir** *number*
- **policer-control-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **root**
 - **max-percent-rate** *decimal-number*
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fixed-mbs** *boolean*
 - **mbs-contribution** (*number* | *keyword*)
 - **profile-preferred** *boolean*
- **tier** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
 - **description** *string*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **reference-rate** *keyword*
- **port-scheduler-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **dist-lag-rate-shared** *boolean*
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-threshold** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **hqos-algorithm** *keyword*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *reference*
 - **monitor-threshold** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **weight** *number*
 - **max-percent-rate** *decimal-number*

configure qos port-scheduler-policy max-rate

- **max-rate** *(number | keyword)*
- **monitor-threshold** *number*
- **orphan-overrides**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
- **post-policer-mapping** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fc** *keyword* **profile** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **maps-to**
 - **fc** *keyword*
 - **profile** *keyword*
- **queue-group-redirect-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **match** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **instance** *number*
 - **type** *keyword*
- **queue-group-templates**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **queue-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **queue**
 - **none**
 - **queue-id** *reference*
 - **hs-attachment-policy** *reference*
 - **hs-wrr-group** *number*
 - **adaptation-rule**
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **percent-rate** *decimal-number*
 - **rate** *(number | keyword)*
 - **policer** *number*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **adv-config-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
 - **cbs** *(number | keyword)*
 - **description** *string*
 - **exceed-pir** *boolean*

configure qos queue-group-templates egress queue-group policer high-prio-only

```

- high-prio-only (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
  - reference-rate keyword
- profile-capped boolean
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue number
- adaptation-rule
  - cir keyword
  - pir keyword
- adv-config-policy reference
- apply-groups reference
- apply-groups-exclude reference
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
  - exceed
    - percent-reduction-from-mbs (number | keyword)
  - high
    - percent-reduction-from-mbs (number | keyword)
  - highplus
    - percent-reduction-from-mbs (number | keyword)
  - low
    - percent-reduction-from-mbs (number | keyword)
- dynamic-mbs boolean
- hs-alt-port-class-pool boolean
- hs-class-weight number
- hs-wred-queue
  - policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
  - reference-rate keyword
- port-parent
  - cir-level number
  - cir-weight number
  - level number
  - weight number
- queue-delay number
- queue-type keyword
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name string
  - weight number
- wred-queue
  - mode keyword
  - policy reference
  - usage keyword
- queues-hqos-manageable boolean
- ingress

```

configure qos queue-group-templates ingress apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **queue-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **policer** *number*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **adv-config-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
 - **cbs** (*number* | *keyword*)
 - **description** *string*
 - **high-prio-only** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **profile-capped** *boolean*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue** *number*
 - **adaptation-rule**
 - **cir** *keyword*
 - **fir** *keyword*
 - **pir** *keyword*
 - **adv-config-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **burst-limit** (*number* | *keyword*)
 - **cbs** (*number* | *keyword*)
 - **cir-non-profiling** *boolean*
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **multipoint** *boolean*
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **fir** *decimal-number*
 - **pir** *decimal-number*
 - **police**
 - **reference-rate** *keyword*
 - **queue-mode** *keyword*
 - **queue-type** *keyword*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **fir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **police**
 - **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*

configure qos queue-group-templates ingress queue-group queue scheduler-parent scheduler-name

```

    - scheduler-name string
    - weight number
- sap-egress string
- apply-groups reference
- apply-groups-exclude reference
- description string
- dot1p number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc keyword
  - profile keyword
- dscp keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fc keyword
  - profile keyword
- ethernet-ctag boolean
- fc keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - de-mark
    - force number
  - de-mark-inner
    - force number
  - de-mark-outer
    - force number
  - dot1p
    - exceed-profile number
    - in-profile number
    - out-profile number
  - dot1p-inner
    - in-profile number
    - out-profile number
  - dot1p-outer
    - exceed-profile number
    - in-profile number
    - out-profile number
  - dscp
    - exceed-profile keyword
    - in-profile keyword
    - out-profile keyword
- policer reference
- port-redirect-group-queue
  - queue number
- prec
  - exceed-profile number
  - in-profile number
  - out-profile number
- queue reference
- queue-group-queue
  - instance number
  - queue reference
  - queue-group-name reference
- hs-attachment-policy reference
- hs-wrr-group number
  - adaptation-rule
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hs-class-weight number
  - percent-rate decimal-number
  - rate (number | keyword)
- ip-criteria
  - entry number

```

configure qos sap-egress ip-criteria entry action

```

- action
  - fc keyword
  - policer reference
  - port-redirect-group-queue boolean
  - profile keyword
  - queue number
  - type keyword
  - use-fc-mapped-queue boolean
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - dscp keyword
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
- ipv6-criteria
  - entry number
    - action
      - fc keyword
      - policer reference
      - port-redirect-group-queue boolean
      - profile keyword
      - queue number
      - type keyword
      - use-fc-mapped-queue boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - ipv6-prefix-list reference
        - mask string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - next-header (number | keyword)

```

configure qos sap-egress ipv6-criteria entry match src-ip

- **src-ip**
 - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
- **src-port**
 - **eq** *number*
 - **gt** *number*
 - **lt** *number*
 - **range**
 - **end** *number*
 - **start** *number*
- **parent-location** *keyword*
- **policer** *number*
- **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
- **adv-config-policy** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
- **cbs** (*number* | *keyword*)
- **description** *string*
- **dscp-prec-remarking** *boolean*
- **exceed-pir** *boolean*
- **high-prio-only** (*number* | *keyword*)
- **mbs** (*number* | *keyword*)
- **packet-byte-offset** *number*
- **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **reference-rate** *keyword*
- **port-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
- **profile-capped** *boolean*
- **profile-out-preserve** *boolean*
- **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *string*
 - **weight** *number*
- **stat-mode** *keyword*
- **policers-hqos-manageable** *boolean*
- **policy-id** *number*
- **post-policer-mapping** *reference*
- **prec** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **profile** *keyword*
- **queue** *number*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **adv-config-policy** *reference*

configure qos sap-egress queue agg-shaper-weight

- **agg-shaper-weight** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **avg-frame-overhead** *decimal-number*
- **burst-limit** (*number* | *keyword*)
- **cbs** (*number* | *keyword*)
- **drop-tail**
 - **exceed**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **high**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **highplus**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
- **fir-burst-limit** (*number* | *keyword*)
- **hs-alt-port-class-pool** *boolean*
- **hs-class-weight** *number*
- **hs-wred-queue**
 - **policy** *reference*
- **hs-wrr-weight** *number*
- **maximum-data-transmission** (*number* | *keyword*)
- **mbs** (*number* | *keyword*)
- **packet-byte-offset** *number*
- **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **reference-rate** *keyword*
- **port-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
- **queue-type** *keyword*
- **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **sched-class** (*number* | *keyword*)
- **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *string*
 - **weight** *number*
- **wred-queue**
 - **mode** *keyword*
 - **policy** *reference*
 - **usage** *keyword*
- **sched-class-elevation**
 - **sched-class** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **weight** *number*
- **scope** *keyword*
- **subscriber-mgmt**
 - **dynamic-policer**
 - **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **policer-id-range**

configure qos sap-egress subscriber-mgmt dynamic-policer policer-id-range end

```

    - end number
    - start number
    - stat-mode keyword
  - pcc-rule-entry
    - range
      - end number
      - start number
- sap-ingress string
- apply-groups reference
- apply-groups-exclude reference
- default-fc string
- default-priority keyword
- description string
- dot1p number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- dscp keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- fc string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast-policer number
  - broadcast-queue reference
  - broadcast-queue-group-queue
    - queue reference
    - queue-group-name reference
  - de-1-out-profile boolean
  - egress-fc keyword
  - fp-redirect-group-broadcast-policer
  - fp-redirect-group-multicast-policer
  - fp-redirect-group-policer
  - fp-redirect-group-unknown-policer
  - in-remark
    - dscp keyword
    - prec number
  - multicast-policer number
  - multicast-queue reference
  - multicast-queue-group-queue
    - queue reference
    - queue-group-name reference
  - out-remark
    - dscp keyword
    - prec number
  - policer number
  - profile keyword
  - queue reference
  - queue-group-queue
    - queue reference
    - queue-group-name reference
  - unknown-policer number
  - unknown-queue reference
  - unknown-queue-group-queue
    - queue reference
    - queue-group-name reference
- ip-criteria
  - entry number
    - action
      - fc string
      - policer reference

```


configure qos sap-ingress ip-criteria entry action priority

```

- priority keyword
- type keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dscp keyword
- dst-ip
- address (ipv4-prefix-with-host-bits | ipv4-address)
- ip-prefix-list reference
- mask string
- dst-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- fragment keyword
- protocol (number | keyword)
- src-ip
- address (ipv4-prefix-with-host-bits | ipv4-address)
- ip-prefix-list reference
- mask string
- src-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- vlan-vni
- eq number
- range
- end number
- start number
- tag number
- type keyword
- ipv6-criteria
- entry number
- action
- fc string
- policer reference
- priority keyword
- type keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dscp keyword
- dst-ip
- address (ipv6-prefix-with-host-bits | ipv6-address)
- ipv6-prefix-list reference
- mask string
- dst-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- fragment keyword
- next-header (number | keyword)
- src-ip

```

configure qos sap-ingress ipv6-criteria entry match src-ip address

```

    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - vxlan-vni
    - eq number
    - range
      - end number
      - start number
  - tag number
  - type keyword
- lsp-exp number
- apply-groups reference
- apply-groups-exclude reference
- fc string
- priority keyword
- mac-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dot1p
        - mask number
        - priority number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword
      - inner-tag
        - mask number
        - vlan number
      - llc-dsap
        - dsap number
        - mask number
      - llc-ssap
        - mask number
        - ssap number
      - outer-tag
        - mask number
        - vlan number
      - snap-oui keyword
      - snap-pid number
      - src-mac
        - address string
        - mask string
    - type keyword
  - policer number
  - adaptation-rule
    - cir keyword
    - pir keyword
  - adv-config-policy reference

```

configure qos sap-ingress policer apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
- **cbs** (*number* | *keyword*)
- **description** *string*
- **high-prio-only** (*number* | *keyword*)
- **mbs** (*number* | *keyword*)
- **packet-byte-offset** *number*
- **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **reference-rate** *keyword*
- **profile-capped** *boolean*
- **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *string*
 - **weight** *number*
- **stat-mode** *keyword*
- **policers-hqos-manageable** *boolean*
- **policy-id** *number*
- **prec** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *string*
 - **priority** *keyword*
- **queue** *number*
 - **adaptation-rule**
 - **cir** *keyword*
 - **fir** *keyword*
 - **pir** *keyword*
 - **adv-config-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **burst-limit** (*number* | *keyword*)
 - **cbs** (*number* | *keyword*)
 - **cir-non-profiling** *boolean*
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **multipoint** *boolean*
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **fir** *decimal-number*
 - **pir** *decimal-number*
 - **police**
 - **reference-rate** *keyword*
 - **queue-mode** *keyword*
 - **queue-type** *keyword*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **fir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **police**
 - **scheduler-parent**

configure qos sap-ingress queue scheduler-parent cir-level

- **cir-level** *number*
- **cir-weight** *number*
- **level** *number*
- **scheduler-name** *string*
- **weight** *number*
- **scope** *keyword*
- **subscriber-mgmt**
 - **dynamic-policer**
 - **arbiter-parent**
 - **arbiter-name** *string*
 - **level** *number*
 - **weight** *number*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **policer-id-range**
 - **end** *number*
 - **start** *number*
 - **stat-mode** *keyword*
 - **pcc-rule-entry**
 - **range**
 - **end** *number*
 - **start** *number*
- **scheduler-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **frame-based-accounting** *boolean*
 - **tier** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent-location** *keyword*
 - **scheduler** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **limit-unused-bandwidth** *boolean*
 - **percent-rate**
 - **cir** (*keyword* | *decimal-number*)
 - **pir** *decimal-number*
 - **reference-rate** *keyword*
 - **port-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **weight** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **scheduler-parent**
 - **cir-level** *number*
 - **cir-weight** *number*
 - **level** *number*
 - **scheduler-name** *string*
 - **weight** *number*
- **shared-queue** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast-queue** *number*
 - **multicast-queue** *number*

configure qos shared-queue fc queue

- **queue** *number*
- **unknown-queue** *number*
- **queue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** *number*
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **mbs** *number*
 - **multipoint** *boolean*
 - **queue-type** *keyword*
 - **rate**
 - **cir** *number*
 - **fir** *number*
 - **pir** *number*
- **slope-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **exceed-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
 - **high-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
 - **highplus-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
 - **low-slope**
 - **admin-state** *keyword*
 - **max-avg** *number*
 - **max-prob** *number*
 - **start-avg** *number*
- **time-average-factor** *number*

3.37.1 qos command descriptions

qos

Synopsis	Enter the qos context
Context	configure qos
Tree	qos
Introduced	16.0.R1
Platforms	All

adv-config-policy [[adv-config-policy-name](#)] *string*

Synopsis	Enter the adv-config-policy list instance
Context	configure qos adv-config-policy <i>string</i>
Tree	adv-config-policy
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[[adv-config-policy-name](#)] *string*

Synopsis	Advanced QoS policy name
Context	configure qos adv-config-policy <i>string</i>
Tree	adv-config-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

child-control

Synopsis	Enter the child-control context
Context	configure qos adv-config-policy <i>string</i> child-control
Tree	child-control

Introduced 16.0.R1
Platforms All

bandwidth-distribution

Synopsis Enter the **bandwidth-distribution** context
Context **configure qos adv-config-policy string child-control bandwidth-distribution**
Tree [bandwidth-distribution](#)
Introduced 16.0.R1
Platforms All

above-offered-allowance

Synopsis Enter the **above-offered-allowance** context
Context **configure qos adv-config-policy string child-control bandwidth-distribution above-offered-allowance**
Tree [above-offered-allowance](#)
Description Commands in this context control the child's above offered allowance bandwidth. The configuration is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm (specified via the **configure qos port-scheduler-policy hqos-algorithm** command).
Introduced 19.10.R2
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delta-consumed-agg-rate

Synopsis Enter the **delta-consumed-agg-rate** context
Context **configure qos adv-config-policy string child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate**
Tree [delta-consumed-agg-rate](#)
Introduced 19.10.R2
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis Percentage of the delta consumed aggregate rate

Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate percent <i>decimal-number</i>
Tree	percent
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the aggregate rate consumed by other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. This command is only applicable when the port scheduler is configured to use the above-offered-allowance-control algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	20.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

delta-consumed-higher-tier-rate

Synopsis	Enter the delta-consumed-higher-tier-rate context
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate
Tree	delta-consumed-higher-tier-rate
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the delta consumed higher-tier rate
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate percent <i>decimal-number</i>
Tree	percent
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the higher-tier rate consumed by its other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates. This command is only applicable when the port scheduler is configured to use the above-offered-allowance-control algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	5.00
Introduced	19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unconsumed-agg-rate

Synopsis Enter the **unconsumed-agg-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate

Tree [unconsumed-agg-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis Percentage of the unconsumed aggregate rate

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate percent *decimal-number*

Tree [percent](#)

Description This command configures the percentage of the unconsumed aggregate rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.

Range 0.00 to 100.00

Default 100.00

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

unconsumed-higher-tier-rate

Synopsis Enter the **unconsumed-higher-tier-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate

Tree [unconsumed-higher-tier-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

percent *decimal-number*

Synopsis	Percentage of the unconsumed higher-tier rate
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate percent <i>decimal-number</i>
Tree	percent
Description	This command configures the percentage of the unconsumed higher tier rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates. This command is only applicable when the port scheduler is configured to use the above-offered-allowance-control algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	100.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

above-offered-cap

Synopsis	Enter the above-offered-cap context
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap
Tree	above-offered-cap
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of the child's administrative PIR used as the fair share increase limit
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate (*number* | *keyword*)

Synopsis	Explicit number to assign as limit to the child's fair share increase
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	0 to 100000000
Options	max
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

enqueue-on-pir-zero *boolean*

Synopsis	Enqueue the packets when bandwidth-distribution granularity rate is set to zero
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution enqueue-on-pir-zero <i>boolean</i>
Tree	enqueue-on-pir-zero
Default	false
Introduced	16.0.R1
Platforms	All

granularity

Synopsis	Enter the granularity context
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Rounding percentage value for administrative PIR
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00

Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate number

Synopsis	Rounding rate step value
Context	configure qos adv-config-policy string child-control bandwidth-distribution granularity rate number
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

internal-scheduler-weight-mode keyword

Synopsis	Weight mode applied to this advanced QoS policy
Context	configure qos adv-config-policy string child-control bandwidth-distribution internal-scheduler-weight-mode keyword
Tree	internal-scheduler-weight-mode
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

limit-pir-zero-drain boolean

Synopsis	Throttle the queue draining based on bandwidth-distribution granularity rate
Context	configure qos adv-config-policy string child-control bandwidth-distribution limit-pir-zero-drain boolean
Tree	limit-pir-zero-drain
Default	false
Introduced	16.0.R1
Platforms	All

lub-init-min-pir *boolean*

Synopsis	Apply minimal PIR for new queues when LUB is enabled
Context	configure qos adv-config-policy <i>string</i> child-control bandwidth-distribution lub-init-min-pir <i>boolean</i>
Tree	lub-init-min-pir
Default	false
Introduced	16.0.R1
Platforms	All

offered-measurement

Synopsis	Enter the offered-measurement context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement
Tree	offered-measurement
Introduced	16.0.R1
Platforms	All

add

Synopsis	Enter the add context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add
Tree	add
Introduced	16.0.R1
Platforms	All

active-min-only *boolean*

Synopsis	Use increase in rate or percentage as minimum offered rate only for active queues or policers
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add active-min-only <i>boolean</i>
Tree	active-min-only
Default	false
Introduced	16.0.R1
Platforms	All

min-only *boolean*

Synopsis	Use specified increase value as a minimum offered rate even for inactive queues or policers
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add min-only <i>boolean</i>
Tree	min-only
Default	false
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of child's administrative PIR to add to child's offered rate
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Rate value to add to child's offered rate
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement add rate <i>number</i>
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

fast-start *boolean*

Synopsis	Allow fast detection of initial bandwidth on a child policer or queue associated with policy
----------	--

Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement fast-start <i>boolean</i>
Tree	fast-start
Default	false
Introduced	16.0.R1
Platforms	All

fast-stop *boolean*

Synopsis	Allow fast detection of lack of offered rate on a child policer or queue associated with the policy
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement fast-stop <i>boolean</i>
Tree	fast-stop
Default	false
Introduced	16.0.R1
Platforms	All

granularity

Synopsis	Enter the granularity context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Percentage of child's administrative PIR used as threshold sensitivity to offered rate change
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement granularity percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1

Platforms All

rate *number*

Synopsis Value to use as child's offered rate change sensitivity value

Context **configure qos adv-config-policy** *string* **child-control offered-measurement granularity**
rate *number*

Tree [rate](#)

Range 0 to 100000000

Notes The following elements are part of a choice: **percent** or **rate**.

Introduced 16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure qos adv-config-policy** *string* **child-control offered-measurement hold-time**

Tree [hold-time](#)

Introduced 16.0.R1

Platforms All

active-min-only *boolean*

Synopsis Use specified increase value as minimum offered rate only for active queues or policers

Context **configure qos adv-config-policy** *string* **child-control offered-measurement hold-time**
active-min-only *boolean*

Tree [active-min-only](#)

Default false

Introduced 16.0.R1

Platforms All

high-rate *number*

Synopsis Time during which current offered rate is maintained for a child policer or queue

Context **configure qos adv-config-policy** *string* **child-control offered-measurement hold-time**
high-rate *number*

Tree	high-rate
Range	0 to 60
Default	0
Introduced	16.0.R1
Platforms	All

max-decrement

Synopsis	Enter the max-decrement context
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement max-decrement
Tree	max-decrement
Introduced	16.0.R1
Platforms	All

percent *decimal-number*

Synopsis	Value of the child's administrative PIR to use as the decrement limit to offered rate change
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement max-decrement percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1
Platforms	All

rate *number*

Synopsis	Value to use as the decrement limit to offered rate change
Context	configure qos adv-config-policy <i>string</i> child-control offered-measurement max-decrement rate <i>number</i>
Tree	rate
Range	0 to 100000000
Notes	The following elements are part of a choice: percent or rate .
Introduced	16.0.R1

Platforms All

sample-interval *number*

Synopsis Interval for sampling the child's offered rate

Context **configure qos adv-config-policy** *string* **child-control offered-measurement sample-interval** *number*

Tree [sample-interval](#)

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms All

time-average-factor

Synopsis Enter the **time-average-factor** context

Context **configure qos adv-config-policy** *string* **child-control offered-measurement time-average-factor**

Tree [time-average-factor](#)

Introduced 16.0.R1

Platforms All

dec-only *boolean*

Synopsis Apply time average factor adjustment when the offered rate decreases compared to previous

Context **configure qos adv-config-policy** *string* **child-control offered-measurement time-average-factor dec-only** *boolean*

Tree [dec-only](#)

Default false

Introduced 16.0.R1

Platforms All

weighting-factor *number*

Synopsis New offered rate with a sample of the previous offered rate

Context	configure qos adv-config-policy <i>string</i> <i>child-control</i> <i>offered-measurement</i> <i>time-average-factor</i> <i>weighting-factor</i> <i>number</i>
Tree	weighting-factor
Range	0 to 64
Default	0
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos adv-config-policy <i>string</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fp-resource-policy [[fp-resource-policy-name](#)] *string*

Synopsis	Enter the fp-resource-policy list instance
Context	configure qos fp-resource-policy <i>string</i>
Tree	fp-resource-policy
Max. Instances	15
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[fp-resource-policy-name] *string*

Synopsis	FP resource policy name
Context	configure qos fp-resource-policy <i>string</i>
Tree	fp-resource-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

aggregate-shapers

Synopsis Enter the **aggregate-shapers** context
 Context **configure** qos fp-resource-policy string aggregate-shapers
 Tree [aggregate-shapers](#)
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

auto-creation *boolean*



WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis Enables auto-creation of hardware aggregate shapers
 Context **configure** qos fp-resource-policy string aggregate-shapers auto-creation *boolean*
 Tree [auto-creation](#)
 Description When configured to **true**, enables the auto-creation of hardware aggregate shapers on the specified FP. After enabling, the corresponding FP is rebooted.
 Default false
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

hw-agg-shapers

Synopsis Enter the **hw-agg-shapers** context
 Context **configure** qos fp-resource-policy string aggregate-shapers hw-agg-shapers
 Tree [hw-agg-shapers](#)
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

saps *boolean*

**WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for SAPs
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers saps <i>boolean</i>
Tree	saps
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

subscribers *boolean*

**WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables hardware aggregate shapers for subscribers
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers subscribers <i>boolean</i>
Tree	subscribers
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

queue-sets

Synopsis	Enter the queue-sets context
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets
Tree	queue-sets
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

default-size

Synopsis	Enter the default-size context
Context	configure qos fp-resource-policy string aggregate-shapers queue-sets default-size
Tree	default-size
Description	Commands in this context configure the default queue-set size for individual object types.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

queue-groups (*number* | *keyword*)

Synopsis	Default size of queue-groups
Context	configure qos fp-resource-policy string aggregate-shapers queue-sets default-size queue-groups (<i>number</i> <i>keyword</i>)
Tree	queue-groups
Range	2 to 8
Default	8
Options	non-shaper-queues
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

saps (*number* | *keyword*)

Synopsis	Default queue-set size for SAPs
Context	configure qos fp-resource-policy string aggregate-shapers queue-sets default-size saps (<i>number</i> <i>keyword</i>)
Tree	saps
Description	This command configures the default queue-set size for SAPs. When the non-shaper-queues keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Default	8
Options	non-shaper-queues
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

subscribers (*number* | *keyword*)

Synopsis	Default queue-set size for subscribers
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size subscribers (<i>number</i> <i>keyword</i>)
Tree	subscribers
Description	This command configures the default queue-set size for subscribers. When the non-shaper-queues keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Default	8
Options	non-shaper-queues
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

size [*qset-size*] *number*

Synopsis	Enter the size list instance
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Description	Commands in this context configure parameters for the specified queue-set size.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

[qset-size] *number*

Synopsis	Size of the queue-sets
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Range	2 to 8
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

allocation-weight *number*

Synopsis	Allocation weight of the queue-set size
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i> allocation-weight <i>number</i>
Tree	allocation-weight
Description	This command configures the allocation weight for the specified queue-set size. The available queue-sets are distributed based on the allocation weight among different queue-set sizes.
Range	0 to 100
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

reserved-non-shaper-queues *number*

Synopsis	Number of queues reserved for non-shaper queues
Context	configure qos fp-resource-policy <i>string</i> aggregate-shapers reserved-non-shaper-queues <i>number</i>
Tree	reserved-non-shaper-queues
Description	This command configures the number of egress queues that will not be used by hardware aggregate shapers.
Range	2048 to 262144
Default	8192
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Text description
Context	configure qos fp-resource-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ports

Synopsis	Enter the ports context
Context	configure qos fp-resource-policy string ports
Tree	ports
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hqos-mode *keyword*

**WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Default HQOS mode of the port
Context	configure qos fp-resource-policy string ports hqos-mode keyword
Tree	hqos-mode
Default	port-scheduler
Options	port-scheduler, hw-agg-shaping
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

queues

Synopsis	Enter the queues context
Context	configure qos fp-resource-policy string queues
Tree	queues
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-percent-of-total *decimal-number*

**WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Percentage of total ingress queues allocated
Context	configure qos fp-resource-policy <i>string</i> queues ingress-percent-of-total <i>decimal-number</i>
Tree	ingress-percent-of-total
Description	<p>This command configures the percentage of the total number of queues on the FP on which the policy is applied that are allocated to ingress, with the remainder allocated to egress. The ingress and egress buffer pool sizes are not affected by the queue allocation.</p> <p>The allocation is performed in sets of 8192 queues, with a minimum of 8192 queues at ingress and 8192 queues at egress. If the percentage configured results in the queue allocation not being a multiple of 8192, the number of queues at ingress is rounded down to the next 8192 boundary, and consequently the number of queues at egress is rounded up to the next 8192 boundary, both while respecting the minimum at ingress and egress.</p> <p>If the FP resource policy is applied to any FP and the updated allocation is not achievable with the current ingress or egress queue consumption on any of the related FPs, the command fails.</p> <p>The configuration of this command (which includes removing the configuration) causes the router to immediately reset the associated cards, XIOMs and MDAs on all FPs on which the FP resource policy is applied, except on the 7750 SR-1, where the configuration must be saved and the router rebooted, immediately after committing the configuration transaction.</p>
Range	4.00 to 97.00
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

hs-attachment-policy [*name*] *string*

Synopsis	Enter the hs-attachment-policy list instance
Context	configure qos hs-attachment-policy <i>string</i>
Tree	hs-attachment-policy
Max. Instances	31
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[name] *string*

Synopsis	HS attachment policy name
Context	configure qos hs-attachment-policy <i>string</i>
Tree	hs-attachment-policy

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-attachment-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

low-burst-max-class *number*

Synopsis	Low priority burst threshold
Context	configure qos hs-attachment-policy <i>string</i> low-burst-max-class <i>number</i>
Tree	low-burst-max-class
Range	1 to 6
Default	6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue [*queue-id*] *number*

Synopsis	Enter the queue list instance
Context	configure qos hs-attachment-policy <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[queue-id] *number*

Synopsis	Queue identifier for the HS attachment policy
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Context	configure qos hs-attachment-policy <i>string queue number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

sched-class *number*

Synopsis	Scheduling class associated with the queue
Context	configure qos hs-attachment-policy <i>string queue number sched-class number</i>
Tree	sched-class
Range	1 to 6
Notes	The following elements are part of a choice: sched-class , unattached , or wrr-group .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

unattached

Synopsis	Do not attach queue to scheduling class or WRR group
Context	configure qos hs-attachment-policy <i>string queue number unattached</i>
Tree	unattached
Notes	The following elements are part of a choice: sched-class , unattached , or wrr-group .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

wrr-group *number*

Synopsis	WRR group attached to the queue
Context	configure qos hs-attachment-policy <i>string queue number wrr-group number</i>
Tree	wrr-group
Range	1 to 2
Notes	The following elements are part of a choice: sched-class , unattached , or wrr-group .
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

wrr-group [[wrr-group-id](#)] *number*

Synopsis Enter the **wrr-group** list instance
Context **configure qos hs-attachment-policy** *string wrr-group number*
Tree [wrr-group](#)
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

[wrr-group-id] *number*

Synopsis WRR group ID for the HS attachment policy
Context **configure qos hs-attachment-policy** *string wrr-group number*
Tree [wrr-group](#)
Range 1 to 2
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

sched-class *number*

Synopsis Scheduling class associated with the WRR group
Context **configure qos hs-attachment-policy** *string wrr-group number sched-class number*
Tree [sched-class](#)
Range 1 to 6
Notes The following elements are part of a choice: **sched-class** or **unattached**.
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

unattached

Synopsis Do not attach group ID to scheduling class or WRR group
Context **configure qos hs-attachment-policy** *string wrr-group number unattached*
Tree [unattached](#)

Notes	The following elements are part of a choice: sched-class or unattached .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-pool-policy [*name*] *string*

Synopsis	Enter the hs-pool-policy list instance
Context	configure qos hs-pool-policy <i>string</i>
Tree	hs-pool-policy
Max. Instances	63
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[*name*] *string*

Synopsis	HS pool policy name
Context	configure qos hs-pool-policy <i>string</i>
Tree	hs-pool-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-pool-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mid-tier

Synopsis	Enter the mid-tier context
Context	configure qos hs-pool-policy <i>string</i> mid-tier
Tree	mid-tier
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mid-pool [**mid-pool-id**] *number*

Synopsis	Enter the mid-pool list instance
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i>
Tree	mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[mid-pool-id] *number*

Synopsis	Mid-pool identifier for the HS pool policy
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i>
Tree	mid-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation-percent *decimal-number*

Synopsis	Root pool size to derive the mid-pool size
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i> allocation-percent <i>decimal-number</i>
Tree	allocation-percent
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-root-pool

Synopsis	Enter the parent-root-pool context
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> parent-root-pool
Tree	parent-root-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Assign no buffers to the mid-tier pool
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> parent-root-pool none
Tree	none
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id *reference*

Synopsis	Parent root pool to which the mid-pool is associated
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> parent-root-pool pool-id <i>reference</i>
Tree	pool-id
Reference	configure qos hs-pool-policy <i>string</i> <i>root-tier</i> <i>root-pool</i> <i>number</i>
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-oversubscription-factor *number*

Synopsis	Over subscription factor for port-class pool sizes
Context	configure qos hs-pool-policy <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> port-bw-oversubscription-factor <i>number</i>
Tree	port-bw-oversubscription-factor
Description	This command modifies the size of the mid-pool when calculating the port-class pool sizes based on port bandwidth ratios. The over subscription factor for a mid-pool can

be modified at any time, causing the corresponding port-class pool dynamic sizes to be recalculated. A similar behavior can be obtained by increasing the mid-pool's allocation-percent of its parent root-pool. However, the major difference in using this command is that it provides larger port-class pools without allowing the mid-pool to use a higher number of buffers in the root pool.

Range	1 to 10
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-pool-policy <i>string</i> mid-tier mid-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

root-tier

Synopsis	Enter the root-tier context
Context	configure qos hs-pool-policy <i>string</i> root-tier
Tree	root-tier
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

root-pool [**root-pool-id**] *number*

Synopsis	Enter the root-pool list instance
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i>
Tree	root-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[root-pool-id] *number*

Synopsis	Root pool identifier for the HS pool policy
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i>
Tree	root-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

allocation-weight *number*

Synopsis	Root pool allocation weight used to calculate pool size
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i> allocation-weight <i>number</i>
Tree	allocation-weight
Description	<p>This command specifies the weight that is applied to the root pool and is divided by the sum of all root pool weights to derive the pool's buffer allocation factor. The amount of buffers remaining after the system-reserve percentage is applied is multiplied by the buffer allocation factor to derive the pool size.</p> <p>A root pool with an allocation weight set to "0" is considered inactive and is not allocated buffers.</p> <p>When a root pool's allocation weight is modified, all root pools, mid-tier pools, and port class pool sizes are reevaluated and modified when necessary.</p>
Range	0 to 100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-pool-policy <i>string</i> root-tier root-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

system-reserve *decimal-number*

Synopsis	Percentage of HS buffers reserved for internal system use
Context	configure qos hs-pool-policy <i>string</i> system-reserve <i>decimal-number</i>
Tree	system-reserve
Range	1.00 to 30.00
Default	5.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-port-pool-policy [*name*] *string*

Synopsis	Enter the hs-port-pool-policy list instance
Context	configure qos hs-port-pool-policy <i>string</i>
Tree	hs-port-pool-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[name] *string*

Synopsis	HS port pool policy name
Context	configure qos hs-port-pool-policy <i>string</i>
Tree	hs-port-pool-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

alt-port-class-pools

Synopsis	Enter the alt-port-class-pools context
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools
Tree	alt-port-class-pools
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

class-pool [[alt-class-pool-id](#)] *number*

Synopsis Enter the **class-pool** list instance

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)

Tree [class-pool](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

[alt-class-pool-id] *number*

Synopsis Class pool ID

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)

Tree [class-pool](#)

Range 1 to 6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

allocation

Synopsis Enter the **allocation** context

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number allocation](#)

Tree [allocation](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

explicit-percent *decimal-number*

Synopsis Percentage of parent pool to be allocated

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number allocation explicit-percent decimal-number](#)

Tree [explicit-percent](#)

Range 0.01 to 100.00

Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-weight *number*

Synopsis	Port bandwidth weight to be allocated
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> allocation port-bw-weight <i>number</i>
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-mid-pool

Synopsis	Enter the parent-mid-pool context
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Deactivate the port-class pool; pool size is zero
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool pool-id <i>number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-port-pool-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

std-port-class-pools

Synopsis	Enter the std-port-class-pools context
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools
Tree	std-port-class-pools
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

class-pool [**std-class-pool-id**] *number*

Synopsis Enter the **class-pool** list instance

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**

Tree **class-pool**

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

[std-class-pool-id] *number*

Synopsis Standard port class identifier for the HS port pool policy

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**

Tree **class-pool**

Range 1 to 6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

allocation

Synopsis Enter the **allocation** context

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation**

Tree **allocation**

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

explicit-percent *decimal-number*

Synopsis Percentage of parent pool to be allocated

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation explicit-percent decimal-number**

Tree **explicit-percent**

Range 0.01 to 100.00

Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

port-bw-weight *number*

Synopsis	Port bandwidth weight to be allocated
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> allocation port-bw-weight <i>number</i>
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: explicit-percent or port-bw-weight .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

parent-mid-pool

Synopsis	Enter the parent-mid-pool context
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

none

Synopsis	Deactivate the port-class pool; pool size is zero
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pool-id *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool pool-id <i>number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: none or pool-id .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

slope-policy *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	configure qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-scheduler-policy [*name*] *string*

Synopsis	Enter the hs-scheduler-policy list instance
Context	configure qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
Max. Instances	127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[name] *string*

Synopsis	HS scheduler policy name
Context	configure qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

description *string*

Synopsis	Text description
Context	configure qos hs-scheduler-policy <i>string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

group [[group-id](#)] *number*

Synopsis	Enter the group list instance
Context	configure qos hs-scheduler-policy <i>string group number</i>
Tree	group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[group-id] *number*

Synopsis	Group ID for the HS scheduler policy
Context	configure qos hs-scheduler-policy <i>string group number</i>
Tree	group
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Group maximum rate
Context	configure qos hs-scheduler-policy <i>string group number rate (number keyword)</i>

Tree	rate
Range	1 to 100000
Default	max
Units	megabps
Options	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit for the policy
Context	configure qos hs-scheduler-policy <i>string</i> max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 100000
Default	max
Options	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

scheduling-class [[class-id](#)] *number*

Synopsis	Enter the scheduling-class list instance
Context	configure qos hs-scheduler-policy <i>string</i> scheduling-class <i>number</i>
Tree	scheduling-class
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[class-id] *number*

Synopsis	Class identifier for the HS scheduler policy scheduling class
Context	configure qos hs-scheduler-policy <i>string</i> scheduling-class <i>number</i>
Tree	scheduling-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

group

Synopsis Enable the **group** context

Context **configure qos hs-scheduler-policy** *string* *scheduling-class* *number* *group*

Tree [group](#)

Notes The following elements are part of a choice: **group** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

group-id *number*

Synopsis Associated group associated with this scheduling class

Context **configure qos hs-scheduler-policy** *string* *scheduling-class* *number* *group* *group-id* *number*

Tree [group-id](#)

Range 1

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

weight *number*

Synopsis Weight associated with this scheduling class

Context **configure qos hs-scheduler-policy** *string* *scheduling-class* *number* *group* *weight* *number*

Tree [weight](#)

Range 1 to 127

Default 1

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	configure qos hs-scheduler-policy <i>string scheduling-class number rate (number keyword)</i>
Tree	rate
Range	1 to 100000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: group or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hw-agg-shaper-scheduler-policy [[name](#)] *string*

Synopsis	Enter the hw-agg-shaper-scheduler-policy list instance
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i>
Tree	hw-agg-shaper-scheduler-policy
Description	Commands in this context configure the attributes of a hardware aggregate shaper scheduler policy.
Max. Instances	127
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[name] *string*

Synopsis	Name of the hardware aggregate shaper scheduler policy
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i>
Tree	hw-agg-shaper-scheduler-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

congestion-threshold *number*

Synopsis	Congestion threshold of the scheduler
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Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> congestion-threshold <i>number</i>
Tree	congestion-threshold
Description	This command configures the congestion threshold for the hardware aggregate shaper scheduler policy, which, if exceeded, triggers the hardware aggregate scheduler algorithm. The value is expressed as a percentage of the scheduler rate.
Range	0 to 100
Default	90
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

description *string*

Synopsis	Description of the hardware aggregate shaper scheduler policy
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

group [**group-name**] *string*

Synopsis	Add a list entry for group
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> group <i>string</i>
Tree	group
Max. Instances	6
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[group-name] *string*

Synopsis	Name of the HW aggregate shaper scheduler policy group
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> group <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

max-percent-rate *decimal-number*

Synopsis Maximum frame-based bandwidth percentage
 Context **configure qos hw-agg-shaper-scheduler-policy** *string* **max-percent-rate** *decimal-number*
 Tree **max-percent-rate**
 Description This command configures the rate of the hardware aggregate shaper scheduler expressed as a percentage of the port rate.
 Range 0.01 to 100.00
 Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
 Context **configure qos hw-agg-shaper-scheduler-policy** *string* **max-rate** (*number* | *keyword*)
 Tree **max-rate**
 Range 1 to 6400000000
 Default max
 Units kilobps
 Options max
 Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

monitor-threshold *number*

Synopsis Monitor threshold for the scheduler
 Context **configure qos hw-agg-shaper-scheduler-policy** *string* **monitor-threshold** *number*
 Tree **monitor-threshold**
 Description This command configures the monitor threshold for the hardware aggregate shaper scheduler policy, which is used for egress scheduler monitoring. The value is expressed

as a percentage of the scheduler rate, which is considered as a limit for determining congestion.

Range	0 to 100
Default	0
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

sched-class [\[class-id\]](#) *number*

Synopsis	Enter the sched-class list instance
Context	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i>
Tree	sched-class
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

[class-id] *number*

Synopsis	Scheduling class ID for the scheduler policy
Context	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i>
Tree	sched-class
Range	1 to 6
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

group *reference*

Synopsis	Group associated with the scheduling class
Context	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> group <i>reference</i>
Tree	group
Description	This command assigns the specified scheduling class to a group within a hardware aggregate shaper scheduler policy.
Reference	configure qos hw-aggr-shaper-scheduler-policy <i>string</i> group <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

weight *number*

Synopsis	Weight associated with the scheduling class
Context	configure qos hw-agg-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

match-list

Synopsis	Enter the match-list context
Context	configure qos match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

ip-prefix-list [*prefix-list-name*] *string*

Synopsis	Enter the ip-prefix-list list instance
Context	configure qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
Max. Instances	512
Introduced	16.0.R1
Platforms	All

[prefix-list-name] *string*

Synopsis	IP prefix list name
Context	configure qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R3
 Platforms All

description *string*

Synopsis Text description
 Context **configure qos match-list ip-prefix-list** *string description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

prefix [[ip-prefix](#)] *string*

Synopsis Add a list entry for **prefix**
 Context **configure qos match-list ip-prefix-list** *string prefix string*
 Tree [prefix](#)
 Max. Instances 256
 Introduced 16.0.R1
 Platforms All

[ip-prefix] *string*

Synopsis IPv4 address prefix
 Context **configure qos match-list ip-prefix-list** *string prefix string*
 Tree [prefix](#)
 Notes This element is part of a list key.
 Introduced 16.0.R3
 Platforms All

ipv6-prefix-list [[prefix-list-name](#)] *string*

Synopsis Enter the **ipv6-prefix-list** list instance
 Context **configure qos match-list ipv6-prefix-list** *string*

Tree	ipv6-prefix-list
Max. Instances	128
Introduced	16.0.R4
Platforms	All

[prefix-list-name] string

Synopsis	IP prefix list name
Context	configure qos match-list ipv6-prefix-list string
Tree	ipv6-prefix-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description string

Synopsis	Text description
Context	configure qos match-list ipv6-prefix-list string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

prefix [ipv6-prefix] string

Synopsis	Add a list entry for prefix
Context	configure qos match-list ipv6-prefix-list string prefix string
Tree	prefix
Max. Instances	128
Introduced	16.0.R4
Platforms	All

[ipv6-prefix] string

Synopsis	Ipv6 address prefix
Context	configure qos match-list ipv6-prefix-list string prefix string
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port-list [port-list-name] string

Synopsis	Enter the port-list list instance
Context	configure qos match-list port-list string
Tree	port-list
Max. Instances	16
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[port-list-name] string

Synopsis	Port list name
Context	configure qos match-list port-list string
Tree	port-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description string

Synopsis	Text description
Context	configure qos match-list port-list string description string
Tree	description
String Length	1 to 80
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [*value*] *number*

Synopsis Add a list entry for **port**

Context **configure qos match-list port-list** *string port number*

Tree [port](#)

Description Commands in this context specify ports for a port match list.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[value] *number*

Synopsis Port number

Context **configure qos match-list port-list** *string port number*

Tree [port](#)

Range 0 to 65535

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range [*start*] *number end number*

Synopsis Add a list entry for **range**

Context **configure qos match-list port-list** *string range number end number*

Tree [range](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[start] *number*

Synopsis Lower bound for the port range

Context **configure qos match-list port-list** *string range number end number*

Tree [range](#)

Range 0 to 65534

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

end number

Synopsis	Upper bound for the port range
Context	configure qos match-list port-list <i>string range number end number</i>
Tree	range
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-auto-id

Synopsis	Enter the md-auto-id context
Context	configure qos md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

qos-policy-id-range

Synopsis	Enable the qos-policy-id-range context
Context	configure qos md-auto-id qos-policy-id-range
Tree	qos-policy-id-range
Introduced	16.0.R1
Platforms	All

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	configure qos md-auto-id qos-policy-id-range end <i>number</i>
Tree	end
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

start *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	configure qos md-auto-id qos-policy-id-range start <i>number</i>
Tree	start
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

network [[network-policy-name](#)] *string*

Synopsis	Enter the network list instance
Context	configure qos network <i>string</i>
Tree	network
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[network-policy-name] *string*

Synopsis	QoS network policy name
Context	configure qos network <i>string</i>

Tree	network
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure qos network <i>string</i> egress
Tree	egress
Introduced	16.0.R1
Platforms	All

dscp [[dscp-name](#)] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos network <i>string</i> egress dscp <i>keyword</i>
Tree	dscp
Introduced	16.0.R1
Platforms	All

[[dscp-name](#)] *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	configure qos network <i>string</i> egress dscp <i>keyword</i>

Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>string</i> egress dscp <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile keyword

Synopsis	Default profile to use for the ingressing traffic
Context	configure qos network <i>string</i> egress dscp <i>keyword</i> profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

fc [fc-name] keyword

Synopsis	Enter the fc list instance
Context	configure qos network <i>string</i> egress fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1

Platforms All

[fc-name] *keyword*

Synopsis Forwarding class name
Context **configure qos network** *string egress fc keyword*
Tree [fc](#)
Options be, l2, af, l1, h2, ef, h1, nc
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

de-mark

Synopsis Enable the **de-mark** context
Context **configure qos network** *string egress fc keyword de-mark*
Tree [de-mark](#)
Introduced 16.0.R1
Platforms All

force *number*

Synopsis DE value
Context **configure qos network** *string egress fc keyword de-mark force number*
Tree [force](#)
Range 0 to 1
Introduced 16.0.R1
Platforms All

dot1p-in-profile *number*

Synopsis Dot1p marking for in-profile marking
Context **configure qos network** *string egress fc keyword dot1p-in-profile number*
Tree [dot1p-in-profile](#)
Range 0 to 7

Introduced	16.0.R1
Platforms	All

dot1p-out-profile *number*

Synopsis	Dot1p marking for out-of-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> dot1p-out-profile <i>number</i>
Tree	dot1p-out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dscp-in-profile *keyword*

Synopsis	DSCP marking for in-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> dscp-in-profile <i>keyword</i>
Tree	dscp-in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-out-profile *keyword*

Synopsis	DSCP marking for out-of-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> dscp-out-profile <i>keyword</i>
Tree	dscp-out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

lsp-exp-in-profile *number*

Synopsis	LSP-EXP marking for in-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> lsp-exp-in-profile <i>number</i>
Tree	lsp-exp-in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

lsp-exp-out-profile *number*

Synopsis	LSP-EXP marking for out-of-profile marking
Context	configure qos network <i>string</i> egress fc <i>keyword</i> lsp-exp-out-profile <i>number</i>
Tree	lsp-exp-out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>string</i> egress fc <i>keyword</i> port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	All

policer *number*

Synopsis	Policer to be used
Context	configure qos network <i>string</i> egress fc <i>keyword</i> port-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 16
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to be used
Context	configure qos network <i>string</i> egress fc keyword port-redirect-group queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos network <i>string</i> egress ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i>
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network string egress ip-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos network string egress ip-criteria entry number action fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network string egress ip-criteria entry number action port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer number

Synopsis	Policer ID to be used for the matched traffic
Context	configure qos network string egress ip-criteria entry number action port-redirect-group policer number
Tree	policer

Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue number

Synopsis	Queue to be used for post-policed traffic
Context	configure qos network string egress ip-criteria entry number action port-redirect-group queue number
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile keyword

Synopsis	Profile reclassification action
Context	configure qos network string egress ip-criteria entry number action profile keyword
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Action for criteria entry
Context	configure qos network string egress ip-criteria entry number action type keyword
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
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Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	Destination IPv4 address to match
Context	configure qos network <i>string</i> egress ip-criteria entry number match dst-ip address (<i>ipv4-prefix-with-host-bits ipv4-address</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Subnet mask
Context	configure qos network <i>string</i> egress ip-criteria entry number match dst-ip mask <i>string</i>
Tree	mask
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>string</i> egress ip-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network <i>string</i> egress ip-criteria entry number match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network string egress ip-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network string egress ip-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure qos network string egress ip-criteria entry number match dst-port port-list reference
Tree	port-list
Reference	configure qos match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network string egress ip-criteria entry number match dst-port range
Tree	range

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network string egress ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string egress ip-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network string egress ip-criteria entry number match fragment keyword
Tree	fragment
Description	This command configures fragmented or non-fragmented IP packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true
Introduced	16.0.R1
Platforms	All

icmp-type *number*

Synopsis	ICMP type in the ICMP header of IPv4 packet to match
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match icmp-type <i>number</i>
Tree	icmp-type
Description	This command configures matching on the ICMP type field in the ICMP header of an IPv4 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>string</i> egress ip-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address to match
Context	configure qos network <i>string</i> egress ip-criteria entry number match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Subnet mask
Context	configure qos network <i>string</i> egress ip-criteria entry number match src-ip mask <i>string</i>
Tree	mask
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>string</i> egress ip-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network <i>string</i> egress ip-criteria entry number match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network string egress ip-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network string egress ip-criteria entry number match src-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Name of the port list as the match criterion
Context	configure qos network string egress ip-criteria entry number match src-port port-list reference
Tree	port-list
Reference	configure qos match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network string egress ip-criteria entry number match src-port range
Tree	range

Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network string egress ip-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network string egress ip-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos network string egress ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos network string egress ipv6-criteria entry number

Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] number

Synopsis	Entry ID for match criterion and corresponding action
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i>
Tree	entry
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

port-redirect-group

Synopsis	Enter the port-redirect-group context
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> port-redirect-group
Tree	port-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis	Policer ID to be used for the matched traffic
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> port-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue *number*

Synopsis	Queue to be used for post-policed traffic
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> port-redirect-group queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Profile reclassification action
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Action for criteria entry
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria entry number</i> <i>action type keyword</i>
Tree	<i>type</i>
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria entry number</i> <i>description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria entry number</i> <i>match</i>
Tree	<i>match</i>
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>string</i> <i>egress</i> <i>ipv6-criteria entry number</i> <i>match dscp keyword</i>
Tree	<i>dscp</i>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network string egress ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address to match
Context	configure qos network string egress ipv6-criteria entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Address mask
Context	configure qos network string egress ipv6-criteria entry number match dst-ip mask string
Tree	mask
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network string egress ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1

Platforms All

eq number

Synopsis Value 'equal to' assigned as match condition

Context **configure qos network string egress ipv6-criteria entry number match dst-port eq number**

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**

Introduced 16.0.R1

Platforms All

gt number

Synopsis Value 'greater than' assigned as match condition

Context **configure qos network string egress ipv6-criteria entry number match dst-port gt number**

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**

Introduced 16.0.R1

Platforms All

lt number

Synopsis Value 'less than' assigned as match condition

Context **configure qos network string egress ipv6-criteria entry number match dst-port lt number**

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**

Introduced 16.0.R1

Platforms All

port-list *reference*

Synopsis	Name of the port list as the match criterion
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match dst-port port-list reference
Tree	port-list
Reference	configure qos match-list port-list string
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match dst-port range start number
Tree	start

Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match fragment <i>keyword</i>
Tree	fragment
Description	This command configures fragmented or non-fragmented IPv6 packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

icmp-type *number*

Synopsis	ICMPv6 type in ICMPv6 header of IPv6 packet to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match icmp-type <i>number</i>
Tree	icmp-type
Description	This command configures matching on the ICMPv6 type field in the ICMPv6 header of an IPv6 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> egress ipv6-criteria entry number match next-header (<i>number</i> <i>keyword</i>)

Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network string egress ipv6-criteria entry number match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address to match
Context	configure qos network string egress ipv6-criteria entry number match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	Address mask
Context	configure qos network string egress ipv6-criteria entry number match src-ip mask string
Tree	mask
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
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Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' assigned as match condition
Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1

Platforms All

port-list *reference*

Synopsis Name of the port list as the match criterion

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* *src-port* *port-list* *reference*

Tree [port-list](#)

Reference **configure qos match-list** *port-list* *string*

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis Enter the **range** context

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* *src-port* *range*

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.

Introduced 16.0.R1

Platforms All

end *number*

Synopsis Upper bound of port range to match

Context **configure qos network** *string* *egress* *ipv6-criteria* *entry* *number* *match* *src-port* *range* *end* *number*

Tree [end](#)

Range 0 to 65535

Introduced 16.0.R1

Platforms All

start *number*

Synopsis Lower bound of port range to match

Context	configure qos network <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port range <i>start number</i>
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

prec [**prec-value**] *number*

Synopsis	Enter the prec list instance
Context	configure qos network <i>string</i> egress prec <i>number</i>
Tree	prec
Introduced	16.0.R1
Platforms	All

[prec-value] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos network <i>string</i> egress prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> egress prec <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	configure qos network <i>string</i> egress prec number profile keyword
Tree	profile
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

remark-trusted

Synopsis	Enable the remark-trusted context
Context	configure qos network <i>string</i> egress remark-trusted
Tree	remark-trusted
Introduced	16.0.R1
Platforms	All

force-egress-marking *boolean*

Synopsis	Remark DSCP bits in the internal IP header
Context	configure qos network <i>string</i> egress remark-trusted force-egress-marking boolean
Tree	force-egress-marking
Default	false
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure qos network <i>string</i> ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

default-action

Synopsis	Enter the default-action context
Context	configure qos network <i>string</i> ingress default-action
Tree	default-action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Default forwarding class to use while classifying the ingress traffic
Context	configure qos network <i>string</i> ingress default-action fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile keyword

Synopsis	Default profile for the ingressing traffic
Context	configure qos network <i>string</i> ingress default-action profile keyword
Tree	profile
Default	out
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

dot1p [*dot1p-value*] *number*

Synopsis	Enter the dot1p list instance
Context	configure qos network <i>string</i> ingress dot1p <i>number</i>
Tree	dot1p
Introduced	16.0.R1
Platforms	All

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos network <i>string</i> ingress dot1p <i>number</i>
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> ingress dot1p <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile to be used for the ingressing traffic
Context	configure qos network <i>string</i> ingress dot1p <i>number</i> profile <i>keyword</i>
Tree	profile
Options	in, out, de, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dscp [**dscp-name**] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos network <i>string</i> ingress dscp <i>keyword</i>
Tree	dscp

Introduced 16.0.R1
 Platforms All

[dscp-name] *keyword*

Synopsis DSCP associated with the forwarding class
 Context **configure qos network** *string ingress dscp keyword*
 Tree **dscp**
 Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

fc *keyword*

Synopsis Forwarding class
 Context **configure qos network** *string ingress dscp keyword fc keyword*
 Tree **fc**
 Options be, l2, af, l1, h2, ef, h1, nc
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

profile *keyword*

Synopsis Default profile to use for the ingressing traffic
 Context **configure qos network** *string ingress dscp keyword profile keyword*
 Tree **profile**
 Options in, out, exceed, inplus
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

fc [*fc-name*] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos network <i>string</i> ingress fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos network <i>string</i> ingress fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group

Synopsis	Enter the fp-redirect-group context
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group
Tree	fp-redirect-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

broadcast-policer *number*

Synopsis	Policer to be used for broadcast traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group broadcast-policer <i>number</i>
Tree	broadcast-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

multicast-policer *number*

Synopsis	Policer to be used for multicast traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group multicast-policer <i>number</i>
Tree	multicast-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policer *number*

Synopsis	Policer to be used for unicast traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group policer <i>number</i>
Tree	policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

unknown-policer *number*

Synopsis	Policer to be used for unknown traffic
Context	configure qos network <i>string</i> ingress fc <i>keyword</i> fp-redirect-group unknown-policer <i>number</i>
Tree	unknown-policer
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos network <i>string</i> ingress ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Network Ingress IP Criteria Entry Index
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP to be used as network QoS policy match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list reference

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-ip ip-prefix-list reference
Tree	ip-prefix-list

Reference	configure qos match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match dst-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact destination port as the match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than destination port value as match criterion
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Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Port list used as match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-port port-list reference
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-port range

Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match fragment keyword
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

protocol (*number | keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match protocol (<i>number keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	Source IPv4 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match src-ip address (<i>ipv4-prefix-with-host-bits ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match src-ip ip-prefix-list reference
Tree	ip-prefix-list

Reference	configure qos match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact source port as the match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Greater than source port value as match criterion
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Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Port list used as match criterion
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port port-list reference
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port range

Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> ingress ip-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos network <i>string</i> ingress ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
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Context	configure qos network <i>string</i> ingress ipv6-criteria entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	Network Ingress IPv6 Criteria Entry Index
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic
----------	--

Context	configure qos network <i>string ingress ipv6-criteria entry number action profile keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos network <i>string ingress ipv6-criteria entry number action type keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network <i>string ingress ipv6-criteria entry number description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos network <i>string ingress ipv6-criteria entry number match</i>
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list reference

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>

Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R4
Platforms	All

mask string

Synopsis	IP address to match with source IP of the packet
Context	configure qos network string ingress ipv6-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos network string ingress ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Exact destination port as the match criterion
Context	configure qos network string ingress ipv6-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than destination port value as match criterion
----------	--

Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Port list used as match criterion
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port port-list reference
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list <i>string</i>
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
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Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Fragmentation state as the match criterion
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match fragment keyword
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address for network QoS policy match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list

Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R4
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Exact source port as the match criterion
Context	configure qos network <i>string</i> ingress ipv6-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Greater than source port value as match criterion
Context	configure qos network string ingress ipv6-criteria entry number match src-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Less than destination port value as the match criterion
Context	configure qos network string ingress ipv6-criteria entry number match src-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	16.0.R1
Platforms	All

port-list reference

Synopsis	Port list used as match criterion
Context	configure qos network string ingress ipv6-criteria entry number match src-port port-list reference
Tree	port-list
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	configure qos match-list port-list string
Notes	The following elements are part of a choice: eq, gt, lt, port-list, or range.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

range

Synopsis	Enter the range context
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , port-list , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of port range to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of port range to match
Context	configure qos network <i>string</i> ingress ipv6-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ler-use-dscp boolean

Synopsis	Honor the DSCP markings instead of the LSP-EXP bits
Context	configure qos network <i>string</i> ingress ler-use-dscp <i>boolean</i>
Tree	ler-use-dscp
Default	false
Introduced	16.0.R1

Platforms All

lsp-exp [*lsp-exp-value*] *number*

Synopsis Enter the **lsp-exp** list instance
 Context **configure qos network** *string* **ingress lsp-exp** *number*
 Tree **lsp-exp**
 Introduced 16.0.R1
 Platforms All

[lsp-exp-value] *number*

Synopsis Value to assign the unique MPLS LSP EXP value that will match the lsp-exp rule
 Context **configure qos network** *string* **ingress lsp-exp** *number*
 Tree **lsp-exp**
 Range 0 to 7
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

fc *keyword*

Synopsis Forwarding class
 Context **configure qos network** *string* **ingress lsp-exp** *number* **fc** *keyword*
 Tree **fc**
 Options be, l2, af, l1, h2, ef, h1, nc
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

profile *keyword*

Synopsis Default profile to use for the ingressing traffic
 Context **configure qos network** *string* **ingress lsp-exp** *number* **profile** *keyword*
 Tree **profile**

Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

policy-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	QoS network policy ID
Context	configure qos network <i>string policy-id number</i>
Tree	<i>policy-id</i>
Description	<p>This command specifies the QoS network policy ID and uniquely identifies the policy on the router.</p> <p>Network policy-id 1 exists as the default policy that is applied to all network interfaces by default. The network policy-id 1 cannot be modified or deleted. It defines the default DSCP-to-FC mapping and MPLS EXP-to-FC mapping for the ingress. For the egress, it defines forwarding classes that represent individual queues and the packet marking criteria.</p> <p>Network policy-id 1 exists as the default policy that is applied to all network ports by default. This default policy cannot be modified or deleted. It defines the default DSCP-to-FC mapping and default unicast meters for ingress IP traffic. For the egress, it defines the forwarding class to dot1p and DSCP values and the packet marking criteria.</p> <p>If a new network policy is created (for instance, policy-id 3), only the default action and egress forwarding class parameters are identical to the default policy. A new network policy does not contain the default DSCP-to-FC and MPLS-EXP-to-FC mapping for network QoS policy of type ip-interface or the DSCP-to-FC mapping (for network QoS policy of type port). The default network policy can be copied to create a new network policy that includes the default ingress DSCP-to-FC and MPLS EXP-to-FC mapping (as appropriate).</p>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the policy
Context	configure qos network <i>string scope keyword</i>

Tree	scope
Default	template
Options	exclusive, template
Introduced	16.0.R1
Platforms	All

network-queue [[network-queue-policy](#)] *string*

Synopsis	Enter the network-queue list instance
Context	configure qos network-queue string
Tree	network-queue
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[network-queue-policy] *string*

Synopsis	Name for network queue policy
Context	configure qos network-queue string
Tree	network-queue
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos network-queue string description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos network-queue <i>string fc keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos network-queue <i>string fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multicast-queue *reference*

Synopsis	Multicast queue for packets in this forwarding class
Context	configure qos network-queue <i>string fc keyword multicast-queue reference</i>
Tree	multicast-queue
Reference	configure qos network-queue <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue for packets in this forwarding class
Context	configure qos network-queue <i>string fc keyword queue reference</i>
Tree	queue
Reference	configure qos network-queue <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

hs-attachment-policy *reference*

Synopsis	HS attachment policy applied
Context	configure qos network-queue <i>string</i> hs-attachment-policy <i>reference</i>
Tree	hs-attachment-policy
Reference	configure qos hs-attachment-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *number*

Synopsis	Enter the hs-wrr-group list instance
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[[group-id](#)] *number*

Synopsis	HS WRR group identifier
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i>
Tree	hs-wrr-group
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate *number*

Synopsis	PIR rate
Context	configure qos network-queue <i>string</i> hs-wrr-group <i>number</i> rate <i>number</i>
Tree	rate
Range	1 to 100
Default	100
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

queue [**queue-id**] *number*

Synopsis	Enter the queue list instance
Context	configure qos network-queue <i>string</i> queue <i>number</i>

Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Queue identifier
Context	configure qos network-queue <i>string</i> queue <i>number</i>
Tree	queue
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos network-queue <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos network-queue <i>string</i> queue <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

fir *keyword*

Synopsis	Constraint used when deriving the operational FIR value
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Context	configure qos network-queue <i>string queue number adaptation-rule fir keyword</i>
Tree	fir
Default	closest
Options	max, min, closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos network-queue <i>string queue number adaptation-rule pir keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure qos network-queue <i>string queue number avg-frame-overhead decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

cbs *decimal-number*

Synopsis	Reserved buffer space for the queue
Context	configure qos network-queue <i>string queue number cbs decimal-number</i>
Tree	cbs
Range	0.00 to 100.00
Units	centipercen

Introduced 16.0.R1
 Platforms All

drop-tail

Synopsis Enter the **drop-tail** context
 Context **configure** qos network-queue *string* queue *number* drop-tail
 Tree [drop-tail](#)
 Introduced 16.0.R1
 Platforms All

low

Synopsis Enter the **low** context
 Context **configure** qos network-queue *string* queue *number* drop-tail low
 Tree [low](#)
 Introduced 16.0.R1
 Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis Low drop-tail percent from MBS that is reduced
 Context **configure** qos network-queue *string* queue *number* drop-tail low percent-reduction-from-mbs (*number* | *keyword*)
 Tree [percent-reduction-from-mbs](#)
 Range 0 to 100
 Default auto
 Options auto
 Introduced 16.0.R1
 Platforms All

hs-alt-port-class-pool *boolean*

Synopsis Use HS alternate class port pool buffer for traffic
 Context **configure** qos network-queue *string* queue *number* hs-alt-port-class-pool *boolean*
 Tree [hs-alt-port-class-pool](#)

Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	configure qos network-queue <i>string queue number hs-class-weight number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-mbs *decimal-number*

Synopsis	Percentage of buffer space allowed for the HS queue
Context	configure qos network-queue <i>string queue number hs-mbs decimal-number</i>
Tree	hs-mbs
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure qos network-queue <i>string queue number hs-wred-queue</i>
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy reference

Synopsis	Slope policy name
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Context	configure qos network-queue <i>string queue number hs-wred-queue policy reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure qos network-queue <i>string queue number hs-wrr-weight number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs *decimal-number*

Synopsis	Percentage of buffer space allowed for the queue
Context	configure qos network-queue <i>string queue number mbs decimal-number</i>
Tree	mbs
Range	0.00 to 100.00
Units	centipercen
Introduced	16.0.R1
Platforms	All

multipoint *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	configure qos network-queue <i>string queue number multipoint boolean</i>
Tree	multipoint
Introduced	16.0.R1

Platforms All

port-parent

Synopsis Enable the **port-parent** context

Context **configure qos network-queue** *string queue number* **port-parent**

Tree [port-parent](#)

Introduced 16.0.R1

Platforms All

cir-level *number*

Synopsis Port priority to receive bandwidth for within-CIR pass

Context **configure qos network-queue** *string queue number* **port-parent cir-level** *number*

Tree [cir-level](#)

Range 0 to 8

Default 0

Introduced 16.0.R1

Platforms All

cir-weight *number*

Synopsis Weight to receive bandwidth at the within-CIR level

Context **configure qos network-queue** *string queue number* **port-parent cir-weight** *number*

Tree [cir-weight](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

level *number*

Synopsis Port priority level for above-CIR behavior

Context **configure qos network-queue** *string queue number* **port-parent level** *number*

Tree [level](#)

Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos network-queue <i>string queue number port-parent weight number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos network-queue <i>string queue number queue-type keyword</i>
Tree	queue-type
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos network-queue <i>string queue number rate</i>
Tree	rate
Introduced	16.0.R1
Platforms	All

cir number

Synopsis	CIR percentage rate
Context	configure qos network-queue <i>string queue number rate cir number</i>
Tree	cir
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

fir number

Synopsis	FIR percentage
Context	configure qos network-queue <i>string queue number rate fir number</i>
Tree	fir
Description	This command defines an additional percentage at which the system prioritizes the queue over other queues competing for the same bandwidth above that used by the CIR percentage.
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir number

Synopsis	PIR percentage rate
Context	configure qos network-queue <i>string queue number rate pir number</i>
Tree	pir
Range	1 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	All

policer-control-policy [**policer-control-policy-name**] *string*

Synopsis	Enter the policer-control-policy list instance
Context	configure qos policer-control-policy <i>string</i>
Tree	policer-control-policy
Max. Instances	2047
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-control-policy-name] *string*

Synopsis	Policer control policy name
Context	configure qos policer-control-policy <i>string</i>
Tree	policer-control-policy
Description	This command specifies the policer control policy name. Each policer control policy must be created with a unique policy name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos policer-control-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis	Enter the root context
Context	configure qos policer-control-policy <i>string</i> root
Tree	root

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-percent-rate *decimal-number*

Synopsis Maximum rate of the arbiter
 Context **configure qos policer-control-policy string root max-percent-rate decimal-number**
 Tree [max-percent-rate](#)
 Range 0.01 to 100.00
 Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number | keyword*)

Synopsis Maximum frame-based bandwidth limit of the arbiter
 Context **configure qos policer-control-policy string root max-rate (number | keyword)**
 Tree [max-rate](#)
 Range 1 to 6400000000
 Default max
 Options max
 Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context
 Context **configure qos policer-control-policy string root priority-mbs-thresholds**
 Tree [priority-mbs-thresholds](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum separation between policer discard thresholds
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>)
Tree	min-thresh-separation
Range	0 to 16777216
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [*priority-level*] *number*

Synopsis	Enter the priority list instance
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis	Priority level
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fixed-mbs *boolean*

Synopsis	Consider cumulative buffer space to be fixed
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i> fixed-mbs <i>boolean</i>

Tree	fixed-mbs
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space
Context	configure qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>)
Tree	mbs-contribution
Range	0 to 16777216
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-preferred *boolean*

Synopsis	Provide a preference to consume PIR bucket tokens at a given priority level
Context	configure qos policer-control-policy <i>string</i> root profile-preferred <i>boolean</i>
Tree	profile-preferred
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

tier [[tier-id](#)] *number*

Synopsis	Enter the tier list instance
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i>
Tree	tier
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[tier-id] number

Synopsis	Tier for policer control policer arbiter
Context	configure qos policer-control-policy string tier number
Tree	tier
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter [arbiter-name] string

Synopsis	Enter the arbiter list instance
Context	configure qos policer-control-policy string tier number arbiter string
Tree	arbiter
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[arbiter-name] string

Synopsis	Arbiter name
Context	configure qos policer-control-policy string tier number arbiter string
Tree	arbiter
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos policer-control-policy string tier number arbiter string arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos policer-control-policy <i>string tier number arbiter string arbiter-parent arbiter-name string</i>
Tree	arbiter-name
Description	This command specifies the arbiter name. In tier 1, the arbiter name is not allowed and only the system reversed name "root" is accepted. The specified arbiter name must exist within the policer control policy at tier 1 or the parent command fails. When a tiered arbiter is acting as a parent for another tiered arbiter, the parent arbiter cannot be removed from the policy. The child arbiter receives all bandwidth directly from its parent arbiter (that receives bandwidth from the root arbiter).
String Length	1 to 32
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level the child arbiter uses on its parent
Context	configure qos policer-control-policy <i>string tier number arbiter string arbiter-parent level number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight attribute at parent level applied to children
Context	configure qos policer-control-policy <i>string tier number arbiter string arbiter-parent weight number</i>
Tree	weight
Description	This command defines how multiple children at the same parent strict level compete when insufficient bandwidth exists on the parent for that level. Each child's weight is divided by the sum of the active children's weights and the result is multiplied by the available bandwidth. If a child cannot receive its entire weighted fair share of bandwidth due to a defined child rate limit, the remainder of its bandwidth is distributed between the other children based on their weights.

Range	1 to 100
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 6400000000
Default	max
Options	max
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> reference-rate <i>keyword</i>
Tree	reference-rate
Default	local-limit
Options	local-limit, reference-port-limit
Notes	The following elements are part of a choice: (percent-rate and reference-rate) or rate .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-scheduler-policy [[name](#)] *string*

Synopsis	Enter the port-scheduler-policy list instance
Context	configure qos port-scheduler-policy <i>string</i>
Tree	port-scheduler-policy
Max.	1023
Instances	
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Port scheduler policy name
Context	configure qos port-scheduler-policy <i>string</i>
Tree	port-scheduler-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos port-scheduler-policy <i>string</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dist-lag-rate-shared *boolean*

Synopsis	Share rates when the port is part of a LAG configured in distribute mode
Context	configure qos port-scheduler-policy <i>string</i> <i>dist-lag-rate-shared</i> <i>boolean</i>
Tree	dist-lag-rate-shared
Default	false
Introduced	16.0.R1
Platforms	All

group [*group-name*] *string*

Synopsis	Enter the group list instance
Context	configure qos port-scheduler-policy <i>string</i> <i>group</i> <i>string</i>
Tree	group
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[group-name] *string*

Synopsis	Weighted scheduler group name
Context	configure qos port-scheduler-policy <i>string</i> <i>group</i> <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

monitor-threshold *number*

Synopsis Congestion monitoring threshold

Context **configure** qos port-scheduler-policy *string* group *string* monitor-threshold *number*

Tree [monitor-threshold](#)

Description This command defines the congestion monitoring threshold for the desired monitoring entity under the port scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.

The congestion threshold is specified as a percentage of the configured PIR for the entity for which congestion monitoring is desired. For example, if the configured PIR for level 1 is 100000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is greater than 90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** qos port-scheduler-policy *string* group *string* percent-rate

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir *decimal-number*

Synopsis Administrative CIR percent

Context **configure** qos port-scheduler-policy *string* group *string* percent-rate cir *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Default 100.00

Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos port-scheduler-policy <i>string</i> group <i>string</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos port-scheduler-policy <i>string</i> group <i>string</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos port-scheduler-policy <i>string</i> group <i>string</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos port-scheduler-policy <i>string group string rate</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

hqos-algorithm *keyword*

Synopsis	Port scheduler H-QoS algorithm
Context	configure qos port-scheduler-policy <i>string</i> hqos-algorithm <i>keyword</i>
Tree	hqos-algorithm
Description	This command configures the port scheduler H-QoS algorithm used to calculate the operational rates for the children connected to the port scheduler.
Default	default
Options	default, above-offered-allowance-control
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Priority level this port scheduler policy
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i>

Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group reference

Synopsis	Associated group
Context	configure qos port-scheduler-policy string level number group reference
Tree	group
Reference	configure qos port-scheduler-policy string group string
Introduced	16.0.R1
Platforms	All

monitor-threshold number

Synopsis	Monitoring threshold of the configured rate
Context	configure qos port-scheduler-policy string level number monitor-threshold number
Tree	monitor-threshold
Description	This command specifies the configured rate as a percentage. If the offered rate exceeds the configured threshold, a counter monitoring the threshold is increased.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos port-scheduler-policy string level number percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000

Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight of the level in the weighted scheduler group
Context	configure qos port-scheduler-policy <i>string</i> level <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

max-percent-rate *decimal-number*

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos port-scheduler-policy <i>string</i> max-percent-rate <i>decimal-number</i>
Tree	max-percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: max-percent-rate or max-rate .

Introduced	16.0.R1
Platforms	All

max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	configure qos port-scheduler-policy <i>string</i> max-rate (<i>number</i> <i>keyword</i>)
Tree	max-rate
Range	1 to 6400000000
Default	max
Options	max
Notes	The following elements are part of a choice: max-percent-rate or max-rate .
Introduced	16.0.R1
Platforms	All

monitor-threshold *number*

Synopsis	Congestion monitoring threshold
Context	configure qos port-scheduler-policy <i>string</i> monitor-threshold <i>number</i>
Tree	monitor-threshold
Description	<p>This command defines the congestion monitoring threshold for the desired monitoring entity under the port-scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.</p> <p>The congestion threshold is specified as a percentage of the configured PIR rate for the entity for which congestion monitoring is desired. For example, if the configured PIR rate for level 1 is 1000,000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is >90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.</p>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

orphan-overrides

Synopsis	Enter the orphan-overrides context
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Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides
Tree	orphan-overrides
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority level for within-CIR orphan behavior
Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides cir-level <i>number</i>
Tree	cir-level
Description	This command defines the port priority that the orphan queues and schedulers use to receive bandwidth for their within-CIR offered-load. If the cir-weight command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and this command setting is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides cir-weight <i>number</i>
Tree	cir-weight
Description	This command defines the weight the orphan queues and schedulers will use in the within-CIR port priority level. When this command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and the cir-level command is ignored.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority level for above-CIR orphan behavior
Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides level <i>number</i>

Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to use in the above-CIR port priority level
Context	configure qos port-scheduler-policy <i>string</i> orphan-overrides weight <i>number</i>
Tree	weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

post-policer-mapping [[name](#)] *string*

Synopsis	Enter the post-policer-mapping list instance
Context	configure qos post-policer-mapping <i>string</i>
Tree	post-policer-mapping
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[name] *string*

Synopsis	Post-policer mapping policy name
Context	configure qos post-policer-mapping <i>string</i>
Tree	post-policer-mapping
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos post-policer-mapping <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fc [**fc-name**] *keyword* **profile** *keyword*

Synopsis	Enter the fc list instance
Context	configure qos post-policer-mapping <i>string</i> fc <i>keyword</i> profile <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[fc-name] *keyword*

Synopsis	Forwarding class remapping
Context	configure qos post-policer-mapping <i>string</i> fc <i>keyword</i> profile <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Egress packet profile remapping
Context	configure qos post-policer-mapping <i>string</i> fc <i>keyword</i> profile <i>keyword</i>
Tree	fc
Options	in, out, exceed, inplus
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

maps-to

Synopsis Enter the **maps-to** context

Context **configure qos post-policer-mapping string fc keyword profile keyword maps-to**

Tree **maps-to**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fc keyword

Synopsis Forwarding class remapping

Context **configure qos post-policer-mapping string fc keyword profile keyword maps-to fc keyword**

Tree **fc**

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile keyword

Synopsis Egress packet profile remapping

Context **configure qos post-policer-mapping string fc keyword profile keyword maps-to profile keyword**

Tree **profile**

Options in, out, exceed, inplus

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

queue-group-redirect-list [name] string

Synopsis Enter the **queue-group-redirect-list** list instance

Context **configure qos queue-group-redirect-list string**

Tree **queue-group-redirect-list**

Max. Instances	2047
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Queue group redirect list name
Context	configure qos queue-group-redirect-list <i>string</i>
Tree	queue-group-redirect-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

match [[field-value](#)] *number*

Synopsis	Enter the match list instance
Context	configure qos queue-group-redirect-list <i>string match number</i>
Tree	match
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[field-value] *number*

Synopsis	Field value in the ingress or egress packet to match
Context	configure qos queue-group-redirect-list <i>string match number</i>
Tree	match
Description	This command specifies the value of the field in the ingress or egress packet. When there is a match, the packet is redirected to the specified queue group instance. The field must be a valid VXLAN VNI.
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

instance *number*

Synopsis Queue group instance for traffic redirection

Context **configure qos queue-group-redirect-list** *string match number instance number*

Tree [instance](#)

Range 1 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis Type for queue-group redirect list

Context **configure qos queue-group-redirect-list** *string type keyword*

Tree [type](#)

Default vxlan-vni

Options vxlan-vni

Introduced 16.0.R1

Platforms All

queue-group-templates

Synopsis Enter the **queue-group-templates** context

Context **configure qos queue-group-templates**

Tree [queue-group-templates](#)

Introduced 16.0.R1

Platforms All

egress

Synopsis Enter the **egress** context

Context **configure qos queue-group-templates egress**

Tree [egress](#)

Introduced 16.0.R1
 Platforms All

queue-group [[egress-queue-group-name](#)] *string*

Synopsis Enter the **queue-group** list instance
 Context **configure** [qos queue-group-templates egress queue-group](#) *string*
 Tree [queue-group](#)
 Introduced 16.0.R1
 Platforms All

[egress-queue-group-name] *string*

Synopsis Egress queue group template name
 Context **configure** [qos queue-group-templates egress queue-group](#) *string*
 Tree [queue-group](#)
 Description This command specifies the name of the egress queue group template. Each ingress queue group template must be uniquely named within the system. Multiple ingress queue group templates may not share the same name. An ingress and egress queue group template may share the same name.
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [qos queue-group-templates egress queue-group](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 0 to 80
 Introduced 16.0.R1
 Platforms All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

queue

Synopsis	Enter the queue context
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i> queue
Tree	queue
Introduced	16.0.R1
Platforms	All

none

Synopsis	No mid-pool is associated with this parent-pool
Context	configure qos queue-group-templates egress queue-group <i>string</i> fc <i>keyword</i> queue none
Tree	none
Notes	The following elements are part of a choice: none or queue-id .
Introduced	16.0.R1
Platforms	All

queue-id *reference*

Synopsis	Queue defined in forwarding class mapping
Context	configure qos queue-group-templates egress queue-group <i>string</i> <i>fc</i> keyword queue <i>queue-id</i> <i>reference</i>
Tree	queue-id
Reference	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Notes	The following elements are part of a choice: none or queue-id .
Introduced	16.0.R1
Platforms	All

hs-attachment-policy *reference*

Synopsis	HS attachment policy applied
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-attachment-policy <i>reference</i>
Tree	hs-attachment-policy
Reference	configure qos hs-attachment-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *number*

Synopsis	Enter the hs-wrr-group list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[group-id] *number*

Synopsis	HS WRR group identifier
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i>
Tree	hs-wrr-group
Range	1 to 2

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policer [[policer-id](#)] *number*

Synopsis	Enter the policer list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i>
Tree	policer
Description	Commands in this context configure a QoS egress queue-group policer.
Introduced	16.0.R1
Platforms	All

[policer-id] number

Synopsis	Egress queue-group policer ID
Context	configure qos queue-group-templates egress queue-group string policer number
Tree	policer
Description	This command specifies the queue-group policer that will either be created or edited within the queue group template. For VSR, the queue group template may only have up to eight policers (numbered 1 through 8).
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates egress queue-group string policer number adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos queue-group-templates egress queue-group string policer number adaptation-rule cir keyword
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
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Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	All

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight in the priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exceed-pir *boolean*

Synopsis	Allow forwarding of packets with an exceed-profile state and traffic exceeding the PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number exceed-pir <i>boolean</i>
Tree	exceed-pir
Default	false
Introduced	16.0.R1
Platforms	All

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer number high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
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Context	configure qos queue-group-templates egress queue-group <i>string policer number mbs</i> (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos queue-group-templates egress queue-group <i>string policer number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates egress queue-group <i>string policer number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>string policer number</i> percent-rate cir <i>decimal-number</i>

Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group string policer number percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates egress queue-group string policer number percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Default	local-limit
Options	local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	All

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	configure qos queue-group-templates egress queue-group string policer number profile-capped <i>boolean</i>
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>rate</i>
Tree	<i>rate</i>
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>rate</i> <i>cir</i> (<i>number</i> <i>keyword</i>)
Tree	<i>cir</i>
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>rate</i> <i>pir</i> (<i>number</i> <i>keyword</i>)
Tree	<i>pir</i>
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	All

queue [**queue-id**] *number*

Synopsis	Enter the queue list instance
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Egress Queue-Group queue identifier
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule

Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy reference

Synopsis	Name of the advanced configuration policy
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

exceed

Synopsis	Enter the exceed context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail exceed
Tree	exceed
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail that is reduced from MBS for exceed profile packets
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail exceed percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail high
Tree	high
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail being that is reduced from MBS for high profile packets
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail high percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100

Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

highplus

Synopsis	Enter the highplus context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail highplus
Tree	highplus
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail being that is reduced from MBS for high plus profile packets
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

dynamic-mbs *boolean*

Synopsis	Allow modifying of the MBS size for a queue to maintain maximum latency for traffic
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> dynamic-mbs <i>boolean</i>
Tree	dynamic-mbs
Default	false
Introduced	16.0.R1
Platforms	All

hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-class-weight <i>number</i>

Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy name
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-wred-queue <i>policy reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Default	port-limit
Options	port-limit, local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	All

port-parent

Synopsis	Enable the port-parent context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent

Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1

Platforms All

weight *number*

Synopsis Weight that this queue uses to receive bandwidth from the port level scheduler

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* port-parent *weight* *number*

Tree [weight](#)

Range 0 to 100

Default 1

Introduced 16.0.R1

Platforms All

queue-delay *number*

Synopsis Target queue delay for forwarding packets through this queue

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* queue-delay *number*

Tree [queue-delay](#)

Range 1 to 5000

Units milliseconds

Introduced 16.0.R1

Platforms All

queue-type *keyword*

Synopsis Priority that this queue receives from the hardware level schedulers

Context **configure** qos queue-group-templates egress queue-group *string* queue *number* queue-type *keyword*

Tree [queue-type](#)

Options expedited, best-effort

Introduced 16.0.R1

Platforms All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent level <i>number</i>

Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Parent scheduler name
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue number scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to be used by the scheduler for feeding this queue
Context	configure qos queue-group-templates egress queue-group <i>string</i> queue number scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

wred-queue

Synopsis	Enter the wred-queue context
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Context	configure qos queue-group-templates egress queue-group <i>string queue number wred-queue</i>
Tree	wred-queue
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Generic pool association of the queue to allow queue-specific WRED slopes
Context	configure qos queue-group-templates egress queue-group <i>string queue number wred-queue mode keyword</i>
Tree	mode
Options	native, pool-per-queue
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Slope policy name
Context	configure qos queue-group-templates egress queue-group <i>string queue number wred-queue policy reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

usage *keyword*

Synopsis	Congestion control type
Context	configure qos queue-group-templates egress queue-group <i>string queue number wred-queue usage keyword</i>
Tree	usage
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

queues-hqos-manageable *boolean*

Synopsis	Manage queues through the Hierarchical QoS process
Context	configure qos queue-group-templates egress queue-group <i>string</i> queues-hqos-manageable <i>boolean</i>
Tree	queues-hqos-manageable
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

ingress

Synopsis	Enter the ingress context
Context	configure qos queue-group-templates ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

queue-group [*ingress-queue-group-name*] *string*

Synopsis	Enter the queue-group list instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

[ingress-queue-group-name] *string*

Synopsis	Ingress queue group template name
Context	configure qos queue-group-templates ingress queue-group <i>string</i>
Tree	queue-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos queue-group-templates ingress queue-group <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

policer [*policer-id*] *number*

Synopsis	Enter the policer list instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i>
Tree	policer
Introduced	16.0.R1
Platforms	All

[policer-id] *number*

Synopsis	Ingress Queue-Group Policer identifier
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy reference

Synopsis	Advanced QoS policy name
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> adv- config-policy <i>reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

arbiter-parent

Synopsis	Enter the arbiter-parent context
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Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	All

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis Exceed threshold of the CIR leaky bucket of the policer

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number* **cbs** (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 268435456

Default auto

Units bytes

Options auto

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

high-prio-only (*number* | *keyword*)

Synopsis Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number* **high-prio-only** (*number* | *keyword*)

Tree [high-prio-only](#)

Range 0 to 100

Default auto

Options auto

Introduced 16.0.R1

Platforms All

mbs (*number* | *keyword*)

Synopsis High priority 'violate' threshold of PIR leaky bucket of this policer

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number* mbs (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Default auto

Units bytes

Options auto

Introduced 16.0.R1

Platforms All

packet-byte-offset *number*

Synopsis Packet size modification for policing information

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number* packet-byte-offset *number*

Tree [packet-byte-offset](#)

Range -32 to 31

Default 0

Introduced 16.0.R1

Platforms All

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** qos queue-group-templates ingress queue-group *string* policer *number* percent-rate

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.2.R1

Platforms All

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	20.2.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.2.R1
Platforms	All

profile-capped *boolean*

Synopsis	Enforce a limit on the profile
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> profile-capped <i>boolean</i>
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> rate
Tree	rate

Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> <i>rate</i> cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> <i>rate</i> pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode

Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Ingress Queue-Group Queue identifier
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint for deriving operational CIR for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

fir keyword

Synopsis	Constraint for deriving operational FIR for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule fir <i>keyword</i>
Tree	fir
Default	closest
Options	max, min, closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir keyword

Synopsis	Constraint for deriving operational FIR for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy reference

Synopsis	Advanced QoS policy name
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Context	configure qos queue-group-templates ingress queue-group <i>string queue number adv-config-policy reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

burst-limit (*number | keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos queue-group-templates ingress queue-group <i>string queue number burst-limit (number keyword)</i>
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number | keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos queue-group-templates ingress queue-group <i>string queue number cbs (number keyword)</i>
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

cir-non-profiling *boolean*

Synopsis	Prevent profile modification of CIR dependent packet
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Context	configure qos queue-group-templates ingress queue-group <i>string queue number cir-non-profiling boolean</i>
Tree	cir-non-profiling
Description	<p>When configured to true, the system prevents the modification of the profile of a packet-dependent queue rate compared to its configured CIR. The CIR continues to be used to affect the scheduling priority of a queue.</p> <p>This command is only supported on hardware that is FP4-based and later and is ignored when the related policy is applied to FP3-based hardware.</p> <p>This command should not be configured under an ingress queue group template queue associated with a LAG which spans FP4-based and later and FP3-based hardware as the resulting operation could be different depending on which hardware type the traffic ingresses.</p>
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos queue-group-templates ingress queue-group <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos queue-group-templates ingress queue-group <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
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Context	configure qos queue-group-templates ingress queue-group <i>string queue number drop-tail low percent-reduction-from-mbs</i> (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	configure qos queue-group-templates ingress queue-group <i>string queue number mbs</i> (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

multipoint *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create an ingress multipoint queue
Context	configure qos queue-group-templates ingress queue-group <i>string queue number multipoint boolean</i>
Tree	multipoint
Default	false
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	20.10.R1
Platforms	All

fir *decimal-number*

Synopsis	Administrative FIR
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Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate fir <i>decimal-number</i>
Tree	fir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into physical queue
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Default	port-limit

Options	port-limit, local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	All

queue-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Queue operational mode for explicitly profiled packets
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> queue-mode <i>keyword</i>
Tree	queue-mode
Default	priority
Options	priority, profile
Introduced	16.0.R1
Platforms	All

queue-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Default	best-effort
Options	expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
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Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

fir (*number* | *keyword*)

Synopsis	Administrative FIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate fir (<i>number</i> <i>keyword</i>)
Tree	fir
Range	0 to 2000000000
Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 2000000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>

Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos queue-group-templates ingress queue-group <i>string queue number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos queue-group-templates ingress queue-group <i>string queue number</i> scheduler-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos queue-group-templates ingress queue-group <i>string queue number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler

name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.

String Length 1 to 32

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis Weight to be used by the scheduler for feeding this queue

Context **configure** qos queue-group-templates ingress queue-group *string* queue *number* scheduler-parent *weight* *number*

Tree [weight](#)

Range 0 to 100

Default 1

Introduced 16.0.R1

Platforms All

sap-egress [[sap-egress-policy-name](#)] *string*

Synopsis Enter the **sap-egress** list instance

Context **configure** qos sap-egress *string*

Tree [sap-egress](#)

Introduced 16.0.R1

Platforms All

[[sap-egress-policy-name](#)] *string*

Synopsis Policy name

Context **configure** qos [sap-egress](#) *string*

Tree [sap-egress](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

description *string*

Synopsis	Text description
Context	configure qos sap-egress <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dot1p [**dot1p-value**] *number*

Synopsis	Enter the dot1p list instance
Context	configure qos sap-egress <i>string</i> dot1p <i>number</i>
Tree	dot1p
Introduced	16.0.R1
Platforms	All

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos sap-egress <i>string</i> dot1p <i>number</i>
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string</i> dot1p <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress <i>string</i> dot1p <i>number</i> profile <i>keyword</i>
Tree	profile
Options	in, out, de, exceed, inplus
Introduced	16.0.R1
Platforms	All

dscp [*dscp-name*] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos sap-egress <i>string</i> dscp <i>keyword</i>
Tree	dscp
Introduced	16.0.R1
Platforms	All

[dscp-name] *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	configure qos sap-egress <i>string</i> dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string</i> dscp <i>keyword</i> fc <i>keyword</i>
Tree	fc

Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress string dscp keyword profile keyword
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

ethernet-ctag *boolean*

Synopsis	Tag value for dot1p and DE (Drop-Eligible) that are used by all dot1-p entries
Context	configure qos sap-egress string ethernet-ctag boolean
Tree	ethernet-ctag
Default	false
Introduced	16.0.R1
Platforms	All

fc [*fc-name*] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos sap-egress string fc keyword
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress string fc keyword
Tree	fc

Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

de-mark

Synopsis	Enable the de-mark context
Context	configure qos sap-egress string fc keyword de-mark
Tree	de-mark
Introduced	16.0.R1
Platforms	All

force number

Synopsis	DE value
Context	configure qos sap-egress string fc keyword de-mark force number
Tree	force
Range	0 to 1
Introduced	16.0.R1
Platforms	All

de-mark-inner

Synopsis	Enable the de-mark-inner context
Context	configure qos sap-egress string fc keyword de-mark-inner
Tree	de-mark-inner
Introduced	16.0.R1
Platforms	All

force number

Synopsis	DE value to set in inner VLAN tag
Context	configure qos sap-egress string fc keyword de-mark-inner force number
Tree	force

Range	0 to 1
Introduced	16.0.R1
Platforms	All

de-mark-outer

Synopsis	Enable the de-mark-outer context
Context	configure qos sap-egress <i>string fc keyword de-mark-outer</i>
Tree	de-mark-outer
Introduced	16.0.R1
Platforms	All

force number

Synopsis	DE value to set in outer VLAN tag
Context	configure qos sap-egress <i>string fc keyword de-mark-outer force number</i>
Tree	force
Range	0 to 1
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the dot1p context
Context	configure qos sap-egress <i>string fc keyword dot1p</i>
Tree	dot1p
Introduced	16.0.R1
Platforms	All

exceed-profile number

Synopsis	Dot1p value for exceed-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p exceed-profile number</i>
Tree	exceed-profile
Range	0 to 7

Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Dot1p value for in-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p in-profile number</i>
Tree	in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Dot1p value for out-of-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p out-profile number</i>
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dot1p-inner

Synopsis	Enter the dot1p-inner context
Context	configure qos sap-egress <i>string fc keyword dot1p-inner</i>
Tree	dot1p-inner
Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Inner Dot1p value for in-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p-inner in-profile number</i>
Tree	in-profile
Range	0 to 7

Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Inner Dot1p value for out-of-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p-inner out-profile number</i>
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dot1p-outer

Synopsis	Enter the dot1p-outer context
Context	configure qos sap-egress <i>string fc keyword dot1p-outer</i>
Tree	dot1p-outer
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Outer Dot1p value for exceed-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p-outer exceed-profile number</i>
Tree	exceed-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Outer Dot1p value for in-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p-outer in-profile number</i>
Tree	in-profile
Range	0 to 7

Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Outer Dot1p value for out-of-profile frames
Context	configure qos sap-egress <i>string fc keyword dot1p-outer out-profile number</i>
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

dscp

Synopsis	Enter the dscp context
Context	configure qos sap-egress <i>string fc keyword dscp</i>
Tree	dscp
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

exceed-profile *keyword*

Synopsis	DSCP name for exceed-profile frames
Context	configure qos sap-egress <i>string fc keyword dscp exceed-profile keyword</i>
Tree	exceed-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

in-profile keyword

Synopsis	DSCP name for in-profile frames
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> dscp in-profile <i>keyword</i>
Tree	in-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

out-profile keyword

Synopsis	DSCP name for out-of-profile frames
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> dscp out-profile <i>keyword</i>
Tree	out-profile
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

policer reference

Synopsis	Policer to forward the traffic
Context	configure qos sap-egress <i>string</i> fc <i>keyword</i> policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string</i> policer <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue

Synopsis	Enable the port-redirect-group-queue context
----------	---

Context	configure qos sap-egress <i>string fc keyword port-redirect-group-queue</i>
Tree	port-redirect-group-queue
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to forward the traffic
Context	configure qos sap-egress <i>string fc keyword port-redirect-group-queue queue number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

prec

Synopsis	Enter the prec context
Context	configure qos sap-egress <i>string fc keyword prec</i>
Tree	prec
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

exceed-profile *number*

Synopsis	Precedence for exceed-profile frames
Context	configure qos sap-egress <i>string fc keyword prec exceed-profile number</i>
Tree	exceed-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

in-profile *number*

Synopsis	Precedence value for in-profile frames
Context	configure qos sap-egress <i>string fc keyword prec in-profile number</i>
Tree	in-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

out-profile *number*

Synopsis	Precedence value for out-of-profile frames
Context	configure qos sap-egress <i>string fc keyword prec out-profile number</i>
Tree	out-profile
Range	0 to 7
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to forward the traffic
Context	configure qos sap-egress <i>string fc keyword queue reference</i>
Tree	queue
Reference	configure qos sap-egress <i>string queue number</i>
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue-group-queue

Synopsis	Enable the queue-group-queue context
Context	configure qos sap-egress <i>string fc keyword queue-group-queue</i>
Tree	queue-group-queue
Notes	The following elements are part of a choice: port-redirect-group-queue , queue , or queue-group-queue .

Introduced 16.0.R1
 Platforms All

instance *number*

Synopsis Instance ID
 Context **configure** qos sap-egress *string fc keyword queue-group-queue instance number*
 Tree [instance](#)
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

queue *reference*

Synopsis SAP egress queue ID
 Context **configure** qos sap-egress *string fc keyword queue-group-queue queue reference*
 Tree [queue](#)
 Reference **configure** qos queue-group-templates egress queue-group *string queue number*
 Introduced 16.0.R1
 Platforms All

queue-group-name *reference*

Synopsis Queue group to forward traffic
 Context **configure** qos sap-egress *string fc keyword queue-group-queue queue-group-name reference*
 Tree [queue-group-name](#)
 Reference **configure** qos queue-group-templates egress queue-group *string*
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

hs-attachment-policy *reference*

Synopsis HS attachment policy applied

Context	configure qos sap-egress <i>string</i> hs-attachment-policy <i>reference</i>
Tree	hs-attachment-policy
Reference	configure qos hs-attachment-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *number*

Synopsis	Enter the hs-wrr-group list instance
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

[group-id] *number*

Synopsis	HS WRR group identifier
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i>
Tree	hs-wrr-group
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
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Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> rate (<i>number</i> <i>keyword</i>)
Tree	rate
Range	1 to 2000000000
Default	max
Units	kilobps

Options	max
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos sap-egress <i>string ip-criteria</i>
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-egress <i>string ip-criteria entry number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[[entry-id](#)] *number*

Synopsis	IP Criteria Entry Index
Context	configure qos sap-egress <i>string ip-criteria entry number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-egress <i>string ip-criteria entry number action</i>

Tree	action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> action fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

policer reference

Synopsis	Policer identifier for the matched traffic
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> action policer <i>reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string</i> policer <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue boolean

Synopsis	Use the queue specified in egress access port queue-group instance
Context	configure qos sap-egress <i>string</i> ip-criteria <i>entry</i> <i>number</i> action port-redirect-group-queue <i>boolean</i>
Tree	port-redirect-group-queue
Default	false
Introduced	16.0.R1
Platforms	All

profile keyword

Synopsis	Default profile for the matching traffic
----------	--

Context	configure qos sap-egress <i>string ip-criteria entry number action profile keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to use when the matched traffic is policed by the local policer
Context	configure qos sap-egress <i>string ip-criteria entry number action queue number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-egress <i>string ip-criteria entry number action type keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
Context	configure qos sap-egress <i>string ip-criteria entry number action use-fc-mapped-queue boolean</i>
Tree	use-fc-mapped-queue
Default	false
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure qos sap-egress string ip-criteria entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-egress string ip-criteria entry number match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos sap-egress string ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-egress string ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port
Tree	dst-port

Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>string ip-criteria entry number match dst-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress <i>string ip-criteria entry number match dst-port gt number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress <i>string ip-criteria entry number match dst-port lt number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port range end <i>number</i>
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port range start <i>number</i>
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Matching criteria to be used for fragmented or non-fragmented packets
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	16.0.R1

Platforms All

protocol (*number* | *keyword*)

Synopsis IP protocol to match

Context **configure** qos sap-egress *string* ip-criteria entry *number* match protocol (*number* | *keyword*)

Tree [protocol](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Introduced 16.0.R1

Platforms All

src-ip

Synopsis Enter the **src-ip** context

Context **configure** qos sap-egress *string* ip-criteria entry *number* match src-ip

Tree [src-ip](#)

Introduced 16.0.R1

Platforms All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis Source IPv4 address for SAP QoS policy match criterion

Context **configure** qos sap-egress *string* ip-criteria entry *number* match src-ip address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms All

ip-prefix-list *reference*

Synopsis List of IPv4 prefixes for the match criteria

Context	configure qos sap-egress <i>string ip-criteria entry number match src-ip ip-prefix-list reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>string ip-criteria entry number match src-ip mask string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-egress <i>string ip-criteria entry number match src-port</i>
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>string ip-criteria entry number match src-port eq number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match src-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match src-port lt <i>number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match src-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	configure qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match src-port range end <i>number</i>
Tree	end

Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress string ip-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos sap-egress string ipv6-criteria
Tree	ipv6-criteria
Introduced	16.0.R1
Platforms	All

entry [entry-id] number

Synopsis	Enter the entry list instance
Context	configure qos sap-egress string ipv6-criteria entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] number

Synopsis	IP Criteria Entry Index
Context	configure qos sap-egress string ipv6-criteria entry number
Tree	entry
Range	1 to 65535

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-egress <i>string ipv6-criteria entry number action</i>
Tree	action
Introduced	16.0.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string ipv6-criteria entry number action fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

policer reference

Synopsis	Policer identifier for the matched traffic
Context	configure qos sap-egress <i>string ipv6-criteria entry number action policer reference</i>
Tree	policer
Reference	configure qos sap-egress <i>string policer number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-redirect-group-queue boolean

Synopsis	Use the queue specified in egress access port queue-group instance
Context	configure qos sap-egress <i>string ipv6-criteria entry number action port-redirect-group-queue boolean</i>

Tree	port-redirect-group-queue
Default	false
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the matching traffic
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action profile <i>keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Queue to use when the matched traffic is policed by the local policer
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number action type <i>keyword</i>
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

use-fc-mapped-queue *boolean*

Synopsis	Redirect policer output to the configured queues
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> action use-fc-mapped-queue <i>boolean</i>
Tree	use-fc-mapped-queue
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp *keyword*

Synopsis	DSCP value to match in the packet
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry number</i> match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address for SAP QoS policy match
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry number</i> match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry number</i> match dst-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address mask to match with destination IP of the packet
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry number</i> match dst-ip mask <i>string</i>

Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry</i> <i>number</i> match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry</i> <i>number</i> match dst-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' as match condition
Context	configure qos sap-egress <i>string</i> ipv6-criteria <i>entry</i> <i>number</i> match dst-port gt <i>number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt number

Synopsis	Value 'less than' as match condition
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress string ipv6-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535

Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address for SAP QoS policy match
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address mask to match with source IP of the packet
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' as match condition
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

gt *number*

Synopsis Value 'greater than' as match condition

Context **configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port **gt** *number*

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

lt *number*

Synopsis Value 'less than' as match condition

Context **configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port **lt** *number*

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

range

Synopsis Enter the **range** context

Context **configure** qos sap-egress *string* ipv6-criteria entry *number* match src-port **range**

Tree [range](#)

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

end *number*

Synopsis Upper bound of the port range

Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-egress <i>string</i> ipv6-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

parent-location keyword

Synopsis	Location where queues look to find parent scheduler
Context	configure qos sap-egress <i>string</i> parent-location keyword
Tree	parent-location
Default	auto
Options	auto, sla
Introduced	16.0.R1
Platforms	All

policer [policer-id] number

Synopsis	Enter the policer list instance
Context	configure qos sap-egress <i>string</i> policer number
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] number

Synopsis	SAP egress policer ID
Context	configure qos sap-egress <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-egress <i>string</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-egress <i>string</i> policer <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-egress <i>string</i> policer <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adv-config-policy *reference*

Synopsis Advanced QoS policy name
 Context **configure qos sap-egress** *string* *policer* *number* **adv-config-policy** *reference*
 Tree **adv-config-policy**
 Reference **configure qos adv-config-policy** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis Enter the **arbiter-parent** context
 Context **configure qos sap-egress** *string* *policer* *number* **arbiter-parent**
 Tree **arbiter-parent**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis Arbiter name
 Context **configure qos sap-egress** *string* *policer* *number* **arbiter-parent** **arbiter-name** *string*
 Tree **arbiter-name**
 Description This command specifies an arbiter name. The policer is intended to become a child to one of the tiered arbiters with the specified arbiter name where an instance of the policer is created. If the specified arbiter name does not exist, the policer is placed in the orphan state.
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis Level of priority while feeding to the parent
 Context **configure qos sap-egress** *string* *policer* *number* **arbiter-parent** **level** *number*

Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight number

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	configure qos sap-egress <i>string</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (number | keyword)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-egress <i>string</i> policer <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description string

Synopsis	Text description
Context	configure qos sap-egress <i>string</i> policer <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

dscp-prec-remarking *boolean*

Synopsis Remark DSCP and precedence based on the profile state of a forwarding packet
 Context **configure qos sap-egress** *string* **policer** *number* **dscp-prec-remarking** *boolean*
 Tree [dscp-prec-remarking](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

exceed-pir *boolean*

Synopsis Allow forwarding of packets with an exceed-profile state and traffic exceeding the PIR
 Context **configure qos sap-egress** *string* **policer** *number* **exceed-pir** *boolean*
 Tree [exceed-pir](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

high-prio-only (*number* | *keyword*)

Synopsis Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
 Context **configure qos sap-egress** *string* **policer** *number* **high-prio-only** (*number* | *keyword*)
 Tree [high-prio-only](#)
 Range 0 to 100
 Default auto
 Options auto
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis High priority 'violate' threshold of PIR leaky bucket of this policer
 Context **configure qos sap-egress** *string* **policer** *number* **mbs** (*number* | *keyword*)

Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-egress <i>string</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-egress <i>string</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-egress <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis Administrative PIR percent
 Context **configure qos sap-egress** *string* **policer** *number* **percent-rate** **pir** *decimal-number*
 Tree **pir**
 Range 0.01 to 100.00
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis Reference rate
 Context **configure qos sap-egress** *string* **policer** *number* **percent-rate** **reference-rate** *keyword*
 Tree **reference-rate**
 Default local-limit
 Options local-limit, reference-port-limit
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

port-parent

Synopsis Enable the **port-parent** context
 Context **configure qos sap-egress** *string* **policer** *number* **port-parent**
 Tree **port-parent**
 Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-level *number*

Synopsis Port priority level for within-CIR offered load
 Context **configure qos sap-egress** *string* **policer** *number* **port-parent** **cir-level** *number*
 Tree **cir-level**

Description	This command defines the port priority that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the port schedulers with-CIR pass and the cir-weight command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-egress <i>string</i> policer <i>number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Description	<p>This command defines the weight that the policer uses at the within-CIR port priority level.</p> <p>All CIR weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to the default value, the policer receives bandwidth only after other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Port priority level for above-CIR behavior
Context	configure qos sap-egress <i>string</i> policer <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight number

Synopsis	Weight to use in the above-CIR port priority level
Context	configure qos sap-egress string policer number port-parent weight number
Tree	weight
Description	<p>This command defines the weight that the policer uses at the above-CIR port priority level.</p> <p>All weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after other children with a non-zero weight at this level.</p>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-capped boolean

Synopsis	Enforce an overall in-profile burst limit to the CIR bucket at egress policer
Context	configure qos sap-egress string policer number profile-capped boolean
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-out-preserve boolean

Synopsis	Preserve the color of offered out-of-profile traffic at SAP-egress policer
Context	configure qos sap-egress string policer number profile-out-preserve boolean
Tree	profile-out-preserve
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis	Enter the rate context
Context	configure qos sap-egress <i>string</i> policer <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-egress <i>string</i> policer <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>string</i> policer <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos sap-egress string policer number scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-level number

Synopsis	Port priority level for within-CIR offered load
Context	configure qos sap-egress string policer number scheduler-parent cir-level number
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the schedulers within-CIR pass and the cir-weight command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir-weight number

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-egress string policer number scheduler-parent cir-weight number
Tree	cir-weight
Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	configure qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent <i>level number</i>
Tree	level
Description	This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler. Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent <i>scheduler-name string</i>
Tree	scheduler-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Policer weight at the above-CIR priority level
Context	configure qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent <i>weight number</i>
Tree	weight
Range	0 to 100
Default	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-egress <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policers-hqos-manageable *boolean*

Synopsis	Manage policers through the Hierarchical QoS process
Context	configure qos sap-egress <i>string</i> policers-hqos-manageable <i>boolean</i>
Tree	policers-hqos-manageable
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

policy-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress SAP QoS policy ID
Context	configure qos sap-egress <i>string</i> policy-id <i>number</i>
Tree	policy-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

post-policer-mapping *reference*

Synopsis	Post policer mapping policy applied to this policy
Context	configure qos sap-egress <i>string</i> post-policer-mapping <i>reference</i>
Tree	post-policer-mapping
Reference	configure qos post-policer-mapping <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

prec [**prec-value**] *number*

Synopsis	Enter the prec list instance
Context	configure qos sap-egress <i>string</i> prec <i>number</i>
Tree	prec
Introduced	16.0.R1
Platforms	All

[prec-value] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos sap-egress <i>string</i> prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *keyword*

Synopsis	Forwarding class
Context	configure qos sap-egress <i>string</i> prec <i>number</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

profile *keyword*

Synopsis	Default profile for the ingressing traffic
Context	configure qos sap-egress <i>string prec number profile keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue [[queue-id](#)] *number*

Synopsis	Enter the queue list instance
Context	configure qos sap-egress <i>string queue number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Egress Queue-Group queue identifier
Context	configure qos sap-egress <i>string queue number</i>
Tree	queue
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-egress <i>string queue number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-egress <i>string queue number adaptation-rule cir keyword</i>
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-egress <i>string queue number adaptation-rule pir keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

adv-config-policy reference

Synopsis	Name of the advanced configuration policy
Context	configure qos sap-egress <i>string queue number adv-config-policy reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

agg-shaper-weight number

Synopsis	Aggregate shaper weight of the sap-egress queue
Context	configure qos sap-egress <i>string queue number agg-shaper-weight number</i>
Tree	agg-shaper-weight
Range	1 to 100

Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

avg-frame-overhead *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	configure qos sap-egress <i>string</i> queue <i>number</i> avg-frame-overhead <i>decimal-number</i>
Tree	avg-frame-overhead
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

burst-limit (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> burst-limit (<i>number</i> <i>keyword</i>)
Tree	burst-limit
Range	1 to 14000000
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes
Options	auto

Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos sap-egress <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

exceed

Synopsis	Enter the exceed context
Context	configure qos sap-egress <i>string queue number drop-tail exceed</i>
Tree	exceed
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Percentage of drop-tail that is reduced from MBS for exceed profile packets
Context	configure qos sap-egress <i>string queue number drop-tail exceed percent-reduction-from-mbs</i> (<i>number keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure qos sap-egress <i>string queue number drop-tail high</i>
Tree	high

Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail being that is reduced from MBS for high profile packets
Context	configure qos sap-egress <i>string</i> queue <i>number</i> drop-tail high percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

highplus

Synopsis	Enter the highplus context
Context	configure qos sap-egress <i>string</i> queue <i>number</i> drop-tail highplus
Tree	highplus
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage of drop-tail being that is reduced from MBS for high plus profile packets
Context	configure qos sap-egress <i>string</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos sap-egress <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number | keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos sap-egress <i>string queue number drop-tail low percent-reduction-from-mbs</i> (<i>number keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

fir-burst-limit (*number | keyword*)

Synopsis	Burst limit for FIR
Context	configure qos sap-egress <i>string queue number fir-burst-limit</i> (<i>number keyword</i>)
Tree	fir-burst-limit
Description	This command configures a burst limit for the FIR of the specified queue. If the keyword auto is used, the FIR burst limit is based on the PIR. In this case, it is recommended to use the explicit PIR value in the queue configuration.
Range	1 to 102400
Default	auto
Units	bytes
Options	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

hs-alt-port-class-pool *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-class-weight *number*

Synopsis	Scheduling class weight
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1 2 4 8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wred-queue

Synopsis	Enter the hs-wred-queue context
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-wred-queue
Tree	hs-wred-queue
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

policy *reference*

Synopsis	Slope policy name
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-wred-queue policy <i>reference</i>
Tree	policy
Reference	configure qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis	Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context	configure qos sap-egress <i>string</i> queue <i>number</i> hs-wrr-weight <i>number</i>
Tree	hs-wrr-weight
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

maximum-data-transmission (*number* | *keyword*)

Synopsis	Maximum data transmitted at each scheduling opportunity
Context	configure qos sap-egress <i>string</i> queue <i>number</i> maximum-data-transmission (<i>number</i> <i>keyword</i>)
Tree	maximum-data-transmission
Description	This command sets the maximum amount of data transmitted at a single scheduling opportunity. If the frame to be scheduled is longer than the configured amount of data, the entire frame is still transmitted. This command is applicable only to FP4 and FP5 chipsets.
Range	512 to 32768
Default	auto
Units	bytes
Options	auto
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

mbs (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto

Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet byte offset for addition of policing information
Context	configure qos sap-egress <i>string queue number packet-byte-offset number</i>
Tree	packet-byte-offset
Range	-64 to 32
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-egress <i>string queue number percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-egress <i>string queue number percent-rate cir decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
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Context	configure qos sap-egress <i>string queue number percent-rate pir decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos sap-egress <i>string queue number percent-rate reference-rate keyword</i>
Tree	reference-rate
Default	port-limit
Options	port-limit, local-limit, reference-port-limit
Introduced	16.0.R1
Platforms	All

port-parent

Synopsis	Enable the port-parent context
Context	configure qos sap-egress <i>string queue number port-parent</i>
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos sap-egress <i>string queue number port-parent cir-level number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-egress <i>string</i> queue <i>number</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos sap-egress <i>string</i> queue <i>number</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos sap-egress <i>string</i> queue <i>number</i> port-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

queue-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos sap-egress <i>string queue number queue-type keyword</i>
Tree	<i>queue-type</i>
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos sap-egress <i>string queue number rate</i>
Tree	<i>rate</i>
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-egress <i>string queue number rate cir (number keyword)</i>
Tree	<i>cir</i>
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-egress <i>string queue number rate pir (number keyword)</i>
Tree	<i>pir</i>
Range	1 to 6400000000

Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

sched-class (*number* | *keyword*)

Synopsis	Scheduler class for the sap-egress queue
Context	configure qos sap-egress <i>string</i> queue <i>number</i> sched-class (<i>number</i> <i>keyword</i>)
Tree	sched-class
Description	This command configures a scheduling class for the specified queue. If the keyword auto is used, the scheduling class mapping is done automatically.
Range	1 to 6
Default	auto
Options	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

scheduler-parent

Synopsis	Enable the scheduler-parent context
Context	configure qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0

Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-egress <i>string queue number scheduler-parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-egress <i>string queue number scheduler-parent level number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Parent scheduler name
Context	configure qos sap-egress <i>string queue number scheduler-parent scheduler-name string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

weight *number*

Synopsis Weight to be used by the scheduler for feeding this queue

Context **configure qos sap-egress** *string queue number scheduler-parent weight number*

Tree [weight](#)

Range 0 to 100

Default 1

Introduced 16.0.R1

Platforms All

wred-queue

Synopsis Enter the **wred-queue** context

Context **configure qos sap-egress** *string queue number wred-queue*

Tree [wred-queue](#)

Introduced 16.0.R1

Platforms All

mode *keyword*

Synopsis Generic pool association of the queue to allow queue-specific WRED slopes

Context **configure qos sap-egress** *string queue number wred-queue mode keyword*

Tree [mode](#)

Options native, pool-per-queue

Introduced 16.0.R1

Platforms All

policy *reference*

Synopsis Slope policy name

Context **configure qos sap-egress** *string queue number wred-queue policy reference*

Tree [policy](#)

Reference **configure qos slope-policy** *string*

Introduced 16.0.R1
 Platforms All

usage *keyword*

Synopsis Congestion control type
 Context **configure** qos sap-egress *string* queue number wred-queue usage *keyword*
 Tree [usage](#)
 Options auto, exceed-low
 Introduced 16.0.R1
 Platforms All

sched-class-elevation

Synopsis Enter the **sched-class-elevation** context
 Context **configure** qos sap-egress *string* sched-class-elevation
 Tree [sched-class-elevation](#)
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

sched-class [[class-id](#)] *number*

Synopsis Enter the **sched-class** list instance
 Context **configure** qos sap-egress *string* sched-class-elevation sched-class *number*
 Tree [sched-class](#)
 Introduced 21.7.R1
 Platforms 7750 SR-1, 7750 SR-s

[class-id] *number*

Synopsis Scheduling class associated with this SAP egress
 Context **configure** qos sap-egress *string* sched-class-elevation sched-class *number*
 Tree [sched-class](#)
 Range 1 to 6
 Notes This element is part of a list key.

Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

weight *number*

Synopsis Weight of the schedule class
Context **configure** [qos sap-egress](#) *string* [sched-class-elevation](#) [sched-class](#) *number* [weight](#) *number*
Tree [weight](#)
Range 1 to 8
Default 1
Introduced 21.7.R1
Platforms 7750 SR-1, 7750 SR-s

scope *keyword*

Synopsis Scope of the policy
Context **configure** [qos sap-egress](#) *string* [scope](#) *keyword*
Tree [scope](#)
Default template
Options exclusive, template
Introduced 16.0.R1
Platforms All

subscriber-mgmt

Synopsis Enter the **subscriber-mgmt** context
Context **configure** [qos sap-egress](#) *string* [subscriber-mgmt](#)
Tree [subscriber-mgmt](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-policer

Synopsis Enter the **dynamic-policer** context
Context **configure** [qos sap-egress](#) *string* [subscriber-mgmt](#) [dynamic-policer](#)

Tree [dynamic-policer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-parent

Synopsis Enter the **arbiter-parent** context
Context **configure** [qos sap-egress](#) *string* [subscriber-mgmt](#) [dynamic-policer](#) [arbiter-parent](#)
Tree [arbiter-parent](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-name *string*

Synopsis Arbiter name
Context **configure** [qos sap-egress](#) *string* [subscriber-mgmt](#) [dynamic-policer](#) [arbiter-parent](#) [arbiter-name](#) *string*
Tree [arbiter-name](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis Level of priority while feeding to the parent
Context **configure** [qos sap-egress](#) *string* [subscriber-mgmt](#) [dynamic-policer](#) [arbiter-parent](#) [level](#) *number*
Tree [level](#)
Range 1 to 8
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis Weight to be used by the arbiter for feeding this policer

Context	configure qos sap-egress string subscriber-mgmt dynamic-policer arbiter-parent weight number
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-egress string subscriber-mgmt dynamic-policer cbs (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
Context	configure qos sap-egress string subscriber-mgmt dynamic-policer mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-id-range

Synopsis	Enable the policer-id-range context
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range
Tree	policer-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the dynamic policer ID range
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range end <i>number</i>
Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the dynamic policer ID range
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range start <i>number</i>
Tree	start
Range	1 to 63

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer stat-mode <i>keyword</i>
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule-entry

Synopsis	Enter the pcc-rule-entry context
Context	configure qos sap-egress <i>string</i> subscriber-mgmt pcc-rule-entry
Tree	pcc-rule-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis	Enable the range context
Context	configure qos sap-egress <i>string</i> subscriber-mgmt pcc-rule-entry range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the filter and QoS policy entries range
Context	configure qos sap-egress <i>string</i> subscriber-mgmt pcc-rule-entry range end <i>number</i>

Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the filter and QoS policy entries range
Context	configure qos sap-egress <i>string</i> subscriber-mgmt pcc-rule-entry range start <i>number</i>
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-ingress [[sap-ingress-policy-name](#)] *string*

Synopsis	Enter the sap-ingress list instance
Context	configure qos sap-ingress <i>string</i>
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

[sap-ingress-policy-name] *string*

Synopsis	Policy name
Context	configure qos sap-ingress <i>string</i>
Tree	sap-ingress
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

default-fc *string*

Synopsis	Default forwarding class or sub forwarding class for traffic not matching specific classification
Context	configure qos sap-ingress <i>string</i> default-fc <i>string</i>
Tree	default-fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

default-priority *keyword*

Synopsis	Priority to assign to traffic ingressing as the default action queue
Context	configure qos sap-ingress <i>string</i> default-priority <i>keyword</i>
Tree	default-priority
Default	low
Options	low, high
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dot1p [[dot1p-value](#)] *number*

Synopsis	Enter the dot1p list instance
Context	configure qos sap-ingress <i>string</i> dot1p <i>number</i>
Tree	dot1p
Introduced	16.0.R1
Platforms	All

[dot1p-value] *number*

Synopsis	Dot1p value to match in the packet
Context	configure qos sap-ingress string dot1p number
Tree	dot1p
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the specific Dot1p
Context	configure qos sap-ingress string dot1p number fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for packets that match the Dot1p value
Context	configure qos sap-ingress string dot1p number priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

dscp [**dscp-name**] *keyword*

Synopsis	Enter the dscp list instance
Context	configure qos sap-ingress string dscp keyword
Tree	dscp
Introduced	16.0.R1

Platforms All

[dscp-name] *keyword*

Synopsis Name for the Differentiated Services Code Point (DSCP)

Context **configure qos sap-ingress string dscp keyword**

Tree **dscp**

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

fc *string*

Synopsis Forwarding class or sub forwarding class to classify traffic matching the specific DSCP

Context **configure qos sap-ingress string dscp keyword fc string**

Tree **fc**

String Length 1 to 32

Introduced 16.0.R1

Platforms All

priority *keyword*

Synopsis Priority for the packet

Context **configure qos sap-ingress string dscp keyword priority keyword**

Tree **priority**

Default auto

Options low, high, auto

Introduced 16.0.R1

Platforms All

fc [*fc-name*] *string*

Synopsis	Enter the fc list instance
Context	configure qos sap-ingress string fc string
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *string*

Synopsis	Forwarding class (and optional subclass) name
Context	configure qos sap-ingress string fc string
Tree	fc
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast-policer *number*

Synopsis	Policer identifier for the unknown broadcast traffic in this forwarding class
Context	configure qos sap-ingress string fc string broadcast-policer number
Tree	broadcast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

broadcast-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress string fc string broadcast-queue reference
Tree	broadcast-queue
Reference	configure qos sap-ingress string queue number

Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	16.0.R1
Platforms	All

broadcast-queue-group-queue

Synopsis	Enable the broadcast-queue-group-queue context
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> broadcast-queue-group-queue
Tree	broadcast-queue-group-queue
Notes	The following elements are part of a choice: (broadcast-policer and fp-redirect-group-broadcast-policer), broadcast-queue , or broadcast-queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> broadcast-queue-group-queue <i>queue reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> broadcast-queue-group-queue <i>queue-group-name reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

de-1-out-profile *boolean*

Synopsis Frames with DE value to be assigned as out of profile
 Context **configure qos sap-ingress** *string fc string de-1-out-profile boolean*
 Tree [de-1-out-profile](#)
 Default false
 Introduced 16.0.R1
 Platforms All

egress-fc *keyword*

Synopsis Forwarding class to override the forwarding class determined by ingress classification
 Context **configure qos sap-ingress** *string fc string egress-fc keyword*
 Tree [egress-fc](#)
 Options be, l2, af, l1, h2, ef, h1, nc
 Introduced 16.0.R1
 Platforms All

fp-redirect-group-broadcast-policer

Synopsis Use policer as defined in FP queue-group for the SAP
 Context **configure qos sap-ingress** *string fc string fp-redirect-group-broadcast-policer*
 Tree [fp-redirect-group-broadcast-policer](#)
 Notes The following elements are part of a choice: (**broadcast-policer** and **fp-redirect-group-broadcast-policer**), **broadcast-queue**, or **broadcast-queue-group-queue**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-multicast-policer

Synopsis Use policer as defined in FP queue-group for the SAP
 Context **configure qos sap-ingress** *string fc string fp-redirect-group-multicast-policer*
 Tree [fp-redirect-group-multicast-policer](#)

Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	configure qos sap-ingress string fc string fp-redirect-group-policer
Tree	fp-redirect-group-policer
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

fp-redirect-group-unknown-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	configure qos sap-ingress string fc string fp-redirect-group-unknown-policer
Tree	fp-redirect-group-unknown-policer
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

in-remark

Synopsis	Enter the in-remark context
Context	configure qos sap-ingress string fc string in-remark
Tree	in-remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP to override DSCP bits of the matching packet
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Context	configure qos sap-ingress <i>string</i> fc <i>string</i> in-remark dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

prec *number*

Synopsis	Value to override precedence bits of matching packet
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> in-remark prec <i>number</i>
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

multicast-policer *number*

Synopsis	Policer identifier for the unknown broadcast traffic in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> multicast-policer <i>number</i>
Tree	multicast-policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

multicast-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> multicast-queue <i>reference</i>

Tree	multicast-queue
Reference	configure qos sap-ingress <i>string</i> queue <i>number</i>
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	16.0.R1
Platforms	All

multicast-queue-group-queue

Synopsis	Enable the multicast-queue-group-queue context
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> multicast-queue-group-queue
Tree	multicast-queue-group-queue
Notes	The following elements are part of a choice: (fp-redirect-group-multicast-policer and multicast-policer), multicast-queue , or multicast-queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> multicast-queue-group-queue queue <i>reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> multicast-queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-remark

Synopsis	Enter the out-remark context
Context	configure qos sap-ingress string fc string out-remark
Tree	out-remark
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP to override DSCP bits of the matching packet
Context	configure qos sap-ingress string fc string out-remark dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

prec number

Synopsis	Value to override precedence bits of matching packet
Context	configure qos sap-ingress string fc string out-remark prec number
Tree	prec
Range	0 to 7
Notes	The following elements are part of a choice: dscp or prec .
Introduced	16.0.R1
Platforms	All

policer *number*

Synopsis	Policer identifier for the unicast normal traffic in this forwarding class
Context	configure qos sap-ingress <i>string fc string policer number</i>
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile *keyword*

Synopsis	Profile of the packets associated with this forwarding class
Context	configure qos sap-ingress <i>string fc string profile keyword</i>
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string fc string queue reference</i>
Tree	queue
Reference	configure qos sap-ingress <i>string queue number</i>
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue-group-queue

Synopsis	Enable the queue-group-queue context
Context	configure qos sap-ingress <i>string fc string queue-group-queue</i>

Tree	queue-group-queue
Notes	The following elements are part of a choice: (fp-redirect-group-policer and policer), queue , or queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> queue-group-queue <i>queue reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group to forward traffic
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

unknown-policer *number*

Synopsis	Policer identifier for the unknown broadcast traffic in this forwarding class
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> unknown-policer <i>number</i>
Tree	unknown-policer
Range	1 to 63
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

unknown-queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string fc string unknown-queue reference</i>
Tree	unknown-queue
Reference	configure qos sap-ingress <i>string queue number</i>
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	All

unknown-queue-group-queue

Synopsis	Enable the unknown-queue-group-queue context
Context	configure qos sap-ingress <i>string fc string unknown-queue-group-queue</i>
Tree	unknown-queue-group-queue
Notes	The following elements are part of a choice: (fp-redirect-group-unknown-policer and unknown-policer), unknown-queue , or unknown-queue-group-queue .
Introduced	16.0.R1
Platforms	All

queue *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	configure qos sap-ingress <i>string fc string unknown-queue-group-queue queue reference</i>
Tree	queue
Reference	configure qos queue-group-templates ingress queue-group <i>string queue number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

queue-group-name *reference*

Synopsis	Queue group name to forward traffic
Context	configure qos sap-ingress <i>string</i> fc <i>string</i> unknown-queue-group-queue queue-group-name <i>reference</i>
Tree	queue-group-name
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ip-criteria

Synopsis	Enter the ip-criteria context
Context	configure qos sap-ingress <i>string</i> ip-criteria
Tree	ip-criteria
Introduced	16.0.R1
Platforms	All

entry [[entry-id](#)] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	IP criteria entry to create or edit for the policy
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-ingress string ip-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc string

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the criteria
Context	configure qos sap-ingress string ip-criteria entry number action fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer reference

Synopsis	Policer identifier for the traffic matching MAC Criteria
Context	configure qos sap-ingress string ip-criteria entry number action policer reference
Tree	policer
Reference	configure qos sap-ingress string policer number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority keyword

Synopsis	Priority for the packet
Context	configure qos sap-ingress string ip-criteria entry number action priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

type keyword

Synopsis	Action for criteria entry
Context	configure qos sap-ingress string ip-criteria entry number action type keyword
Tree	type
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure qos sap-ingress string ip-criteria entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-ingress string ip-criteria entry number match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos sap-ingress string ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-ingress string ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	configure qos sap-ingress string ip-criteria entry number match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	configure qos sap-ingress string ip-criteria entry number match dst-ip ip-prefix-list <i>reference</i>
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask string

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ip-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-ingress string ip-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress string ip-criteria entry number match dst-port eq number
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt number

Synopsis	Value 'greater than' assigned as match condition
Context	configure qos sap-ingress string ip-criteria entry number match dst-port gt number
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1

Platforms All

lt number

Synopsis Value 'less than' assigned as match condition

Context **configure qos sap-ingress string ip-criteria entry number match dst-port lt number**

Tree **lt**

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

range

Synopsis Enter the **range** context

Context **configure qos sap-ingress string ip-criteria entry number match dst-port range**

Tree **range**

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

end number

Synopsis Upper bound of the port range

Context **configure qos sap-ingress string ip-criteria entry number match dst-port range end number**

Tree **end**

Range 0 to 65535

Introduced 16.0.R1

Platforms All

start number

Synopsis Lower bound of the port range

Context **configure qos sap-ingress string ip-criteria entry number match dst-port range start number**

Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment *keyword*

Synopsis	Match performed when the packet is either a fragment or not, or matches all packets
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match fragment <i>keyword</i>
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

protocol (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	configure qos sap-ingress string ip-criteria entry number match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	configure qos sap-ingress string ip-criteria entry number match src-ip ip-prefix-list reference
Tree	ip-prefix-list
Reference	configure qos match-list ip-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ip-criteria entry number match src-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ip-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-ingress string ip-criteria entry number match src-port
Tree	src-port
Introduced	16.0.R1

Platforms All

eq *number*

Synopsis Value 'equal to' assigned as match condition

Context **configure qos sap-ingress** *string ip-criteria entry number match src-port eq number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

gt *number*

Synopsis Value 'greater than' assigned as match condition

Context **configure qos sap-ingress** *string ip-criteria entry number match src-port gt number*

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

lt *number*

Synopsis Value 'less than' assigned as match condition

Context **configure qos sap-ingress** *string ip-criteria entry number match src-port lt number*

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

range

Synopsis Enter the **range** context

Context	configure qos sap-ingress <i>string ip-criteria entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress <i>string ip-criteria entry number match src-port range end number</i>
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress <i>string ip-criteria entry number match src-port range start number</i>
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

vxlan-vni

Synopsis	Enter the vxlan-vni context
Context	configure qos sap-ingress <i>string ip-criteria entry number match vxlan-vni</i>
Tree	vxlan-vni
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match vxlan-vni eq <i>number</i>
Tree	eq
Range	1 to 16777215
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match vxlan-vni range
Tree	range
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the VNI range
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match vxlan-vni range end <i>number</i>
Tree	end
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

start *number*

Synopsis	Lower bound of the VNI range
Context	configure qos sap-ingress <i>string</i> ip-criteria entry <i>number</i> match vxlan-vni range start <i>number</i>
Tree	start
Range	1 to 16777215

Introduced	16.0.R1
Platforms	All

tag number

Synopsis	Tag ID associated with the criteria entry
Context	configure qos sap-ingress string ip-criteria entry number tag number
Tree	tag
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 criteria entry type
Context	configure qos sap-ingress string ip-criteria type keyword
Tree	type
Description	This command specifies the type of entries that can be configured for IPv4 match criteria.
Default	normal
Options	normal, vxlan-vni, tagged-entries
Introduced	16.0.R1
Platforms	All

ipv6-criteria

Synopsis	Enter the ipv6-criteria context
Context	configure qos sap-ingress string ipv6-criteria
Tree	ipv6-criteria

Introduced	16.0.R1
Platforms	All

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	All

[entry-id] *number*

Synopsis	IPv6 criteria entry to create or edit for the policy
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i>
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> action
Tree	action
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the criteria
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> action fc <i>string</i>
Tree	fc
String Length	1 to 32

Introduced 16.0.R1
 Platforms All

policer *reference*

Synopsis Policer identifier for the traffic matching MAC Criteria
 Context **configure qos sap-ingress** *string* *ipv6-criteria entry number action* **policer reference**
 Tree **policer**
 Reference **configure qos sap-ingress** *string* **policer number**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority *keyword*

Synopsis Priority for the packet
 Context **configure qos sap-ingress** *string* *ipv6-criteria entry number action* **priority keyword**
 Tree **priority**
 Default auto
 Options low, high, auto
 Introduced 16.0.R1
 Platforms All

type *keyword*

Synopsis Action for criteria entry
 Context **configure qos sap-ingress** *string* *ipv6-criteria entry number action* **type keyword**
 Tree **type**
 Default ignore-match
 Options ignore-match, accept
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description

Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> match
Tree	match
Introduced	16.0.R1
Platforms	All

dscp keyword

Synopsis	DSCP value to match in the packet
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> match dscp <i>keyword</i>
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dst-ip

Synopsis	Enter the dst-ip context
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address to match destination IP of the packet
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list reference

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-ip ipv6-prefix-list reference
Tree	ipv6-prefix-list
Reference	configure qos match-list ipv6-prefix-list string
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask string

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-ip mask string
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

dst-port

Synopsis	Enter the dst-port context
Context	configure qos sap-ingress string ipv6-criteria entry number match dst-port
Tree	dst-port
Introduced	16.0.R1

Platforms All

eq *number*

Synopsis Value 'equal to' assigned as match condition
 Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port eq *number*
 Tree [eq](#)
 Range 0 to 65535
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
 Introduced 16.0.R1
 Platforms All

gt *number*

Synopsis Value 'greater than' assigned as match condition
 Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port gt *number*
 Tree [gt](#)
 Range 0 to 65535
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
 Introduced 16.0.R1
 Platforms All

lt *number*

Synopsis Value 'less than' assigned as match condition
 Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* match dst-port lt *number*
 Tree [lt](#)
 Range 0 to 65535
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.
 Introduced 16.0.R1
 Platforms All

range

Synopsis Enter the **range** context

Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-port</i> <i>range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-port</i> <i>range</i> <i>end</i> <i>number</i>
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-port</i> <i>range</i> <i>start</i> <i>number</i>
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

fragment keyword

Synopsis	Match performed when the packet is either a fragment or not, or matches all packets
Context	configure qos sap-ingress <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>fragment</i> <i>keyword</i>
Tree	fragment
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>)
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

src-ip

Synopsis	Enter the src-ip context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip
Tree	src-ip
Introduced	16.0.R1
Platforms	All

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv4 address to match
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>)
Tree	address
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip ipv6-prefix-list <i>reference</i>
Tree	ipv6-prefix-list

Reference	configure qos match-list ipv6-prefix-list <i>string</i>
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis	IP address to match with source IP of the packet
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-ip mask <i>string</i>
Tree	mask
Notes	The following elements are part of a choice: (address and mask) or ipv6-prefix-list .
Introduced	16.0.R1
Platforms	All

src-port

Synopsis	Enter the src-port context
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-port
Tree	src-port
Introduced	16.0.R1
Platforms	All

eq *number*

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress <i>string</i> ipv6-criteria entry <i>number</i> match src-port eq <i>number</i>
Tree	eq
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

gt *number*

Synopsis	Value 'greater than' assigned as match condition
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Context	configure qos sap-ingress <i>string ipv6-criteria entry number match src-port gt number</i>
Tree	gt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

lt *number*

Synopsis	Value 'less than' assigned as match condition
Context	configure qos sap-ingress <i>string ipv6-criteria entry number match src-port lt number</i>
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-ingress <i>string ipv6-criteria entry number match src-port range</i>
Tree	range
Notes	The following elements are part of a choice: eq , gt , lt , or range .
Introduced	16.0.R1
Platforms	All

end *number*

Synopsis	Upper bound of the port range
Context	configure qos sap-ingress <i>string ipv6-criteria entry number match src-port range end number</i>
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the port range
Context	configure qos sap-ingress string ipv6-criteria entry number match src-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

vxlan-vni

Synopsis	Enter the vxlan-vni context
Context	configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni
Tree	vxlan-vni
Introduced	16.0.R1
Platforms	All

eq number

Synopsis	Value 'equal to' assigned as match condition
Context	configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni eq number
Tree	eq
Range	1 to 16777215
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1
Platforms	All

range

Synopsis	Enter the range context
Context	configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni range
Tree	range
Notes	The following elements are part of a choice: eq or range .
Introduced	16.0.R1

Platforms All

end number

Synopsis Upper bound of the VNI range

Context **configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni range end number**

Tree [end](#)

Range 1 to 16777215

Introduced 16.0.R1

Platforms All

start number

Synopsis Lower bound of the VNI range

Context **configure qos sap-ingress string ipv6-criteria entry number match vxlan-vni range start number**

Tree [start](#)

Range 1 to 16777215

Introduced 16.0.R1

Platforms All

tag number

Synopsis Tag ID associated with the criteria entry

Context **configure qos sap-ingress string ipv6-criteria entry number tag number**

Tree [tag](#)

Description This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.

Range 0 to 255

Default 0

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 criteria entry type
Context	configure qos sap-ingress <i>string</i> ipv6-criteria type <i>keyword</i>
Tree	type
Description	This command specifies the type of entries that can be configured for IPv6 match criteria.
Default	normal
Options	normal, vxlan-vni, tagged-entries
Introduced	16.0.R1
Platforms	All

lsp-exp [*lsp-exp-value*] *number*

Synopsis	Enter the lsp-exp list instance
Context	configure qos sap-ingress <i>string</i> lsp-exp <i>number</i>
Tree	lsp-exp
Introduced	16.0.R1
Platforms	All

[lsp-exp-value] *number*

Synopsis	Value to assign the unique MPLS LSP EXP value that will match the lsp-exp rule
Context	configure qos sap-ingress <i>string</i> lsp-exp <i>number</i>
Tree	lsp-exp
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc *string*

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the LSP EXP value
----------	---

Context	configure qos sap-ingress <i>string lsp-exp number fc string</i>
Tree	<i>fc</i>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority *keyword*

Synopsis	Priority for the matching traffic
Context	configure qos sap-ingress <i>string lsp-exp number priority keyword</i>
Tree	<i>priority</i>
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

mac-criteria

Synopsis	Enter the mac-criteria context
Context	configure qos sap-ingress <i>string mac-criteria</i>
Tree	<i>mac-criteria</i>
Introduced	16.0.R1
Platforms	All

entry [*entry-id*] *number*

Synopsis	Enter the entry list instance
Context	configure qos sap-ingress <i>string mac-criteria entry number</i>
Tree	<i>entry</i>
Introduced	16.0.R1
Platforms	All

[*entry-id*] *number*

Synopsis	Identifier for MAC match criteria and the corresponding action for a SAP-ingress policy
----------	---

Context	configure qos sap-ingress string mac-criteria entry number
Tree	entry
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

action

Synopsis	Enter the action context
Context	configure qos sap-ingress string mac-criteria entry number action
Tree	action
Introduced	16.0.R1
Platforms	All

fc string

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the criteria
Context	configure qos sap-ingress string mac-criteria entry number action fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

policer reference

Synopsis	Policer identifier for the traffic matching MAC Criteria
Context	configure qos sap-ingress string mac-criteria entry number action policer reference
Tree	policer
Reference	configure qos sap-ingress string policer number
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority *keyword*

Synopsis	Priority for the packet
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> action <i>priority</i> <i>keyword</i>
Tree	<i>priority</i>
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Action for criteria entry
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> action <i>type</i> <i>keyword</i>
Tree	<i>type</i>
Default	ignore-match
Options	ignore-match, accept
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> <i>description</i> <i>string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> <i>match</i>
Tree	<i>match</i>
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enable the dot1p context
Context	configure qos sap-ingress string mac-criteria entry number match dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	3-bit mask for the 802.1p value
Context	configure qos sap-ingress string mac-criteria entry number match dot1p mask number
Tree	mask
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	802.1P priority value to use as the match criterion
Context	configure qos sap-ingress string mac-criteria entry number match dot1p priority number
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

dst-mac

Synopsis	Enable the dst-mac context
Context	configure qos sap-ingress string mac-criteria entry number match dst-mac
Tree	dst-mac
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Destination MAC address as QoS policy match criterion
Context	configure qos sap-ingress string mac-criteria entry number match dst-mac address string
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask string

Synopsis	Mask for destination MAC address
Context	configure qos sap-ingress string mac-criteria entry number match dst-mac mask string
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

etype string

Synopsis	Ethernet type
Context	configure qos sap-ingress string mac-criteria entry number match etype string
Tree	etype
String Length	5 to 6
Introduced	16.0.R1
Platforms	All

frame-type keyword

Synopsis	Match MAC criteria for ingress SAP QoS policy
Context	configure qos sap-ingress string mac-criteria entry number match frame-type keyword
Tree	frame-type
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1

Platforms All

inner-tag

Synopsis Enable the **inner-tag** context

Context **configure** qos sap-ingress *string* mac-criteria entry *number* match inner-tag

Tree [inner-tag](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value

Context **configure** qos sap-ingress *string* mac-criteria entry *number* match inner-tag mask *number*

Tree [mask](#)

Range 1 to 4095

Default 4095

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan number

Synopsis Value to match against the VID of the second VLAN tag

Context **configure** qos sap-ingress *string* mac-criteria entry *number* match inner-tag vlan *number*

Tree [vlan](#)

Range 0 to 4095

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

llc-dsap

Synopsis Enable the **llc-dsap** context

Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-dsap</i>
Tree	llc-dsap
Introduced	16.0.R1
Platforms	All

dsap number

Synopsis	DSAP value
Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-dsap dsap number</i>
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	DSAP mask
Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-dsap mask number</i>
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

llc-ssap

Synopsis	Enable the llc-ssap context
Context	configure qos sap-ingress <i>string mac-criteria entry number match llc-ssap</i>
Tree	llc-ssap
Introduced	16.0.R1
Platforms	All

mask number

Synopsis	Source SAP mask
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match llc-ssap mask <i>number</i>
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

ssap number

Synopsis	SSAP value
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match llc-ssap ssap <i>number</i>
Tree	ssap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

outer-tag

Synopsis	Enable the outer-tag context
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match outer-tag
Tree	outer-tag
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis	First tag carried transparently through the service
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match outer-tag mask <i>number</i>
Tree	mask
Range	1 to 4095

Default	4095
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vlan number

Synopsis	Match against VID of the first VLAN tag in the packet carried transparently through service
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match outer-tag <i>vlan number</i>
Tree	vlan
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snap-oui keyword

Synopsis	Parameter snap-oui as MAC filter match criteria
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match snap-oui <i>keyword</i>
Tree	snap-oui
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

snap-pid number

Synopsis	Parameter snap-pid as MAC filter match criteria
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match snap-pid <i>number</i>
Tree	snap-pid
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

src-mac

Synopsis	Enable the src-mac context
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match src-mac
Tree	src-mac
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Source MAC address as QoS policy match criterion
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match src-mac address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

mask string

Synopsis	Mask for source MAC address
Context	configure qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match src-mac mask <i>string</i>
Tree	mask
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

type keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC criteria filter type
Context	configure qos sap-ingress <i>string</i> mac-criteria <i>type</i> keyword
Tree	type
Default	normal

Options	normal, vid
Introduced	16.0.R1
Platforms	All

policer [**policer-id**] *number*

Synopsis	Enter the policer list instance
Context	configure qos sap-ingress <i>string policer number</i>
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *number*

Synopsis	SAP-ingress policer identifier
Context	configure qos sap-ingress <i>string policer number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-ingress <i>string policer number adaptation-rule</i>
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-ingress <i>string policer number adaptation-rule cir keyword</i>
Tree	cir

Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

adv-config-policy *reference*

Synopsis	Advanced QoS policy name
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	configure qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

arbiter-name *string*

Synopsis	Arbiter name
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Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>arbiter-parent</i> <i>arbiter-name</i> <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>arbiter-parent</i> <i>level</i> <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>arbiter-parent</i> <i>weight</i> <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-ingress <i>string</i> <i>policer</i> <i>number</i> <i>cbs</i> (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

description *string*

Synopsis	Text description
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

high-prio-only (*number* | *keyword*)

Synopsis	Percentage of PIR leaky bucket's MBS of this policer that is reserved for high priority traffic
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> high-prio-only (<i>number</i> <i>keyword</i>)
Tree	high-prio-only
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

reference-rate *keyword*

Synopsis Reference rate
 Context **configure** qos sap-ingress *string* policer *number* percent-rate reference-rate *keyword*
 Tree [reference-rate](#)
 Default local-limit
 Options local-limit, reference-port-limit
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

profile-capped *boolean*

Synopsis Enforce an overall in-profile burst limit to the CIR bucket at ingress policer
 Context **configure** qos sap-ingress *string* policer *number* profile-capped *boolean*
 Tree [profile-capped](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
 Context **configure** qos sap-ingress *string* policer *number* rate
 Tree [rate](#)
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis Administrative CIR
 Context **configure** qos sap-ingress *string* policer *number* rate cir (*number* | *keyword*)

Tree	cir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent
Tree	scheduler-parent
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

cir-level *number*

Synopsis	Port priority level for within-CIR offered load
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	cir-level
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR

offered load. If this command is set to the default value, the policer does not receive bandwidth during the within-CIR pass of the scheduler and the **cir-weight** command is ignored.

Range	0 to 8
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

cir-weight *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

level *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent level <i>number</i>
Tree	level
Description	<p>This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.</p> <p>Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.</p>
Range	1 to 8

Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

weight *number*

Synopsis	Policer weight at the above-CIR priority level
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

stat-mode *keyword*

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-ingress <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, offered-profile-with-discards
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policers-hqos-manageable *boolean*

Synopsis	Manage policers through the hierarchical QoS process
Context	configure qos sap-ingress <i>string</i> policers-hqos-manageable <i>boolean</i>
Tree	policers-hqos-manageable
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

policy-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ingress SAP QoS policy ID
Context	configure qos sap-ingress <i>string</i> policy-id <i>number</i>
Tree	policy-id
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

prec [*prec-value*] *number*

Synopsis	Enter the prec list instance
Context	configure qos sap-ingress <i>string</i> prec <i>number</i>
Tree	prec
Introduced	16.0.R1
Platforms	All

[prec-value] *number*

Synopsis	Precedence value for which mapping is performed
Context	configure qos sap-ingress <i>string</i> prec <i>number</i>
Tree	prec

Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

fc string

Synopsis	Forwarding class or sub forwarding class to classify traffic matching the precedence value
Context	configure qos sap-ingress string prec number fc string
Tree	fc
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

priority keyword

Synopsis	Priority for the matching traffic
Context	configure qos sap-ingress string prec number priority keyword
Tree	priority
Default	auto
Options	low, high, auto
Introduced	16.0.R1
Platforms	All

queue [queue-id] number

Synopsis	Enter the queue list instance
Context	configure qos sap-ingress string queue number
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] number

Synopsis	SAP-ingress policer identifier
Context	configure qos sap-ingress string queue number
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptation-rule

Synopsis	Enter the adaptation-rule context
Context	configure qos sap-ingress string queue number adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	All

cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	configure qos sap-ingress string queue number adaptation-rule cir keyword
Tree	cir
Default	closest
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

fir keyword

Synopsis	Constraint used when deriving the operational FIR value
Context	configure qos sap-ingress string queue number adaptation-rule fir keyword
Tree	fir
Default	closest
Options	max, min, closest
Introduced	16.0.R2

Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure qos sap-ingress** *string queue number adaptation-rule pir keyword*

Tree [pir](#)

Default closest

Options max, min, closest

Introduced 16.0.R1

Platforms All

adv-config-policy *reference*

Synopsis Advanced QoS policy name

Context **configure qos sap-ingress** *string queue number adv-config-policy reference*

Tree [adv-config-policy](#)

Reference **configure qos adv-config-policy** *string*

Introduced 16.0.R1

Platforms All

burst-limit (*number | keyword*)

Synopsis Explicit shaping burst size of a queue

Context **configure qos sap-ingress** *string queue number burst-limit (number | keyword)*

Tree [burst-limit](#)

Range 1 to 14000000

Default auto

Units bytes

Options auto

Introduced 16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	configure qos sap-ingress <i>string queue number cbs</i> (<i>number</i> <i>keyword</i>)
Tree	cbs
Range	0 to 1048576
Default	auto
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

cir-non-profiling *boolean*

Synopsis	Prevent profile modification of CIR dependent packets
Context	configure qos sap-ingress <i>string queue number cir-non-profiling</i> <i>boolean</i>
Tree	cir-non-profiling
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos sap-ingress <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

low

Synopsis	Enter the low context
Context	configure qos sap-ingress <i>string queue number drop-tail low</i>
Tree	low
Introduced	16.0.R1
Platforms	All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>)
Tree	percent-reduction-from-mbs
Range	0 to 100
Default	auto
Options	auto
Introduced	16.0.R1
Platforms	All

mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 1073741824
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

multipoint *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> multipoint <i>boolean</i>
Tree	multipoint
Introduced	16.0.R1
Platforms	All

packet-byte-offset *number*

Synopsis	Packet size modification for queue accounting
Context	configure qos sap-ingress <i>string queue number packet-byte-offset number</i>
Tree	packet-byte-offset
Range	-32 to 30
Default	0
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos sap-ingress <i>string queue number percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir *decimal-number*

Synopsis	Administrative CIR percent
Context	configure qos sap-ingress <i>string queue number percent-rate cir decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

fir *decimal-number*

Synopsis	Administrative FIR percent
Context	configure qos sap-ingress <i>string queue number percent-rate fir decimal-number</i>
Tree	fir

Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R2
Platforms	All

pir *decimal-number*

Synopsis	Administrative PIR percent
Context	configure qos sap-ingress <i>string queue number percent-rate pir decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	configure qos sap-ingress <i>string queue number percent-rate police</i>
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos sap-ingress <i>string queue number percent-rate reference-rate keyword</i>
Tree	reference-rate
Default	port-limit
Options	port-limit, local-limit, reference-port-limit
Introduced	16.0.R1
Platforms	All

queue-mode *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operating mode for this queue
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> queue-mode <i>keyword</i>
Tree	queue-mode
Default	priority
Options	priority, profile
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> rate cir (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

fir (*number* | *keyword*)

Synopsis	Administrative FIR
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> rate fir (<i>number</i> <i>keyword</i>)
Tree	fir
Range	0 to 6400000000
Default	0
Units	kilobps
Options	max
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R2
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos sap-ingress <i>string</i> queue <i>number</i> rate pir (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max

Introduced	16.0.R1
Platforms	All

police

Synopsis	Drop the traffic feeding into queue above the PIR rate
Context	configure qos sap-ingress <i>string queue number rate</i> police
Tree	police
Notes	The following elements are part of a choice: (cir and fir) or police .
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enter the scheduler-parent context
Context	configure qos sap-ingress <i>string queue number</i> scheduler-parent
Tree	scheduler-parent
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string queue number scheduler-parent</i> cir-level <i>number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos sap-ingress <i>string queue number scheduler-parent</i> cir-weight <i>number</i>
Tree	cir-weight

Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string queue number scheduler-parent level number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

scheduler-name *string*

Synopsis	Scheduler name
Context	configure qos sap-ingress <i>string queue number scheduler-parent scheduler-name string</i>
Tree	scheduler-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	configure qos sap-ingress <i>string queue number scheduler-parent weight number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

scope *keyword*

Synopsis	Scope of the policy
Context	configure qos sap-ingress <i>string</i> scope <i>keyword</i>
Tree	scope
Default	template
Options	exclusive, template
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt
Tree	subscriber-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-policer

Synopsis	Enter the dynamic-policer context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer
Tree	dynamic-policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-parent

Synopsis	Enter the arbiter-parent context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arbiter-name *string*

Synopsis	Arbiter name
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent <i>arbiter-name string</i>
Tree	<i>arbiter-name</i>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent level <i>number</i>
Tree	<i>level</i>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent weight <i>number</i>
Tree	<i>weight</i>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer cbs (<i>number</i> <i>keyword</i>)

Tree	cbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket of this policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer mbs (<i>number</i> <i>keyword</i>)
Tree	mbs
Range	0 to 268435456
Default	auto
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis	Packet size modification for policing information
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-id-range

Synopsis	Enable the policer-id-range context
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range

Tree	policer-id-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the dynamic policer ID range
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range end number
Tree	end
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the dynamic policer ID range
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer policer-id-range start number
Tree	start
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stat-mode keyword

Synopsis	Mode of statistics collected by the policer
Context	configure qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer stat-mode keyword
Tree	stat-mode
Default	minimal
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pcc-rule-entry

Synopsis Enter the **pcc-rule-entry** context
Context **configure qos sap-ingress** *string* **subscriber-mgmt pcc-rule-entry**
Tree **pcc-rule-entry**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

Synopsis Enable the **range** context
Context **configure qos sap-ingress** *string* **subscriber-mgmt pcc-rule-entry range**
Tree **range**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of the filter and QoS policy entries range
Context **configure qos sap-ingress** *string* **subscriber-mgmt pcc-rule-entry range end number**
Tree **end**
Range 1 to 65535
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the filter and QoS policy entries range
Context **configure qos sap-ingress** *string* **subscriber-mgmt pcc-rule-entry range start number**
Tree **start**
Range 1 to 65535
Notes This element is mandatory.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy [[scheduler-policy-name](#)] *string*

Synopsis Enter the **scheduler-policy** list instance
 Context **configure qos scheduler-policy** *string*
 Tree [scheduler-policy](#)
 Max. 2047
 Instances
 Introduced 16.0.R1
 Platforms All

[scheduler-policy-name] *string*

Synopsis Scheduler policy name
 Context **configure qos scheduler-policy** *string*
 Tree [scheduler-policy](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure qos scheduler-policy** *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

frame-based-accounting *boolean*

Synopsis Use frame-based accounting for schedulers and children within scheduler policy

Context	configure qos scheduler-policy <i>string frame-based-accounting boolean</i>
Tree	frame-based-accounting
Default	false
Introduced	16.0.R1
Platforms	All

tier [[tier-id](#)] *number*

Synopsis	Enter the tier list instance
Context	configure qos scheduler-policy <i>string tier number</i>
Tree	tier
Introduced	16.0.R1
Platforms	All

[tier-id] *number*

Synopsis	Tier for scheduler-policy scheduler
Context	configure qos scheduler-policy <i>string tier number</i>
Tree	tier
Range	1 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

parent-location *keyword*

Synopsis	Location in which the tier 1 schedulers can find their parent
Context	configure qos scheduler-policy <i>string tier number parent-location keyword</i>
Tree	parent-location
Default	auto
Options	auto, sub, vport
Introduced	16.0.R1
Platforms	All

scheduler [*scheduler-name*] *string*

Synopsis	Enter the scheduler list instance
Context	configure qos scheduler-policy <i>string tier number scheduler string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

[scheduler-name] *string*

Synopsis	Scheduler name
Context	configure qos scheduler-policy <i>string tier number scheduler string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos scheduler-policy <i>string tier number scheduler string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	configure qos scheduler-policy <i>string tier number scheduler string limit-unused-bandwidth boolean</i>
Tree	limit-unused-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

percent-rate

Synopsis	Enter the percent-rate context
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate</i>
Tree	percent-rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	20.10.R1
Platforms	All

cir (*keyword | decimal-number*)

Synopsis	Scheduler CIR
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate cir (keyword decimal-number)</i>
Tree	cir
Range	0.00 to 100.00
Default	sum
Options	sum
Introduced	20.10.R1
Platforms	All

pir *decimal-number*

Synopsis	Scheduler PIR
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate pir decimal-number</i>

Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

reference-rate *keyword*

Synopsis	Reference rate
Context	configure qos scheduler-policy <i>string tier number scheduler string percent-rate reference-rate keyword</i>
Tree	reference-rate
Default	reference-port-limit
Options	local-limit, reference-port-limit
Introduced	20.10.R1
Platforms	All

port-parent

Synopsis	Enable the port-parent context
Context	configure qos scheduler-policy <i>string tier number scheduler string port-parent</i>
Tree	port-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	configure qos scheduler-policy <i>string tier number scheduler string port-parent cir-level number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> port-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Port priority that this queue uses to receive bandwidth from the port level scheduler
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> port-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used at the above-CIR port priority level
Context	configure qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> port-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
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Context	configure qos scheduler-policy <i>string tier number scheduler string rate</i>
Tree	rate
Notes	The following elements are part of a choice: percent-rate or rate .
Introduced	16.0.R1
Platforms	All

cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	configure qos scheduler-policy <i>string tier number scheduler string rate cir</i> (<i>number</i> <i>keyword</i>)
Tree	cir
Range	0 to 6400000000
Default	sum
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	configure qos scheduler-policy <i>string tier number scheduler string rate pir</i> (<i>number</i> <i>keyword</i>)
Tree	pir
Range	1 to 6400000000
Default	max
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

scheduler-parent

Synopsis	Enable the scheduler-parent context
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Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent</i>
Tree	scheduler-parent
Notes	The following elements are part of a choice: port-parent or scheduler-parent .
Introduced	16.0.R1
Platforms	All

cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent cir-level number</i>
Tree	cir-level
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent cir-weight number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level of priority while feeding to the parent
Context	configure qos scheduler-policy <i>string tier number scheduler string scheduler-parent level number</i>
Tree	level
Range	1 to 8
Default	1

Introduced 16.0.R1
 Platforms All

scheduler-name *string*

Synopsis Scheduler name
 Context **configure qos scheduler-policy** *string tier number scheduler string scheduler-parent scheduler-name string*
 Tree [scheduler-name](#)
 String Length 1 to 32
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
 Context **configure qos scheduler-policy** *string tier number scheduler string scheduler-parent weight number*
 Tree [weight](#)
 Range 0 to 100
 Default 1
 Introduced 16.0.R1
 Platforms All

shared-queue [[shared-queue-policy-name](#)] *string*

Synopsis Enter the **shared-queue** list instance
 Context **configure qos shared-queue** *string*
 Tree [shared-queue](#)
 Introduced 16.0.R1
 Platforms All

[[shared-queue-policy-name](#)] *string*

Synopsis Name of the default shared queue policy

Context	configure qos shared-queue <i>string</i>
Tree	shared-queue
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos shared-queue <i>string description</i> <i>string</i>
Tree	description
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure qos shared-queue <i>string fc</i> <i>keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class mapping to queue mapping
Context	configure qos shared-queue <i>string fc</i> <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast-queue *number*

Synopsis	Logical queue that the broadcast traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i> broadcast-queue <i>number</i>
Tree	broadcast-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

multicast-queue *number*

Synopsis	Logical queue that the multicast traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i> multicast-queue <i>number</i>
Tree	multicast-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

queue *number*

Synopsis	Logical queue that the traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i> queue <i>number</i>
Tree	queue
Range	1 to 8
Introduced	16.0.R1
Platforms	All

unknown-queue *number*

Synopsis	Logical queue that the unknown traffic, classified into this forwarding class, should use
Context	configure qos shared-queue <i>string</i> fc <i>keyword</i> unknown-queue <i>number</i>
Tree	unknown-queue
Range	9 to 32
Introduced	16.0.R1
Platforms	All

queue [*queue-id*] *number*

Synopsis	Enter the queue list instance
Context	configure qos shared-queue <i>string queue number</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

[queue-id] *number*

Synopsis	Shared queue identifier
Context	configure qos shared-queue <i>string queue number</i>
Tree	queue
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

cbs *number*

Synopsis	Committed burst size as a percentage of the maximum reserved buffer space for the queue
Context	configure qos shared-queue <i>string queue number cbs number</i>
Tree	cbs
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

drop-tail

Synopsis	Enter the drop-tail context
Context	configure qos shared-queue <i>string queue number drop-tail</i>
Tree	drop-tail
Introduced	16.0.R1

Platforms All

low

Synopsis Enter the **low** context

Context **configure qos shared-queue** *string* *queue number* **drop-tail low**

Tree [low](#)

Introduced 16.0.R1

Platforms All

percent-reduction-from-mbs (*number* | *keyword*)

Synopsis Low drop-tail percent from MBS that is reduced

Context **configure qos shared-queue** *string* *queue number* **drop-tail low percent-reduction-from-mbs** (*number* | *keyword*)

Tree [percent-reduction-from-mbs](#)

Range 0 to 100

Default auto

Options auto

Introduced 16.0.R1

Platforms All

mbs *number*

Synopsis Maximum burst size as a percentage of maximum reserved buffer space for the queue

Context **configure qos shared-queue** *string* *queue number* **mbs** *number*

Tree [mbs](#)

Range 0 to 100

Units percent

Introduced 16.0.R1

Platforms All

multipoint *boolean*

Synopsis Apply as a multicast queue

Context **configure qos shared-queue** *string* *queue number* **multipoint** *boolean*

Tree	multipoint
Introduced	16.0.R1
Platforms	All

queue-type *keyword*

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	configure qos shared-queue <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Default	auto-expedited
Options	expedited, auto-expedited, best-effort
Introduced	16.0.R1
Platforms	All

rate

Synopsis	Enter the rate context
Context	configure qos shared-queue <i>string</i> queue <i>number</i> rate
Tree	rate
Introduced	16.0.R1
Platforms	All

cir *number*

Synopsis	CIR percentage rate
Context	configure qos shared-queue <i>string</i> queue <i>number</i> rate cir <i>number</i>
Tree	cir
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

fir *number*

Synopsis	FIR percentage rate
----------	---------------------

Context	configure qos shared-queue <i>string queue number rate fir number</i>
Tree	fir
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R2
Platforms	All

pir number

Synopsis	PIR percentage rate
Context	configure qos shared-queue <i>string queue number rate pir number</i>
Tree	pir
Range	1 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	All

slope-policy [[slope-policy-name](#)] *string*

Synopsis	Enter the slope-policy list instance
Context	configure qos slope-policy <i>string</i>
Tree	slope-policy
Max. Instances	511
Introduced	16.0.R1
Platforms	All

[slope-policy-name] *string*

Synopsis	Slope policy name
Context	configure qos slope-policy <i>string</i>
Tree	slope-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure qos slope-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exceed-slope

Synopsis	Enter the exceed-slope context
Context	configure qos slope-policy <i>string</i> exceed-slope
Tree	exceed-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the exceed-priority RED slope
Context	configure qos slope-policy <i>string</i> exceed-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> exceed-slope max-avg <i>number</i>
Tree	max-avg

Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at exceed start-average
Context	configure qos slope-policy <i>string</i> exceed-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> exceed-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

high-slope

Synopsis	Enter the high-slope context
Context	configure qos slope-policy <i>string</i> high-slope
Tree	high-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the high priority RED slope
Context	configure qos slope-policy <i>string</i> high-slope admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> high-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at high start-average
Context	configure qos slope-policy <i>string</i> high-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> high-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

highplus-slope

Synopsis	Enter the highplus-slope context
Context	configure qos slope-policy <i>string</i> highplus-slope

Tree	highplus-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the highplus priority RED slope
Context	configure qos slope-policy <i>string</i> highplus-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> highplus-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability increase at highplus start-average
Context	configure qos slope-policy <i>string</i> highplus-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> highplus-slope start-avg <i>number</i>

Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

low-slope

Synopsis	Enter the low-slope context
Context	configure qos slope-policy <i>string</i> low-slope
Tree	low-slope
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the low priority RED slope
Context	configure qos slope-policy <i>string</i> low-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

max-avg *number*

Synopsis	Buffer percentage after which the drop probability reaches maximum average
Context	configure qos slope-policy <i>string</i> low-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

max-prob *number*

Synopsis	Drop probability to increase at low start-average
Context	configure qos slope-policy <i>string</i> low-slope max-prob <i>number</i>

Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

start-avg *number*

Synopsis	Buffer percentage after which the drop probability starts to rise above value
Context	configure qos slope-policy <i>string</i> low-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

time-average-factor *number*

Synopsis	Apply time average factor to weight between previous and new shared buffer utilization result
Context	configure qos slope-policy <i>string</i> time-average-factor <i>number</i>
Tree	time-average-factor
Range	0 to 15
Default	7
Introduced	16.0.R1
Platforms	All

3.38 redundancy commands

```

configure
- redundancy
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-evpn
    - ethernet-segment
      - activation-timer number
      - apply-groups reference
      - apply-groups-exclude reference
      - boot-timer number
    - bgp-mh
      - apply-groups reference
      - apply-groups-exclude reference
      - site
        - activation-timer number
        - boot-timer number
        - min-down-timer number
  - cert-sync boolean
  - mgmt-ethernet
    - revert number
  - multi-chassis
    - ipsec-domain number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - designated-role keyword
      - priority number
      - revertive boolean
      - tunnel-group reference
    - options
      - sub-mgmt
        - apply-groups reference
        - apply-groups-exclude reference
        - dhcp-lease-time-threshold number
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - description string
    - mc-endpoint
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd boolean
      - boot-timer number
      - hold-on-neighbor-failure number
      - keep-alive-interval number
      - passive-mode boolean
      - system-priority number
    - mc-ipsec
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - discovery-interval
        - boot number
        - interval-secs number
      - domain reference
      - admin-state keyword

```

configure redundancy multi-chassis peer mc-ipsec domain apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- hold-on-neighbor-failure number
- keep-alive-interval number
- tunnel-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - peer-group number
  - priority number
- mc-lag
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hold-on-neighbor-failure number
  - keep-alive-interval number
  - lag reference
    - apply-groups reference
    - apply-groups-exclude reference
    - lacp-key number
    - remote-lag string
    - source-bmac-lsb (keyword | bmac-lsb)
    - system-id string
    - system-priority number
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - in-band-control-path
      - debounce boolean
      - dst-ip string
      - interface string
      - max-debounce-time number
      - service-name string
    - path-b
      - apply-groups reference
      - apply-groups-exclude reference
      - range start number end number
      - wildcard-saps boolean
    - path-excl
      - apply-groups reference
      - apply-groups-exclude reference
      - range start number end number
      - wildcard-saps boolean
    - ring-node string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - dst-ip string
      - interval number
      - service-name string
      - src-ip string
      - src-mac (keyword | ring-node-mac-address)
      - vlan string
      - srrp-instance number
      - type keyword
  - peer-name string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sync
  - admin-state keyword
  - apply-groups reference

```

configure redundancy multi-chassis peer sync apply-groups-exclude

- **apply-groups-exclude** *reference*
- **diameter-node**
 - **node** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
- **igmp** *boolean*
- **igmp-snooping** *boolean*
- **ipsec** *boolean*
- **l2tp** *boolean*
- **local-dhcp-server** *boolean*
- **mc-ring** *boolean*
- **mld** *boolean*
- **mld-snooping** *boolean*
- **nat**
 - **nat-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
- **pim-snooping**
 - **saps** *boolean*
 - **spoke-sdps** *boolean*
- **python** *boolean*
- **srrp** *boolean*
- **sub-host-trk** *boolean*
- **sub-mgmt**
 - **ipoe** *boolean*
 - **pppoe** *boolean*
- **tags**
 - **lag** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **sync-tag** *string*
 - **port** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **sync-tag** *string*
 - **pw-port** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **sync-tag** *string*
- **sdp** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range start** *number end number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **sync-tag** *string*
- **track-srrp** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure redundancy multi-chassis peer sync track-srrp l2tp-tunnel-id-range

- **l2tp-tunnel-id-range**
 - **end** *number*
 - **start** *number*
- **transport-encryption**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **keychain** *reference*
 - **tunnel-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
- **rollback-sync** *keyword*
- **srrp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-srrp-id-range**
 - **end** *number*
 - **start** *number*
 - **switchover-exec** *string*
 - **synchronize** *keyword*

3.38.1 redundancy command descriptions

redundancy

Synopsis	Enter the redundancy context
Context	configure redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	All

bgp-evpn

Synopsis	Enter the bgp-evpn context
Context	configure redundancy bgp-evpn
Tree	bgp-evpn
Introduced	16.0.R1
Platforms	All

ethernet-segment

Synopsis	Enter the ethernet-segment context
Context	configure redundancy bgp-evpn ethernet-segment
Tree	ethernet-segment
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time before activating specified Ethernet segment on specified PE that is elected as DF
Context	configure redundancy bgp-evpn ethernet-segment activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Default	3
Units	seconds
Introduced	16.0.R1

Platforms All

boot-timer *number*

Synopsis	Time before BGP EVPN multi-homing DF election algorithm
Context	configure redundancy bgp-evpn ethernet-segment boot-timer <i>number</i>
Tree	boot-timer
Description	<p>This command allows the necessary time for the control plane protocols to come up upon PE boot-up before bringing up the ESs and running the DF algorithm.</p> <p>The following considerations apply to this command:</p> <ul style="list-style-type: none"> • The boot-timer command must provide enough time to allow the IOMs and BGP sessions to come up before exchanging ES routes and running the DF election for each EVI or ISID. • The boot-timer is synchronized across CPMs and is relative to the system up time; it is not changed or reset upon CPM switchover. • The boot-timer is never interrupted (the es-activation-timer, however, can be interrupted if there is a new event triggering the DF election). • The boot-timer runs per EVI or ISID on the ESs in the system. If the system up time (time the system has been up since the last reboot) is less than the boot-timer value, the system does not run the DF election for any EVI or ISID. When the boot-timer value expires, the DF election runs, and if the system is elected DF for the EVI or ISID, the es-activation-timer is triggered. • The system does not advertise ES routes until the boot timer expires, which guarantees that the peer ES PEs only run the DF election when the PE is ready to become the DF, if required.
Range	0 to 1800
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

bgp-mh

Synopsis	Enter the bgp-mh context
Context	configure redundancy bgp-mh
Tree	bgp-mh
Introduced	16.0.R1
Platforms	All

site

Synopsis	Enter the site context
Context	configure redundancy bgp-mh site
Tree	site
Introduced	16.0.R1
Platforms	All

activation-timer *number*

Synopsis	Time to keep local sites in standby status before running DF election algorithm
Context	configure redundancy bgp-mh site activation-timer <i>number</i>
Tree	activation-timer
Range	0 to 100
Default	2
Units	seconds
Introduced	16.0.R1
Platforms	All

boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	configure redundancy bgp-mh site boot-timer <i>number</i>
Tree	boot-timer
Range	0 to 600
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

min-down-timer *number*

Synopsis	Min downtime for BGP multi-homing site after transition
Context	configure redundancy bgp-mh site min-down-timer <i>number</i>
Tree	min-down-timer

Description	<p>This command configures the BGP multi-homing site minimum down time. When this value is set and the site goes operationally down, it remains operationally down for at least the length of time configured by this timer, regardless of whether other state changes might cause the site to go operationally up. This timer is restarted every time the site transitions from operationally up to down.</p> <p>This timer is optimized in the following circumstances:</p> <ul style="list-style-type: none"> • If the site goes down on the DF but there are no BGP multi-homing peers with the same site in an up state, this timer is not used. • If the site goes down on the DF but there are no active BGP multi-homing peers, this timer is not used. • If this timer is active and a BGP multihoming update is received from the DF indicating its site is down, this timer is immediately terminated and the BGP multihoming algorithm is triggered to determine whether this PE should become the DF.
Range	1 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

cert-sync *boolean*

Synopsis	Synchronize redundancy certificate files between the primary and secondary CPMs
Context	configure redundancy cert-sync <i>boolean</i>
Tree	cert-sync
Default	true
Introduced	16.0.R1
Platforms	All

mgmt-ethernet

Synopsis	Enable the mgmt-ethernet context
Context	configure redundancy mgmt-ethernet
Tree	mgmt-ethernet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

revert *number*

Synopsis	Time before reverting standby CPM management Ethernet port to active CPM
Context	configure redundancy mgmt-ethernet revert <i>number</i>
Tree	revert
Range	1 to 300
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

multi-chassis

Synopsis	Enter the multi-chassis context
Context	configure redundancy multi-chassis
Tree	multi-chassis
Description	Commands in this context configure the attributes of multi-chassis redundancy.
Introduced	16.0.R1
Platforms	All

ipsec-domain [*id*] *number*

Synopsis	Enter the ipsec-domain list instance
Context	configure redundancy multi-chassis ipsec-domain <i>number</i>
Tree	ipsec-domain
Description	Commands in this context configure an IPsec domain used for N:M IPsec redundancy.
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *number*

Synopsis	IPsec domain ID
Context	configure redundancy multi-chassis ipsec-domain <i>number</i>
Tree	ipsec-domain

Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

designated-role *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designated role for the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> designated-role <i>keyword</i>
Tree	designated-role
Description	This command configures the designated role of the tunnel group in the IPsec domain.
Default	standby
Options	standby, active
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis	Priority for the IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> priority <i>number</i>
Tree	priority

Description	This command configures the priority for the tunnel group in the IPsec domain. The node with the higher priority is more likely to be elected as active within the domain.
Range	0 to 255
Default	100
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

revertive *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable revertive behavior for the tunnel group
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> revertive <i>boolean</i>
Tree	revertive
Description	When configured to true , the router enables the revertive behavior of the tunnel group, which allows a router in an N:M domain to automatically take over as the active router in the domain when it becomes eligible to do so. When configured to false , the revertive behavior of the tunnel group is disabled.
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID for an IPsec domain
Context	configure redundancy multi-chassis ipsec-domain <i>number</i> tunnel-group <i>reference</i>
Tree	tunnel-group
Description	This command specifies the tunnel group ID for the IPsec domain.
Reference	configure isa tunnel-group <i>number</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure redundancy multi-chassis options
Tree	options
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mgmt

Synopsis	Enter the sub-mgmt context
Context	configure redundancy multi-chassis options sub-mgmt
Tree	sub-mgmt
Description	Commands in this context configure subscriber management options for multi-chassis redundancy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp-lease-time-threshold *number*

Synopsis	DHCP lease threshold to skip MCS synchronization
Context	configure redundancy multi-chassis options sub-mgmt dhcp-lease-time-threshold <i>number</i>
Tree	dhcp-lease-time-threshold
Description	This command configures the DHCP lease time threshold to skip MCS synchronization. DHCP leases for the sub-mgmt MCS applications are eligible to skip synchronization if the committed lease time is less than the active threshold on a multi-chassis peer. The active threshold is the minimum value of the thresholds configured on the nodes at each end of a multi-chassis peer. The threshold is inactive when it is unconfigured on at least one end of the multi-chassis peer.
Range	0 to 86400
Units	seconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Description	This command configures the IP address of the peer in a redundant multi-chassis setup, and enters the context for further application-specific configuration options.
Max. Instances	20
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer IP address
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MC redundancy peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Authentication key used between this node and the multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

mc-endpoint

Synopsis	Enable the mc-endpoint context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-endpoint
Tree	mc-endpoint
Introduced	22.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MC-EP
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-endpoint admin-state <i>keyword</i>

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	All

bfd boolean

Synopsis	Enable BFD detection for the MC-EP peering tunnel
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-endpoint bfd boolean
Tree	bfd
Description	When configured to true , the system uses Bidirectional Forwarding Detection (BFD) to control the state of the associated protocol interface, where the state of the protocol interface is tied to the state of the BFD session between the local and remote nodes. The BFD settings are configured in the IP interface contexts.
Default	false
Introduced	22.10.R1
Platforms	All

boot-timer number

Synopsis	Time to attempt connection before declaring failure
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-endpoint boot-timer number
Tree	boot-timer
Description	This command configures the time interval to attempt connection that applies after the node reboots. This command specifies the time the multi-chassis endpoint (MC-EP) protocol takes to establish a connection before declaring a connection failure with the remote peer. When the time interval expires, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	1 to 600
Default	300
Units	seconds
Introduced	22.10.R1
Platforms	All

hold-on-neighbor-failure *number*

Synopsis	Number of keepalive intervals to wait for packets
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint hold-on-neighbor-failure <i>number</i>
Tree	hold-on-neighbor-failure
Description	This command configures the number of keepalive intervals that the local node waits for packets from the MC-EP peer before declaring a connection failure. When the number of intervals is reached, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	2 to 25
Default	3
Introduced	22.10.R1
Platforms	All

keep-alive-interval *number*

Synopsis	Interval for exchange of keepalive messages
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Description	This command configures the interval for which keepalive messages are exchanged between two systems participating as MC-EP when BFD is not active. The fast keepalive messages are used to detect remote node failure.
Range	5 to 500
Default	10
Introduced	22.10.R1
Platforms	All

passive-mode *boolean*

Synopsis	Enable passive mode for the MC-EP tunnel
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint passive-mode <i>boolean</i>
Tree	passive-mode
Description	When configured to true , the system enables passive mode behavior for the MC-EP protocol. Assuming the remote pair is configured with regular MC-EP in passive mode, the MC-EP pair remains dormant until two of the pseudowires in an MC-EP are activated by the remote PEs.

When one pseudowire is active, the dormant MC-EP pair becomes active. The regular mechanism to select the best pseudowire between the active pair is initiated, and the system blocks the Rx and Tx directions of the other pseudowire.

Default	false
Introduced	22.10.R1
Platforms	All

system-priority *number*

Synopsis	System priority of the MC-EP
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-endpoint system-priority <i>number</i>
Tree	system-priority
Description	This command configures the system priority of the MC-EP. The peer configured with the lower value is selected as the master. If the system priority values are equal, the peer with the higher system ID (chassis MAC address) becomes the master.
Range	0 to 255
Default	0
Introduced	22.10.R1
Platforms	All

mc-ipsec

Synopsis	Enable the mc-ipsec context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec
Tree	mc-ipsec
Description	This command enables the context to configure multi-chassis peer parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec bfd-liveness <i>boolean</i>
Tree	bfd-liveness

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

discovery-interval

Synopsis	Enter the discovery-interval context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec discovery-interval
Tree	discovery-interval
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

boot number

Synopsis	Maximum interval after system bootup
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec discovery-interval boot number
Tree	boot
Range	1 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval-secs number

Synopsis	Maximum discovery interval
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec discovery-interval interval-secs number
Tree	interval-secs
Range	1 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [*id*] *reference*

Synopsis	Enter the domain list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec domain reference
Tree	domain
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	IPsec domain ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec domain reference
Tree	domain
Reference	configure redundancy multi-chassis ipsec-domain number
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the IPsec domain
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec domain reference admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-on-neighbor-failure *number*

Synopsis	Hold time on neighbor failure
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ipsec hold-on-neighbor-failure number

Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis	Keepalive interval
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec keep-alive-interval <i>number</i>
Tree	keep-alive-interval
Range	5 to 500
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [[tunnel-group-id](#)] *reference*

Synopsis	Enter the tunnel-group list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[tunnel-group-id] *reference*

Synopsis	Tunnel group ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ipsec tunnel-group <i>reference</i>
Tree	tunnel-group
Reference	configure isa tunnel-group <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the peer IPsec tunnel group

Context **configure** [redundancy](#) [multi-chassis](#) [peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec](#) [tunnel-group](#) *reference* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-group *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Peer tunnel group

Context **configure** [redundancy](#) [multi-chassis](#) [peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec](#) [tunnel-group](#) *reference* [peer-group](#) *number*

Tree [peer-group](#)

Range 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis Tunnel group priority

Context **configure** [redundancy](#) [multi-chassis](#) [peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec](#) [tunnel-group](#) *reference* [priority](#) *number*

Tree [priority](#)

Range 0 to 255

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mc-lag

Synopsis	Enter the mc-lag context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag
Tree	mc-lag
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MC-LAG
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hold-on-neighbor-failure *number*

Synopsis	Intervals before standby node assumes that redundant neighbor node has failed
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag hold-on-neighbor-failure <i>number</i>
Tree	hold-on-neighbor-failure
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	All

keep-alive-interval *number*

Synopsis	Keepalive timer value
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-lag keep-alive-interval <i>number</i>

Tree	keep-alive-interval
Range	5 to 500
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference
Tree	lag
Introduced	16.0.R1
Platforms	All

[lag-name] *reference*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference
Tree	lag
Reference	configure lag string
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

lACP-key *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag reference lACP-key number
Tree	lACP-key

Range	1 to 65535
Introduced	16.0.R1
Platforms	All

remote-lag *string*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag <i>reference</i> remote-lag string
Tree	remote-lag
String Length	1 to 27
Introduced	16.0.R1
Platforms	All

source-bmac-lsb (*keyword* | *bmac-lsb*)

Synopsis	MAC address value to apply to all ingress traffic
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag <i>reference</i> source-bmac-lsb (<i>keyword</i> <i>bmac-lsb</i>)
Tree	source-bmac-lsb
Options	use-lacp-key
Introduced	16.0.R1
Platforms	All

system-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ID based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-lag lag <i>reference</i> system-id string
Tree	system-id
Introduced	16.0.R1
Platforms	All

system-priority *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority based on the remote MC-LAG
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-lag lag reference system-priority <i>number</i>
Tree	system-priority
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mc-ring

Synopsis	Enter the mc-ring context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring
Tree	mc-ring
Introduced	16.0.R1
Platforms	All

ring [[sync-tag](#)] *string*

Synopsis	Enter the ring list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i>
Tree	ring
Introduced	16.0.R1
Platforms	All

[[sync-tag](#)] *string*

Synopsis	Synchronization tag for this ring on this multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i>

Tree	ring
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multi-chassis ring
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

in-band-control-path

Synopsis	Enter the in-band-control-path context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> in-band-control-path
Tree	in-band-control-path
Introduced	16.0.R1
Platforms	All

debounce *boolean*

Synopsis	Exponential back-off timer to use for delay path switching after consecutive failures
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> in-band-control-path debounce <i>boolean</i>
Tree	debounce
Default	true
Introduced	16.0.R1
Platforms	All

dst-ip string

Synopsis	IP address of the in-band control path peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> in-band-control-path dst-ip <i>string</i>
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

interface string

Synopsis	Interface to verify in-band control path
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> in-band-control-path interface <i>string</i>
Tree	interface
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

max-debounce-time number

Synopsis	Maximum delay after a failure when debouncing is active
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> in-band-control-path max-debounce-time <i>number</i>
Tree	max-debounce-time
Range	5 to 200
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

service-name string

Synopsis	Administrative service name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> in-band-control-path service-name <i>string</i>

Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

path-b

Synopsis	Enter the path-b context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i> path-b
Tree	path-b
Introduced	16.0.R1
Platforms	All

range start number end number

Synopsis	Add a list entry for range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i> path-b range start number end number
Tree	range
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the VLAN range
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) mc-ring ring <i>string</i> path-b range start number end number
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the VLAN range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string path-b range start number end number</i>
Tree	range
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

wildcard-saps boolean

Synopsis	Include the SAPs starting with a wildcard '*'
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string path-b wildcard-saps boolean</i>
Tree	wildcard-saps
Default	false
Introduced	16.0.R4
Platforms	All

path-excl

Synopsis	Enter the path-excl context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string path-excl</i>
Tree	path-excl
Introduced	16.0.R1
Platforms	All

range start number end number

Synopsis	Add a list entry for range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string path-excl range start number end number</i>
Tree	range
Introduced	16.0.R1

Platforms All

start number

Synopsis Lower bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

end number

Synopsis Upper bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

wildcard-saps boolean

Synopsis Include the SAPs starting with a wildcard '**'

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl wildcard-saps](#) [boolean](#)

Tree [wildcard-saps](#)

Default false

Introduced 16.0.R4

Platforms All

ring-node [*name*] *string*

Synopsis	Enter the ring-node list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i>
Tree	ring-node
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Name of the multi-chassis ring access node
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i>
Tree	ring-node
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the ring node verification
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

dst-ip *string*

Synopsis	Destination IP address for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> dst-ip <i>string</i>
Tree	dst-ip

Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Connection verification interval
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> interval <i>number</i>
Tree	interval
Range	1 to 6000
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	All

service-name *string*

Synopsis	Administrative service name
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

src-ip *string*

Synopsis	Source IP address for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> src-ip <i>string</i>
Tree	src-ip
Introduced	16.0.R1
Platforms	All

src-mac (*keyword* | *ring-node-mac-address*)

Synopsis	Source MAC address for the access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> src-mac (<i>keyword</i> <i>ring-node-mac-address</i>)
Tree	src-mac
Default	system-mac-address
Options	system-mac-address
Introduced	16.0.R1
Platforms	All

vlan *string*

Synopsis	VLAN ID for access node connection
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> ring-node <i>string</i> vlan <i>string</i>
Tree	vlan
String Length	1 to 11
Introduced	16.0.R1
Platforms	All

srrp-instance [*id*] *number*

Synopsis	Add a list entry for srrp-instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> srrp-instance <i>number</i>
Tree	srrp-instance
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[id] *number*

Synopsis	SRRP instance ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) mc-ring ring <i>string</i> srrp-instance <i>number</i>

Tree	srrp-instance
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the multi-chassis ring
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) mc-ring ring <i>string</i> type <i>keyword</i>
Tree	type
Options	layer-2, layer-3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

peer-name *string*

Synopsis	Multi-chassis peer name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) peer-name <i>string</i>
Tree	peer-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

source-address ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source address to communicate with the multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Introduced	16.0.R1
Platforms	All

sync

Synopsis	Enable the sync context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync
Tree	sync
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the peer synchronization
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

diameter-node

Synopsis	Enable the diameter-node context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync diameter-node
Tree	diameter-node
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

node [*host-name*] *reference*

Synopsis	Enter the node list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync diameter-node node <i>reference</i>
Tree	node
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[host-name] *reference*

Synopsis	Origin-Host of the node
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync diameter-node node <i>reference</i>
Tree	node
Reference	configure aaa diameter node <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Sync tag to be used for synchronization
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync diameter-node node <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp *boolean*

Synopsis	Synchronize IGMP protocol information with the multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync igmp <i>boolean</i>
Tree	igmp

Default	false
Introduced	16.0.R1
Platforms	All

igmp-snooping *boolean*

Synopsis	Synchronize IGMP snooping information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync igmp-snooping <i>boolean</i>
Tree	igmp-snooping
Default	false
Introduced	16.0.R1
Platforms	All

ipsec *boolean*

Synopsis	Synchronize IPsec information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync ipsec <i>boolean</i>
Tree	ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp *boolean*

Synopsis	Synchronize Layer Two Tunnel Protocol (L2TP)
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync l2tp <i>boolean</i>
Tree	l2tp
Default	false
Introduced	16.0.R1
Platforms	All

local-dhcp-server *boolean*

Synopsis	Synchronize DHCP Server information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync local-dhcp-server <i>boolean</i>
Tree	local-dhcp-server
Default	false
Introduced	16.0.R1
Platforms	All

mc-ring *boolean*

Synopsis	Synchronize ring information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync mc-ring <i>boolean</i>
Tree	mc-ring
Default	false
Introduced	16.0.R1
Platforms	All

mld *boolean*

Synopsis	Synchronize MLD protocol information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync mld <i>boolean</i>
Tree	mld
Default	false
Introduced	16.0.R1
Platforms	All

mld-snooping *boolean*

Synopsis	Synchronize MLD snooping information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync mld-snooping <i>boolean</i>
Tree	mld-snooping
Default	false

Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the nat context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync nat
Tree	nat
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [id] reference

Synopsis	Enter the nat-group list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync nat nat-group reference
Tree	nat-group
Description	Commands in this context configure multi-chassis synchronization (MCS) for a NAT group. NAT group health information is exchanged between the pair of redundant NAT nodes. The system elects one of the nodes as the active node for the NAT group and the other node becomes the standby node.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] reference

Synopsis	NAT group ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync nat nat-group reference
Tree	nat-group
Reference	configure isa nat-group number
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync nat nat-group <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
Description	This command configures the synchronization tag for the NAT group. The tag must match the synchronization tag for the NAT group on the peering node.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim-snooping

Synopsis	Enter the pim-snooping context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync pim-snooping
Tree	pim-snooping
Introduced	16.0.R1
Platforms	All

saps *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync pim-snooping saps <i>boolean</i>
Tree	saps
Default	false
Introduced	16.0.R1
Platforms	All

spoke-sdps *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync pim-snooping spoke-sdps <i>boolean</i>
Tree	spoke-sdps
Default	false
Introduced	16.0.R1
Platforms	All

python *boolean*

Synopsis	Synchronize Python
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync python <i>boolean</i>
Tree	python
Default	false
Introduced	16.0.R1
Platforms	All

srrp *boolean*

Synopsis	Synchronize SRRP information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync srrp <i>boolean</i>
Tree	srrp
Default	false
Introduced	16.0.R1
Platforms	All

sub-host-trk *boolean*

Synopsis	Synchronize subscriber host tracking information
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync sub-host-trk <i>boolean</i>
Tree	sub-host-trk
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-mgmt

Synopsis	Enter the sub-mgmt context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync sub-mgmt
Tree	sub-mgmt
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis	Synchronize subscriber management IPoE information
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync sub-mgmt ipoe <i>boolean</i>
Tree	ipoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe *boolean*

Synopsis	Synchronize subscriber management PPPoE information
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync sub-mgmt pppoe <i>boolean</i>
Tree	pppoe
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tags

Synopsis	Enter the tags context
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync tags

Tree	tags
Introduced	16.0.R1
Platforms	All

lag [[lag-name](#)] *reference*

Synopsis	Enter the lag list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag <i>reference</i>
Tree	lag
Introduced	16.0.R1
Platforms	All

[lag-name] *reference*

Synopsis	LAG name
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag <i>reference</i>
Tree	lag
Reference	configure lag <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

range [start](#) *string* [end](#) *string*

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag <i>reference</i> range start <i>string</i> end <i>string</i>
Tree	range
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	First encapsulation value
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Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag reference range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag reference range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag reference range start string end string sync-tag string
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags lag <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

port [*id*] *reference*

Synopsis	Enter the port list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port <i>reference</i>
Tree	port
Introduced	16.0.R1
Platforms	All

[*id*] *reference*

Synopsis	ID of port to be synchronized with multi-chassis peer
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port <i>reference</i>
Tree	port
Reference	configure port <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range *start string end string*

Synopsis	Enter the range list instance
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Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start string end string
Tree	range
Introduced	16.0.R1
Platforms	All

start string

Synopsis	First encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start string end string
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag string**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags port reference range start string end string sync-tag string

Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags port reference sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

pw-port [[id](#)] *reference*

Synopsis	Enter the pw-port list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags pw-port <i>reference</i>
Tree	pw-port
Introduced	16.0.R4
Platforms	All

[id] *reference*

Synopsis	ID of pseudowire port to be synchronized with MC peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags pw-port <i>reference</i>
Tree	pw-port
Reference	configure pw-port <i>number</i>

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

range *start string end string*

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags pw-port reference range <i>start string end string</i>
Tree	range
Introduced	16.0.R4
Platforms	All

start string

Synopsis	First encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags pw-port reference range <i>start string end string</i>
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

end string

Synopsis	Last encapsulation value
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags pw-port reference range <i>start string end string</i>
Tree	range
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

sync-tag *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags pw-port reference range start string end string sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

sync-tag *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags pw-port reference sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

sdp [*id*] *number*

Synopsis	Enter the sdp list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags sdp <i>number</i>
Tree	sdp
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	ID of SDP to be synchronized with multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number
Tree	sdp
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

range start number end number

Synopsis	Enter the range list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number range start number end number
Tree	range
Introduced	16.0.R1
Platforms	All

start number

Synopsis	First virtual circuit ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number range start number end number
Tree	range
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Last virtual circuit ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tags sdp number range start number end number
Tree	range

Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags sdp number range start number end number sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync tags sdp number sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

track-srrp [[id](#)] *number*

Synopsis	Enter the track-srrp list instance
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Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp <i>number</i>
Tree	track-srrp
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	Tracked SRRP instance ID
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

l2tp-tunnel-id-range

Synopsis	Enter the l2tp-tunnel-id-range context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp <i>number</i> l2tp-tunnel-id-range
Tree	l2tp-tunnel-id-range
Introduced	16.0.R1
Platforms	All

end number

Synopsis	Upper bound of the L2TP tunnel ID range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp <i>number</i> l2tp-tunnel-id-range end number
Tree	end
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Lower bound of the L2TP tunnel ID range
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync track-srrp number l2tp-tunnel-id-range start <i>number</i>
Tree	start
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

transport-encryption

Synopsis	Enter the transport-encryption context
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption
Tree	transport-encryption
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application [[application-id](#)] *keyword*

Synopsis	Enter the application list instance
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption application <i>keyword</i>
Tree	application
Description	Commands in this context configure the MCS application for transport encryption. The application-id configures an application and a keychain defines the key used for the encryption.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[application-id](#)] *keyword*

Synopsis	Application using transport encryption
Context	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone) sync transport-encryption application <i>keyword</i>
Tree	application
Description	This command configures an MCS application for the transport encryption method.

Options	igmp, igmp-snooping, sub-mgmt-ipoe, srrp, mc-ring, mld-snooping, dhcp-server, sub-host-trk, sub-mgmt-pppoe, ipsec, mld, python, l2tp, diam-proxy, pim-snp-g-sap, pim-snp-g-sdp, diam-node, nat
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keychain *reference*

Synopsis	Keychain containing the authentication keys
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync transport-encryption application <i>keyword</i> keychain <i>reference</i>
Tree	keychain
Description	This command specifies a keychain that contains authentication keys for the application.
Reference	configure system security keychains keychain <i>string</i>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-group [[tunnel-group-id](#)] *number*

Synopsis	Enter the tunnel-group list instance
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tunnel-group <i>number</i>
Tree	tunnel-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[tunnel-group-id](#)] *number*

Synopsis	Multi-active tunnel group ID
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tunnel-group <i>number</i>
Tree	tunnel-group
Range	1 to 64
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis	Synchronization tag for this tunnel group on this multi-chassis peer
Context	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) sync tunnel-group number sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rollback-sync *keyword*

Synopsis	Parameters for redundancy rollback synchronization
Context	configure redundancy rollback-sync <i>keyword</i>
Tree	rollback-sync
Options	rollback-single, rollback-all
Introduced	16.0.R1
Platforms	All

srrp

Synopsis	Enter the srrp context
Context	configure redundancy srrp
Tree	srrp
Description	Commands in this context configure system parameters for BNG CUPS inter-UPF resiliency.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-srrp-id-range

Synopsis	Enable the auto-srrp-id-range context
----------	--

Context	configure redundancy srrp auto-srrp-id-range
Tree	auto-srrp-id-range
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the ID range
Context	configure redundancy srrp auto-srrp-id-range end number
Tree	end
Range	2 to 4294967295
Default	4294967295
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the ID range
Context	configure redundancy srrp auto-srrp-id-range start number
Tree	start
Range	1 to 4294967294
Default	2147483648
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

switchover-exec string

Synopsis	CLI script file executed after a redundancy switchover
Context	configure redundancy switchover-exec string
Tree	switchover-exec
Description	<p>This command specifies the location and name of the CLI script file executed following a redundancy switchover from the previously active CPM card. A switchover can happen because of a fatal failure or by manual action.</p> <p>The CLI script file can contain commands for environment settings, classic CLI debug configuration (excluding mirroring settings), and other commands not maintained by the configuration redundancy.</p>

The following commands are not supported in the switchover-exec file: **clear**, **configure**, **candidate**, **oam**, **tools**, **oam**, **ping**, **traceroute**, **mstat**, **mtrace**, and **mrinfo**.

String Length	1 to 100
Introduced	16.0.R1
Platforms	All

synchronize *keyword*

Synopsis	Parameters for redundancy synchronization
Context	configure redundancy synchronize <i>keyword</i>
Tree	synchronize
Options	off, config, boot-env
Introduced	16.0.R1
Platforms	All

3.39 router commands

```

configure
- router string
- aggregates
  - aggregate (ipv4-prefix | ipv6-prefix)
    - aggregator
      - address string
      - as-number number
    - apply-groups reference
    - apply-groups-exclude reference
    - as-set boolean
    - blackhole
      - generate-icmp boolean
    - community string
    - description string
    - discard-component-communities boolean
    - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
    - local-preference number
    - policy reference
    - summary-only boolean
    - tunnel-group number
  - apply-groups reference
  - apply-groups-exclude reference
- allow-icmp-redirect boolean
- allow-icmp6-redirect boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bfd
  - seamless-bfd
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - discriminator number
- bgp
  - add-paths
    - evpn
      - receive boolean
      - send (number | keyword)
    - ipv4
      - receive boolean
      - send (number | keyword)
    - ipv6
      - receive boolean
      - send (number | keyword)
    - label-ipv4
      - receive boolean
      - send (number | keyword)
    - label-ipv6
      - receive boolean
      - send (number | keyword)
    - mcast-vpn-ipv4
      - receive boolean
      - send number
    - mcast-vpn-ipv6
      - receive boolean
      - send number
    - mvpn-ipv4
      - receive boolean
      - send number

```

configure router bgp add-paths mvpn-ipv6

- **mvpn-ipv6**
 - **receive** *boolean*
 - **send** *number*
- **vpn-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
- **vpn-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
- **admin-state** *keyword*
- **advertise-external**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **advertise-inactive** *boolean*
- **advertise-ipv6-next-hops**
 - **evpn** *boolean*
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **aggregator-id-zero** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **asn-4-byte** *boolean*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **backup-path**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
- **best-path-selection**
 - **always-compare-med**
 - **med-value** *keyword*
 - **strict-as** *boolean*
- **as-path-ignore**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **compare-origin-validation-state** *boolean*
- **d-path-length-ignore** *boolean*
- **deterministic-med** *boolean*
- **ebgp-ibgp-equal**
 - **evpn** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **ignore-nh-metric** *boolean*
- **ignore-router-id**
 - **include-internal**

configure router bgp best-path-selection ignore-router-id include-internal mvpn-ipv4

```

    - mvpn-ipv4 boolean
    - mvpn-ipv6 boolean
  - origin-invalid-unusable boolean
- bfd-liveness boolean
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value number
- bgp-tunnel-preference number
- block-prefix-sid boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- convergence
  - family keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - max-wait-to-advertise number
    - min-wait-to-advertise number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- description string
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-peer-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- extended-nh-encoding
  - ipv4 boolean
  - label-ipv4 boolean
  - vpn-ipv4 boolean
- family
  - bgp-ls boolean
  - evpn boolean
  - flow-ipv4 boolean
  - flow-ipv6 boolean
  - flow-vpn-ipv4 boolean
  - flow-vpn-ipv6 boolean
  - ipv4 boolean

```

configure router bgp family ipv6

- **ipv6** *boolean*
- **l2-vpn** *boolean*
- **label-ipv4** *boolean*
- **label-ipv6** *boolean*
- **mcast-ipv4** *boolean*
- **mcast-ipv6** *boolean*
- **mcast-vpn-ipv4** *boolean*
- **mcast-vpn-ipv6** *boolean*
- **mdt-safi** *boolean*
- **ms-pw** *boolean*
- **mvpn-ipv4** *boolean*
- **mvpn-ipv6** *boolean*
- **route-target** *boolean*
- **sr-policy-ipv4** *boolean*
- **sr-policy-ipv6** *boolean*
- **vpn-ipv4** *boolean*
- **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **flowspec**
 - **validate-dest-prefix** *boolean*
 - **validate-redirect-ip** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
- **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
- **restart-time** *number*
- **stale-routes-time** *number*
- **group** *string*
- **add-paths**
 - **evpn**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **mcast-vpn-ipv4**
 - **receive** *boolean*
 - **send** *number*
 - **mcast-vpn-ipv6**
 - **receive** *boolean*
 - **send** *number*
 - **mvpn-ipv4**
 - **receive** *boolean*
 - **send** *number*
 - **mvpn-ipv6**

configure router bgp group add-paths mvpn-ipv6 receive

```

    - receive boolean
    - send number
  - vpn-ipv4
    - receive boolean
    - send (number | keyword)
  - vpn-ipv6
    - receive boolean
    - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-rcv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- dynamic-neighbor
  - interface string
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference
    - max-sessions number
  - match
    - prefix (ipv4-prefix | ipv6-prefix)
      - allowed-peer-as string
      - apply-groups reference
      - apply-groups-exclude reference
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean

```

configure router bgp group ebgp-default-reject-policy import

- **import** *boolean*
- **egress-engineering**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress-peer-engineering-label-unicast** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **vpn-ipv4** *boolean*
- **family**
 - **bgp-ls** *boolean*
 - **evpn** *boolean*
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **flow-vpn-ipv4** *boolean*
 - **flow-vpn-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **ms-pw** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **route-target** *boolean*
 - **sr-policy-ipv4** *boolean*
 - **sr-policy-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*

configure router bgp group import apply-groups-exclude

- **apply-groups-exclude** *reference*
- **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **label-preference** *number*
- **link-bandwidth**
 - **accept-from-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
 - **add-to-received-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
 - **aggregate-used-paths**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
 - **send-to-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)
- **local-as**
 - **as-number** *number*
 - **prepend-global-as** *boolean*
 - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
 - **admin-state** *keyword*
 - **all-stations** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-monitoring**
 - **post-policy** *boolean*
 - **pre-policy** *boolean*
 - **station** *reference*
- **multihop** *number*
- **multipath-eligible** *boolean*
- **next-hop-self** *boolean*
- **next-hop-unchanged**
 - **evpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **origin-validation**
 - **ipv4** *boolean*

configure router bgp group origin-validation ipv6

- **ipv6** *boolean*
- **label-ipv4** *boolean*
- **label-ipv6** *boolean*
- **outbound-route-filtering**
 - **extended-community**
 - **accept-orf** *boolean*
 - **send-orf**
 - **route-target** *string*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **idle-timeout** *number*
- **log-only** *boolean*
- **maximum** *number*
- **post-import** *boolean*
- **threshold** *number*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **segment-routing-v6**
 - **route-advertisement**
 - **drop-routes-with-srv6-tlvs** *boolean*
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **strip-srv6-tlvs** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **static-group** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-next-hop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **ibgp-multipath** *boolean*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **inter-as-vpn** *boolean*
- **keepalive** *number*
- **label-allocation**
 - **label-ipv6**
 - **explicit-null** *boolean*
- **label-preference** *number*

configure router bgp link-state-route-export

- **link-state-route-export** *boolean*
- **link-state-route-import** *boolean*
- **local-as**
 - **as-number** *number*
 - **prepend-global-as** *boolean*
 - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
 - **admin-state** *keyword*
 - **all-stations** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-monitoring**
 - **post-policy** *boolean*
 - **pre-policy** *boolean*
 - **station** *reference*
- **mp-bgp-keep** *boolean*
- **multihop** *number*
- **multipath**
 - **ebgp** *number*
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ebgp** *number*
 - **ibgp** *number*
 - **max-paths** *number*
 - **restrict** *keyword*
 - **unequal-cost** *boolean*
 - **ibgp** *number*
 - **max-paths** *number*
 - **restrict** *keyword*
 - **unequal-cost** *boolean*
- **mvpn-vrf-import-subtype-new** *boolean*
- **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
 - **add-paths**
 - **evpn**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv4**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **label-ipv6**
 - **receive** *boolean*
 - **send** (*number* | *keyword*)
 - **mcast-vpn-ipv4**
 - **receive** *boolean*
 - **send** *number*
 - **mcast-vpn-ipv6**
 - **receive** *boolean*
 - **send** *number*
 - **mvpn-ipv4**
 - **receive** *boolean*
 - **send** *number*
 - **mvpn-ipv6**

configure router bgp neighbor add-paths mvpn-ipv6 receive

```

    - receive boolean
    - send number
  - vpn-ipv4
    - receive boolean
    - send (number | keyword)
  - vpn-ipv6
    - receive boolean
    - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- advertise-ldp-prefix boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- egress-peer-engineering-label-unicast boolean
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference

```

configure router bgp neighbor export apply-groups-exclude

- **apply-groups-exclude** *reference*
- **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
 - **label-ipv4** *boolean*
 - **vpn-ipv4** *boolean*
- **family**
 - **bgp-ls** *boolean*
 - **evpn** *boolean*
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **flow-vpn-ipv4** *boolean*
 - **flow-vpn-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **ms-pw** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*
 - **route-target** *boolean*
 - **sr-policy-ipv4** *boolean*
 - **sr-policy-ipv6** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **group** *reference*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **l2vpn-cisco-interop** *boolean*
- **label-preference** *number*
- **link-bandwidth**
 - **accept-from-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*

configure router bgp neighbor link-bandwidth accept-from-ebgp label-ipv4

```

- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- add-to-received-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- aggregate-used-paths
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- send-to-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
- as-number number
- prepend-global-as boolean
- private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
- admin-state keyword
- all-stations boolean
- apply-groups reference
- apply-groups-exclude reference
- route-monitoring
- post-policy boolean
- pre-policy boolean
- station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- next-hop-unchanged
- evpn boolean
- label-ipv4 boolean
- label-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- origin-validation
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- label-ipv6 boolean
- outbound-route-filtering
- extended-community
- accept-orf boolean
- send-orf
- route-target string
- passive boolean

```


configure router bgp neighbor path-mtu-discovery

- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **idle-timeout** *number*
 - **log-only** *boolean*
 - **maximum** *number*
 - **post-import** *boolean*
 - **threshold** *number*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **segment-routing-v6**
 - **route-advertisement**
 - **drop-routes-with-srv6-tlvs** *boolean*
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **strip-srv6-tlvs** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-next-hop** *boolean*
- **tll-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **neighbor-trust**
 - **evpn** *boolean*
 - **vpn-ipv4** *boolean*
 - **vpn-ipv6** *boolean*
- **next-hop-resolution**
 - **allow-unresolved-leaking** *boolean*
- **labeled-routes**
 - **allow-static** *boolean*
 - **rr-use-route-table** *boolean*
 - **transport-tunnel**
 - **family** *keyword*
 - **allow-flex-algo-fallback** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*

configure router bgp next-hop-resolution labeled-routes transport-tunnel family resolution-filter sr-ospf3

- **sr-ospf3** *boolean*
- **sr-policy** *boolean*
- **sr-te** *boolean*
- **udp** *boolean*
- **use-bgp-routes**
 - **label-ipv6-explicit-null** *boolean*
- **policy** *reference*
- **shortcut-tunnel**
 - **family** *keyword*
 - **allow-flex-algo-fallback** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **disallow-igp** *boolean*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
- **use-bgp-routes** *boolean*
- **vpn-family-policy** *reference*
- **weighted-ecmp** *boolean*
- **optimal-route-reflection**
 - **location** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **primary-ip-address** *string*
 - **primary-ipv6-address** *string*
 - **secondary-ip-address** *string*
 - **secondary-ipv6-address** *string*
 - **tertiary-ip-address** *string*
 - **tertiary-ipv6-address** *string*
- **spf-wait**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **outbound-route-filtering**
 - **extended-community**
 - **accept-orf** *boolean*
 - **send-orf**
 - **route-target** *string*
- **override-tunnel-elc** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **purge-timer** *number*
- **rapid-update**
 - **evpn** *boolean*
 - **l2-vpn** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **mcast-vpn-ipv4** *boolean*
 - **mcast-vpn-ipv6** *boolean*
 - **mdt-safi** *boolean*
 - **mvpn-ipv4** *boolean*
 - **mvpn-ipv6** *boolean*

configure router bgp rapid-update vpn-ipv4

- **vpn-ipv4** *boolean*
- **vpn-ipv6** *boolean*
- **rapid-withdrawal** *boolean*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **rib-management**
 - **ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **label-ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
 - **label-ipv6**
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **route-table-install** *boolean*
- **route-target-list** *string*
- **router-id** *string*
- **rr-vpn-forwarding** *boolean*
- **segment-routing**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
- **segment-routing-v6**
 - **family** *keyword*
 - **add-srv6-tlvs**
 - **locator-name** *reference*
 - **micro-segment-locator-name** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-received-srv6-tlvs** *boolean*
 - **resolution** *keyword*
 - **source-address** *string*
- **selective-label-ip** *keyword*
- **selective-label-ip-prioritization** *boolean*

configure router bgp selective-label-ipv4-install

- **selective-label-ipv4-install** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **sr-policy-import** *boolean*
- **subconfed-vpn-forwarding** *boolean*
- **tcp-mss** *number*
- **third-party-nexthop** *boolean*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **bier**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *keyword*
 - **fast-reroute** *boolean*
 - **template** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sub-domain** *number end number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfr-id** *number*
 - **multi-topology** *keyword*
 - **prefix** *string*
- **class-forwarding** *boolean*
- **confederation**
 - **confed-as-num** *number*
 - **members** *number*
- **description** *string*
- **dhcp-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcpv4** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **force-renews** *boolean*
 - **lease-hold**
 - **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
 - **pool** *string*

configure router dhcp-server dhcpv4 pool apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
- **max-lease-time** *number*
- **min-lease-time** *number*
- **minimum-free**
 - **absolute** *number*
 - **event-when-depleted** *boolean*
 - **percent** *number*
- **nak-non-matching-subnet** *boolean*
- **offer-time** *number*
- **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv4-address** *string*
 - **netbios-node-type** *keyword*
- **subnet** *string*
 - **address-range** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **failover-control-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **exclude-addresses** *string* **end** *string*
 - **maximum-declined** *number*
 - **minimum-free**
 - **absolute** *number*
 - **event-when-depleted** *boolean*
 - **percent** *number*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv4-address** *string*
 - **netbios-node-type** *keyword*
- **pool-selection**
 - **use-gi-address**
 - **scope** *keyword*
 - **use-pool-from-client**
 - **delimiter** *string*
- **user-db** *reference*
- **user-identification** *keyword*

configure router dhcp-server dhcpv6

- **dhcpv6** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-provisioned** *boolean*
 - **defaults**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **options**
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv6-address** *string*
 - **preferred-lifetime** *number*
 - **rebind-time** *number*
 - **renew-time** *number*
 - **valid-lifetime** *number*
 - **description** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **ignore-rapid-commit** *boolean*
 - **interface-id-mapping** *boolean*
 - **lease-hold**
 - **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
 - **lease-query** *boolean*
 - **pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delegated-prefix**
 - **length** *number*
 - **maximum** *number*
 - **minimum** *number*
 - **description** *string*
 - **exclude-prefix** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*

configure router dhcp-server dhcpv6 pool options

```

- options
  - option (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - ascii-string string
  - domain-string string
  - duration number
  - empty
  - hex-string string
  - ipv6-address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - failover-control-type keyword
  - options
    - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - duration number
    - empty
    - hex-string string
    - ipv6-address string
  - preferred-lifetime number
  - prefix-length-threshold number
    - absolute number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - percent number
  - prefix-type
    - pd boolean
    - wan-host boolean
  - rebind-time number
  - renew-time number
  - valid-lifetime number
- prefix-length-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - event-when-depleted boolean
  - minimum-free-percent number
- pool-selection
  - use-link-address
    - scope keyword
  - use-pool-from-client
    - delimiter string
- server-id
  - apply-groups reference
  - apply-groups-exclude reference
  - duid-enterprise
    - ascii-string string
    - hex-string string
  - duid-link-local
  - user-identification keyword
- dns
  - redirect-vprn
    - service reference
    - apply-groups reference
    - apply-groups-exclude reference
    - preference number
- ecmp number
- entropy-label boolean

```

configure router fib-priority

- **fib-priority** *keyword*
- **fib-telemetry** *boolean*
- **firewall**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **domain** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcpv6-server**
 - **name** *string*
 - **router-instance** *string*
 - **nat-group** *reference*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **wlan-gw-group** *reference*
- **flowspec**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter-cam-type** *keyword*
 - **ip-filter-max-size** *number*
 - **ipv6-filter-max-size** *number*
- **gtm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mvpn** *boolean*
 - **provider-tunnel**
 - **inclusive**
 - **rsvp**
 - **admin-state** *keyword*
 - **lsp-template** *reference*
 - **selective**
 - **data-delay-interval** *number*
 - **data-threshold**
 - **group-prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pe-threshold-add** *number*
 - **pe-threshold-delete** *number*
 - **threshold** *number*
 - **maximum-p2mp-spmsi** *number*
 - **rsvp**
 - **admin-state** *keyword*
 - **lsp-template** *reference*
- **gtp**
 - **s11**
 - **interface** *reference*
 - **apn-policy** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer-profile-map**
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer-profile** *reference*
 - **upf-data-endpoint**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe** *reference*
 - **interface** *reference*
 - **uplink**
 - **apn** *string*

configure router gtp uplink apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- pdn-type keyword
- peer-profile-map
  - prefix (ipv4-prefix | ipv6-prefix)
    - apply-groups reference
    - apply-groups-exclude reference
    - peer-profile reference
- icmp-tunneling boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference

```

configure router igmp interface maximum-number-group-sources

- **maximum-number-group-sources** *number*
- **maximum-number-groups** *number*
- **maximum-number-sources** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
- **mc-constraints**
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
- **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **redundant-mcast** *boolean*
- **router-alert-check** *boolean*
- **ssm-translate**
 - **group-range start** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **group-range start** *string* **end** *string* **step** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **subnet-check** *boolean*
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
 - **group-range start** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **tunnel-interface**
 - **ldp-p2mp-root** *reference* **sender-address** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **rsvp-p2mp-root** *reference*
 - **admin-state** *keyword*

configure router igmp tunnel-interface rsvp-p2mp-root apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cflowd-parameters**
 - **sampling** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **direction** *keyword*
 - **sample-profile** (*keyword* | *number*)
 - **type** *keyword*
 - **cpu-protection** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **eth-cfm**
 - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **ccm-tlv-ignore** *keyword*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **facility-fault** *boolean*
 - **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **lbm-svc-act-responder** *boolean*
 - **low-priority-defect** *keyword*
 - **mac-address** *string*
 - **one-way-delay-threshold** *number*
 - **flavor** *keyword*
 - **gre-termination** *boolean*

configure router interface hold-time

- **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **ipv6**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
- **if-attribute**
 - **admin-group** *reference*
 - **delay**
 - **delay-selection** *keyword*
 - **dynamic**
 - **measurement-template** *reference*
 - **twamp-light**
 - **ipv4**
 - **admin-state** *keyword*
 - **destination** *string*
 - **source** *string*
 - **ipv6**
 - **admin-state** *keyword*
 - **destination** *string*
 - **source** *string*
 - **static** *number*
 - **srlg-group** *reference*
- **ingress**
 - **destination-class-lookup** *boolean*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipsec**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-exception** *reference*
 - **ipsec-tunnel** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd**
 - **bfd-designate** *boolean*
 - **bfd-liveness**
 - **dest-ip** *string*
 - **interface** *string*
 - **service-name** *string*
 - **clear-df-bit** *boolean*
 - **copy-traffic-class-upon-decapsulation** *boolean*
 - **description** *string*
 - **encapsulated-ip-mtu** *number*
 - **icmp-generation**
 - **frag-required**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
 - **icmp6-generation**
 - **packet-too-big**

configure router interface ipsec ipsec-tunnel icmp6-generation packet-too-big admin-state

```

    - admin-state keyword
    - interval number
    - message-count number
- ip-mtu number
- key-exchange
  - dynamic
    - auto-establish boolean
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-sap number
  - private-service string
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - replay-window number
  - security-policy
    - id number
    - strict-match boolean
  - ipv6-exception reference
  - public-sap number
  - tunnel-group reference
- ipv4
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - option-82

```

configure router interface ipv4 dhcp option-82 action

```

- action keyword
- circuit-id
  - ascii-tuple
  - if-name
  - ifindex
  - none
  - port-id
  - vlan-ascii-tuple
- remote-id
  - ascii-string string
  - mac
  - none
- vendor-specific-option
  - client-mac-address boolean
  - pool-name boolean
  - port-id boolean
  - service-id boolean
  - string string
  - system-id boolean
- python-policy reference
- relay-plain-bootp boolean
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - learn-unsolicited boolean
  - limit
    - log-only boolean
    - max-entries number
    - threshold number
  - local-proxy-arp boolean
  - proactive-refresh boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean
  - retry-timer number
  - static-neighbor string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-address string
  - static-neighbor-unnumbered
    - mac-address string
  - timeout number
- primary

```

configure router interface ipv4 primary address

- **address** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **broadcast** *keyword*
- **gre-termination** *boolean*
- **prefix-length** *number*
- **track-srrp** *number*
- **qos-route-lookup** *keyword*
- **secondary** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **igp-inhibit** *boolean*
 - **prefix-length** *number*
 - **track-srrp** *number*
- **tcp-mss** *number*
- **unnumbered**
 - **ip-address** *string*
 - **ip-int-name** *string*
 - **system**
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **ssh-reply** *boolean*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **ipv6**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-address-detection** *boolean*
 - **eui-64** *boolean*
 - **prefix-length** *number*
 - **primary-preference** *number*
 - **track-srrp** *number*
- **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*

configure router interface ipv6 bfd multiplier

- **multiplier** *number*
- **receive** *number*
- **transmit-interval** *number*
- **type** *keyword*
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **link-local-address**
 - **address** *string*
 - **duplicate-address-detection** *boolean*
- **local-dhcp-server** *reference*
- **neighbor-discovery**
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-nd** *boolean*
 - **proactive-refresh** *keyword*
 - **proxy-nd-policy** *reference*
 - **reachable-time** *number*
 - **secure-nd**
 - **admin-state** *keyword*
 - **allow-unsecured-msgs** *boolean*
 - **public-key-min-bits** *number*
 - **security-parameter** *number*
 - **stale-time** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router interface ipv6 vrrp bfd-liveness dest-ip

```

    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - interface-name string
    - service-name string
  - init-delay number
  - mac string
  - master-int-inherit boolean
  - message-interval number
  - monitor-oper-group reference
  - ntp-reply boolean
  - oper-group reference
  - owner boolean
  - passive boolean
  - ping-reply boolean
  - policy reference
  - preempt boolean
  - priority number
  - standby-forwarding boolean
  - telnet-reply boolean
  - traceroute-reply boolean
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- ldp-sync-timer
  - end-of-lib boolean
  - seconds number
- load-balancing
  - flow-label-load-balancing boolean
  - ip-load-balancing keyword
  - lsr-load-balancing keyword
  - spi-load-balancing boolean
  - teid-load-balancing boolean
- loopback
- mac string
- mac-accounting boolean
- network-domains
  - network-domain reference
- port (port-and-encap | keyword)
- ptp-hw-assist
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- qos
  - apply-groups reference
  - apply-groups-exclude reference
  - egress-instance number
  - egress-port-redirect-group reference
  - ingress-fp-redirect-group reference
  - ingress-instance number
  - network-policy reference
- strip-label boolean
- tos-marking-state keyword
- untrusted
  - default-forwarding keyword
- urpf-selected-vprns boolean
- vas-if-type keyword
- ipsec
  - multi-chassis-shunt-interface string
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - multi-chassis-shunting-profile string

```

configure router ipsec multi-chassis-shunting-profile apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **multi-chassis-shunt-interface** *reference*
- **security-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ip**
 - **address** *string*
 - **any** *boolean*
 - **local-ipv6**
 - **address** *string*
 - **any** *boolean*
 - **remote-ip**
 - **address** *string*
 - **any** *boolean*
 - **remote-ipv6**
 - **address** *string*
 - **any** *boolean*
- **ipv6**
 - **neighbor-discovery**
 - **reachable-time** *number*
 - **stale-time** *number*
 - **router-advertisement**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rdnss-lifetime** (*keyword* | *number*)
 - **server** *string*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **current-hop-limit** *number*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **server** *string*
 - **managed-configuration** *boolean*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **mtu** *number*
 - **other-stateful-configuration** *boolean*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*keyword* | *number*)
 - **valid-lifetime** (*keyword* | *number*)
 - **reachable-time** *number*
 - **retransmit-time** *number*
 - **router-lifetime** *number*
 - **use-virtual-mac** *boolean*
 - **ipv6-te-router-id**

configure router ipv6-te-router-id interface

- **interface** *reference*
- **isa-service-chaining**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **nat-group** *number*
- **vxlan-vtep-range**
 - **end** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **start** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **isis** *number*
 - **admin-state** *keyword*
 - **advertise-passive-only** *boolean*
 - **advertise-router-capability** *keyword*
 - **advertise-tunnel-link** *boolean*
 - **all-llisis** *string*
 - **all-l2isis** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-address** *string*
 - **authentication-check** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **csnp-authentication** *boolean*
 - **database-export**
 - **bgp-ls-identifier**
 - **value** *number*
 - **igp-identifier** *number*
 - **default-route-tag** *number*
 - **entropy-label**
 - **override-tunnel-elc** *boolean*
 - **export-limit**
 - **log-percent** *number*
 - **number** *number*
 - **export-policy** *reference*
 - **flexible-algorithms**
 - **admin-state** *keyword*
 - **advertise-admin-group** *keyword*
 - **flex-algo** *number*
 - **advertise** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **loopfree-alternate**
 - **micro-loop-avoidance**
 - **participate** *boolean*
 - **graceful-restart**
 - **helper-mode** *boolean*
 - **hello-authentication** *boolean*
 - **hello-padding** *keyword*
 - **ignore-attached-bit** *boolean*
 - **ignore-lsp-errors** *boolean*
 - **ignore-narrow-metric** *boolean*
 - **igp-shortcut**
 - **admin-state** *keyword*
 - **allow-sr-over-srte** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **resolution** *keyword*
 - **resolution-filter**
 - **rsvp** *boolean*
 - **sr-te** *boolean*

configure router isis iid-tlv

- **iid-tlv** *boolean*
- **import-policy** *reference*
- **interface** *string*
 - **adjacency-set** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **ipv4**
 - **include-bfd-tlv** *boolean*
 - **ipv6**
 - **include-bfd-tlv** *boolean*
 - **csnp-interval** *number*
 - **default-instance** *boolean*
 - **flex-algo** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-node-sid**
 - **index** *number*
 - **label** *number*
 - **ipv6-node-sid**
 - **index** *number*
 - **label** *number*
- **hello-authentication** *boolean*
- **hello-authentication-key** *string*
- **hello-authentication-keychain** *reference*
- **hello-authentication-type** *keyword*
- **hello-padding** *keyword*
- **interface-type** *keyword*
- **ipv4-adjacency-sid**
 - **label** *number*
- **ipv4-multicast** *boolean*
- **ipv4-node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
- **ipv6-adjacency-sid**
 - **label** *number*
- **ipv6-multicast** *boolean*
- **ipv6-node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
- **ipv6-unicast** *boolean*
- **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hello-authentication-key** *string*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **hello-padding** *keyword*
 - **ipv4-multicast-metric** *number*
 - **ipv6-multicast-metric** *number*
 - **ipv6-unicast-metric** *number*
 - **metric** *number*
 - **passive** *boolean*
 - **priority** *number*
 - **sd-offset** *number*
 - **sf-offset** *number*
- **level-capability** *keyword*
- **load-balancing-weight** *number*
- **loopfree-alternate**

configure router isis interface loopfree-alternate exclude

- **exclude** *boolean*
- **policy-map**
 - **route-nh-template** *reference*
- **lsp-pacing-interval** *number*
- **mesh-group**
 - **blocked**
 - **value** *number*
- **passive** *boolean*
- **retransmit-interval** *number*
- **sid-protection** *boolean*
- **tag** *number*
- **ipv4-multicast-routing** *keyword*
- **ipv4-routing** *boolean*
- **ipv6-multicast-routing** *keyword*
- **ipv6-routing** *keyword*
- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **level** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **bier**
 - **admin-state** *keyword*
 - **template** *reference*
 - **csnp-authentication** *boolean*
 - **database-export-exclude** *boolean*
 - **default-ipv4-multicast-metric** *number*
 - **default-ipv6-multicast-metric** *number*
 - **default-ipv6-unicast-metric** *number*
 - **default-metric** *number*
 - **external-preference** *number*
 - **hello-authentication** *boolean*
 - **hello-padding** *keyword*
 - **loopfree-alternate-exclude** *boolean*
 - **lsp-mtu-size** *number*
 - **preference** *number*
 - **psnp-authentication** *boolean*
 - **wide-metrics-only** *boolean*
- **level-capability** *keyword*
- **link-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-multicast-metric-offset** *number*
 - **ipv4-unicast-metric-offset** *number*
 - **ipv6-multicast-metric-offset** *number*
 - **ipv6-unicast-metric-offset** *number*
 - **member** *reference*
 - **oper-members** *number*
 - **revert-members** *number*
- **loopfree-alternate**
 - **augment-route-table** *boolean*
 - **exclude**
 - **prefix-policy** *reference*
 - **multi-homed-prefix**
 - **preference** *keyword*
 - **remote-lfa**
 - **max-pq-cost** *number*

configure router isis loopfree-alternate remote-lfa node-protect

```

- node-protect
  - max-pq-nodes number
- ti-lfa
  - max-sr-frr-labels number
  - max-srv6-frr-sids number
  - node-protect
- lsp-lifetime number
- lsp-minimum-remaining-lifetime number
- lsp-mtu-size number
- lsp-refresh
  - half-lifetime boolean
  - interval number
- mru-mismatch-detection boolean
- multi-topology
  - ipv4-multicast boolean
  - ipv6-multicast boolean
  - ipv6-unicast boolean
- multicast-import
  - ipv4 boolean
  - ipv6 boolean
- overload
  - max-metric boolean
- overload-export-external boolean
- overload-export-interlevel boolean
- overload-on-boot
  - max-metric boolean
  - timeout number
- poi-tlv boolean
- prefix-attributes-tlv boolean
- prefix-limit
  - limit number
  - log-only boolean
  - overload-timeout (number | keyword)
  - warning-threshold number
- psnp-authentication boolean
- reference-bandwidth number
- rib-priority
  - high
    - prefix-list reference
    - tag number
- router-id string
- segment-routing
  - adj-sid-hold (number | keyword)
  - adjacency-set number
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - family keyword
    - parallel boolean
    - sid
      - label number
  - adjacency-sid
    - allocate-dual-sids boolean
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- class-forwarding boolean
- egress-statistics
  - adj-set boolean
  - adj-sid boolean
  - node-sid boolean
- entropy-label boolean
- export-tunnel-table keyword
- ingress-statistics

```

configure router isis segment-routing ingress-statistics adj-set

```

- adj-set boolean
- adj-sid boolean
- node-sid boolean
- mapping-server
- admin-state keyword
- node-sid-map number
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-n-flag boolean
  - ip-prefix string
  - level-capability keyword
  - range number
  - set-flags
    - bit-s boolean
- maximum-sid-depth
- override-bmi number
- override-erld number
- micro-loop-avoidance
- fib-delay number
- prefix-sid-range
- global
- max-index number
- start-label number
- srlb reference
- tunnel-mtu number
- tunnel-table-pref number
- segment-routing-v6
- adj-sid-hold (number | keyword)
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- locator reference
- apply-groups reference
- apply-groups-exclude reference
- level keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - metric number
- level-capability keyword
- multi-topology
- mt0 boolean
- mt2 boolean
- tag number
- micro-segment-locator reference
- apply-groups reference
- apply-groups-exclude reference
- level keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - metric number
- level-capability keyword
- multi-topology
- mt0 boolean
- mt2 boolean
- tag number
- standard-multi-instance boolean
- strict-adjacency-check boolean
- summary-address (ipv4-prefix | ipv6-prefix)
- algorithm number
- apply-groups reference
- apply-groups-exclude reference
- level-capability keyword
- route-tag number
- suppress-attached-bit boolean

```

configure router isis system-id

```

- system-id string
- timers
  - lsp-wait
    - lsp-initial-wait number
    - lsp-max-wait number
    - lsp-second-wait number
  - spf-wait
    - spf-initial-wait number
    - spf-max-wait number
    - spf-second-wait number
- traffic-engineering boolean
- traffic-engineering-options
  - advertise-delay boolean
  - application-link-attributes
    - legacy boolean
  - ipv6 boolean
- unicast-import
  - ipv4 boolean
  - ipv6 boolean
- l2tp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avp-hiding keyword
  - challenge boolean
  - destruct-timeout number
  - ethernet-tunnel
    - reconnect-timeout (number | keyword)
  - exclude-avps
    - calling-number boolean
    - initial-rx-lcp-conf-req boolean
  - failover
    - recovery-max-session-lifetime number
    - recovery-method keyword
    - recovery-time number
    - track-srrp reference
      - apply-groups reference
      - apply-groups-exclude reference
      - peer reference
      - sync-tag string
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avp-hiding keyword
    - challenge keyword
    - description string
    - destruct-timeout number
    - ethernet-tunnel
      - reconnect-timeout (number | keyword)
    - failover
      - recovery-method keyword
      - recovery-time number
    - hello-interval (number | keyword)
    - idle-timeout (number | keyword)
    - l2tpv3
      - cookie-length (number | keyword)
      - digest-type keyword
      - nonce-length number
      - password string
      - private-tcp-mss-adjust (number | keyword)
      - public-tcp-mss-adjust (number | keyword)
      - pw-cap-list
        - ethernet boolean

```


configure router l2tp group l2tpv3 pw-cap-list ethernet-vlan

```

- ethernet-vlan boolean
- rem-router-id string
- track-password-change boolean
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave boolean
- max-fragment-delay (number | keyword)
- max-links number
- reassembly-timeout number
- short-sequence-numbers boolean
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation boolean
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm boolean
- lcp-ignore-magic-numbers boolean
- mtu number
- proxy-authentication boolean
- proxy-lcp boolean
- reject-disabled-ncp boolean
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- protocol keyword
- radius-accounting-policy reference
- receive-window-size number
- session-assign-method keyword
- session-limit (number | keyword)
- tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- auto-establish boolean
- avp-hiding keyword
- challenge keyword
- description string
- destruct-timeout number
- failover
- recovery-method keyword
- recovery-time number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)

```

configure router l2tp group tunnel l2tpv3

```

- l2tpv3
  - private-tcp-mss-adjust (number | keyword)
  - public-tcp-mss-adjust (number | keyword)
- lac
  - df-bit keyword
- lns
  - lns-group reference
  - load-balance-method keyword
- mlppp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - endpoint
    - ip (ipv4-address | keyword)
    - mac (mac-address | keyword)
  - interleave keyword
  - max-fragment-delay number
  - max-links number
  - reassembly-timeout number
  - short-sequence-numbers keyword
- ppp
  - authentication keyword
  - authentication-policy string
  - chap-challenge-length
    - end number
    - start number
  - default-group-interface
    - interface string
    - service-name string
  - ipcp-subnet-negotiation keyword
  - keepalive
    - interval number
    - multiplier number
  - lcp-force-ack-accm keyword
  - lcp-ignore-magic-numbers keyword
  - mtu number
  - proxy-authentication keyword
  - proxy-lcp keyword
  - reject-disabled-ncp keyword
  - user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- peer string
- preference number
- radius-accounting-policy reference
- receive-window-size number
- remote-name string
- session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
  - sequencing-required boolean
- l2tpv3
  - cookie-length number
  - digest-type keyword
  - nonce-length number
  - password string
  - private-tcp-mss-adjust number
  - public-tcp-mss-adjust number
  - transport-type

```

configure router l2tp l2tpv3 transport-type ip

```

- ip boolean
- lac
- calling-number-format string
- cisco-nas-port
  - ethernet string
- df-bit boolean
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- next-attempt keyword
- password string
- peer-address-change-policy keyword
- radius-accounting-policy reference
- receive-window-size number
- replace-result-code
  - cdn-invalid-dst boolean
  - cdn-permanent-no-facilities boolean
  - cdn-temporary-no-facilities boolean
- rtm-debounce-time (number | keyword)
- session-assign-method keyword
- session-limit number
- tunnel-selection-blacklist
  - add-tunnel-on
    - address-change-timeout boolean
    - cdn-err-code boolean
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
    - stop-ccn-err-code boolean
    - stop-ccn-other boolean
    - tx-cdn-not-established-in-time boolean
  - max-list-length (number | keyword)
  - max-time number
  - timeout-action keyword
- tunnel-session-limit number
- ldp
- admin-state keyword
- aggregate-prefix-match
  - admin-state keyword
  - prefix-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- class-forwarding keyword
- consider-system-ip-in-gcp boolean
- egress-statistics
  - fec-prefix (ipv4-prefix | ipv6-prefix)
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
  - entropy-label-capability boolean
- export-policy reference
- export-tunnel-table reference
- fast-reroute
  - backup-sr-tunnel boolean
- fec-originate (ipv4-prefix | ipv6-prefix)
  - advertised-label number
  - apply-groups reference
  - apply-groups-exclude reference
  - interface string
  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - pop boolean

```

configure router ldp fec-originate swap-label

- **swap-label** *number*
- **generate-basic-fec-only** *boolean*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **maximum-recovery-time** *number*
 - **neighbor-liveness-time** *number*
- **implicit-null-label** *boolean*
- **import-mcast-policy** *reference*
- **import-pmsi-routes**
 - **mvpn** *boolean*
 - **mvpn-no-export-community** *boolean*
- **import-policy** *reference*
- **import-tunnel-table** *reference*
- **interface-parameters**
 - **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **ipv4**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fec-type-capability**
 - **p2mp-ipv4** *boolean*
 - **p2mp-ipv6** *boolean*
 - **prefix-ipv4** *boolean*
 - **prefix-ipv6** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **interface-name** *reference*
 - **transport-address** *keyword*
 - **ipv6**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fec-type-capability**
 - **p2mp-ipv4** *boolean*
 - **p2mp-ipv6** *boolean*
 - **prefix-ipv4** *boolean*
 - **prefix-ipv6** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **format-32bit** *boolean*
 - **interface-name** *reference*
 - **transport-address** *keyword*
 - **load-balancing-weight** *number*
 - **ipv4**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **keepalive**

configure router ldp interface-parameters ipv4 keepalive factor

```

    - factor number
    - timeout number
    - transport-address keyword
- ipv6
  - hello
    - factor number
    - timeout number
  - keepalive
    - factor number
    - timeout number
    - transport-address keyword
- label-withdrawal-delay number
- ldp-shortcut
  - ipv4 boolean
  - ipv6 boolean
- legacy-ipv4-lsr-interop boolean
- lsp-bfd reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - priority number
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- max-ecmp-routes number
- mcast-upstream-asbr-frr boolean
- mcast-upstream-frr boolean
- mp-mbb-time number
- prefer-mcast-tunnel-in-tunnel boolean
- prefer-protocol-stitching boolean
- prefer-tunnel-in-tunnel boolean
- resolve-root-using keyword
- session-parameters
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - adv-adj-addr-only boolean
    - adv-local-lsr-id boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - community string
    - dod-label-distribution boolean
    - export-addresses reference
    - export-prefixes reference
    - fec-limit
      - limit number
      - log-only boolean
      - threshold number
    - fec-type-capability
      - p2mp boolean
      - prefix-ipv4 boolean
      - prefix-ipv6 boolean
    - fec129-cisco-interop boolean
    - import-prefixes reference
    - pe-id-mac-flush-interop boolean
- shortcut-local-ttl-propagate boolean
- shortcut-transit-ttl-propagate boolean
- targeted-session
  - auto-rx
    - ipv4
      - admin-state keyword
      - tunneling boolean
  - auto-tx
    - ipv4
      - admin-state keyword

```

configure router ldp targeted-session auto-tx ipv4 tunneling

- **tunneling** *boolean*
- **export-prefixes** *reference*
- **import-prefixes** *reference*
- **ipv4**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
- **ipv6**
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
- **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **format-32bit** *boolean*
 - **interface-name** *reference*
 - **mcast-tunneling**
 - **lsp** *string*
 - **tunneling**
 - **lsp** *string*
- **peer-template** *string*
 - **admin-state** *keyword*
 - **adv-local-lsr-id** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **community** *string*
 - **hello**
 - **factor** *number*
 - **timeout** *number*
 - **hello-reduction**
 - **admin-state** *keyword*
 - **factor** *number*
 - **keepalive**
 - **factor** *number*
 - **timeout** *number*
 - **local-lsr-id**
 - **interface-name** *reference*
 - **mcast-tunneling** *boolean*
 - **tunneling** *boolean*

configure router ldp targeted-session peer-template-map

```

- peer-template-map reference
  - apply-groups reference
  - apply-groups-exclude reference
  - policy-map reference
- resolve-v6-prefix-over-shortcut boolean
- sdp-auto-targeted-session boolean
- tcp-session-parameters
  - authentication-key string
  - authentication-keychain reference
  - peer-transport (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - path-mtu-discovery boolean
    - ttl-security number
- tunnel-down-damp-time number
- tunnel-table-pref number
- weighted-ecmp boolean
- leak-export
  - leak-export-limit number
  - policy-name (policy-expr-string | string)
- lsp-bfd
  - bfd-sessions number
  - tail-end
    - apply-groups reference
    - apply-groups-exclude reference
    - multiplier number
    - receive-interval number
    - transmit-interval number
- mc-maximum-routes
  - log-only boolean
  - threshold number
  - value number
- mld
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword

```

configure router mld group-interface apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **import-policy** *reference*
- **maximum-number-group-sources** *number*
- **maximum-number-groups** *number*
- **maximum-number-sources** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **query-source-address** *string*
- **router-alert-check** *boolean*
- **sub-hosts-only** *boolean*
- **subnet-check** *boolean*
- **version** *keyword*
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
 - **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
 - **query-interval** *number*
 - **query-last-member-interval** *number*
 - **query-response-interval** *number*
 - **router-alert-check** *boolean*
 - **ssm-translate**
 - **group-range start** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
 - **group-range start** *string* **end** *string* **step** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**

configure router mld interface version

- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
 - **group-range** *start string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
- **mpls**
 - **admin-group-frr** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bandwidth-multipliers**
 - **adjust-multiplier** *number*
 - **sample-multiplier** *number*
 - **auto-lsp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **one-hop** *boolean*
 - **policy** *reference*
 - **aux-stats**
 - **sr** *boolean*
 - **bypass-resignal-timer** *number*
 - **class-forwarding-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-set** *number*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **forwarding-set** *number*
 - **cspf-on-loose-hop** *boolean*
 - **dynamic-bypass** *boolean*
 - **entropy-label**
 - **rsvp-te** *boolean*
 - **sr-te** *boolean*
 - **exponential-backoff-retry** *boolean*
 - **forwarding-policies**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **forwarding-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **binding-label** *number*
 - **egress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **ingress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **metric** *number*
 - **next-hop-group** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-next-hop**

configure router mpls forwarding-policies forwarding-policy next-hop-group backup-next-hop apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - pushed-labels number
      - apply-groups reference
      - apply-groups-exclude reference
      - label number
    - load-balancing-weight number
    - primary-next-hop
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - pushed-labels number
        - apply-groups reference
        - apply-groups-exclude reference
        - label number
    - resolution-type keyword
    - preference number
    - revert-timer number
    - tunnel-table-pref number
  - reserved-label-block reference
- frr-object boolean
- hold-timer number
- ingress-statistics
  - lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) lsp-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - stat-mode keyword
  - p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
  - p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
- interface reference
  - admin-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - label-map number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pop
  - swap
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
    - out-label (number | keyword)

```

configure router mpls interface srlg-group

- **srlg-group** *reference*
- **te-metric** *number*
- **least-fill-min-thd** *number*
- **least-fill-reoptim-thd** *number*
- **logger-event-bundling** *boolean*
- **lsp** *string*
 - **adaptive** *boolean*
 - **admin-state** *keyword*
 - **admin-tag** *reference*
 - **adspec** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bandwidth**
 - **adjust-down**
 - **bw** *number*
 - **percent** *number*
 - **adjust-up**
 - **bw** *number*
 - **percent** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sampling-weight** *number*
 - **max-bandwidth** *number*
 - **min-bandwidth** *number*
 - **monitor-bandwidth** *boolean*
 - **multipliers**
 - **adjust-multiplier** *number*
 - **sample-multiplier** *number*
 - **overflow-limit**
 - **bw** *number*
 - **number** *number*
 - **threshold** *number*
 - **underflow-limit**
 - **bw** *number*
 - **number** *number*
 - **threshold** *number*
 - **use-last-adj-bw**
 - **secondary-retry-limit** (*number* | *keyword*)
- **bfd**
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **lsp-ping-interval** (*number* | *keyword*)
 - **return-path-label** *number*
 - **wait-for-up-timer** *number*
- **bgp-shortcut** *boolean*
- **bgp-transport-tunnel** *boolean*
- **binding-sid** *number*
- **class-forwarding**
 - **forwarding-set**
 - **policy** *reference*
 - **set** *number*
- **class-type** *number*
- **egress-statistics**
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-stats** *boolean*
 - **stat-mode** *keyword*
- **entropy-label** *keyword*

configure router mpls lsp exclude-admin-group

- **exclude-admin-group** *reference*
- **exclude-node** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **fallback-path-computation-method** *keyword*
- **fast-reroute**
 - **frr-method** *keyword*
 - **hop-limit** *number*
 - **node-protect** *boolean*
 - **propagate-admin-group** *boolean*
- **from** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **hop-limit** *number*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **allow-sr-over-srte** *boolean*
 - **lfa-type** *keyword*
 - **relative-metric** *number*
- **include-admin-group** *reference*
- **label-stack-reduction** *boolean*
- **ldp-over-rsvp** *boolean*
- **least-fill** *boolean*
- **load-balancing-weight** *number*
- **local-sr-protection** *keyword*
- **lsp-self-ping** *keyword*
- **main-ct-retry-limit** *number*
- **max-sr-labels**
 - **additional-frr-labels** *number*
 - **label-stack-size** *number*
- **metric** *number*
- **metric-type** *keyword*
- **override-tunnel-elc** *boolean*
- **p2mp-id** *number*
- **path-computation-method** *keyword*
- **path-profile** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path-group** *number*
- **pce-associations**
 - **diversity** *reference*
 - **policy** *reference*
- **pce-control** *boolean*
- **pce-report** *keyword*
- **primary** *reference*
 - **adaptive** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-class-type** *number*
 - **bandwidth** *number*
 - **bfd**
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **lsp-ping-interval** (*number | keyword*)
 - **return-path-label** *number*
 - **wait-for-up-timer** *number*
- **class-type** *number*
- **exclude-admin-group**
 - **group** *reference*
- **hop-limit** *number*
- **include-admin-group**
 - **group** *reference*
- **priority**
 - **hold-priority** *number*
 - **setup-priority** *number*
- **record** *boolean*
- **record-label** *boolean*

configure router mpls lsp primary-p2mp-instance

```

- primary-p2mp-instance string
  - adaptive boolean
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - exclude-admin-group
    - group reference
  - hop-limit number
  - include-admin-group
    - group reference
  - priority
    - hold-priority number
    - setup-priority number
  - record boolean
  - record-label boolean
  - s2l-path reference to (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- propagate-admin-group boolean
- retry-limit number
- retry-timer number
- revert-timer number
- rsvp-resv-style keyword
- secondary reference
  - adaptive boolean
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - bfd
    - bfd-liveness boolean
    - bfd-template reference
    - lsp-ping-interval (number | keyword)
    - return-path-label number
    - wait-for-up-timer number
  - class-type number
  - exclude-admin-group
    - group reference
  - hop-limit number
  - include-admin-group
    - group reference
  - path-preference number
  - priority
    - hold-priority number
    - setup-priority number
  - record boolean
  - record-label boolean
  - srlg boolean
  - standby boolean
- soft-preemption boolean
- to (ipv4-address-no-zone | ipv6-address-no-zone)
- type keyword
- vprn-auto-bind boolean
- lsp-bsid-block reference
- lsp-history
  - admin-state keyword
- lsp-init-retry-timeout number
- lsp-self-ping
  - interval number
  - rsvp-te boolean
  - timeout number
  - timeout-action keyword

```

configure router mpls lsp-template

- **lsp-template** *string*
- **adaptive** *boolean*
- **admin-state** *keyword*
- **admin-tag** *reference*
- **adspec** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auto-bandwidth**
 - **adjust-down**
 - **bw** *number*
 - **percent** *number*
 - **adjust-up**
 - **bw** *number*
 - **percent** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sampling-weight** *number*
 - **max-bandwidth** *number*
 - **min-bandwidth** *number*
 - **monitor-bandwidth** *boolean*
 - **multipliers**
 - **adjust-multiplier** *number*
 - **sample-multiplier** *number*
 - **overflow-limit**
 - **bw** *number*
 - **number** *number*
 - **threshold** *number*
 - **underflow-limit**
 - **bw** *number*
 - **number** *number*
 - **threshold** *number*
- **backup-class-type** *number*
- **bandwidth** *number*
- **bfd**
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **lsp-ping-interval** (*number* | *keyword*)
 - **return-path-label** *number*
 - **wait-for-up-timer** *number*
- **bgp-shortcut** *boolean*
- **bgp-transport-tunnel** *boolean*
- **binding-sid** *boolean*
- **class-forwarding**
 - **forwarding-set**
 - **policy** *reference*
 - **set** *number*
- **class-type** *number*
- **default-path** *reference*
- **egress-statistics**
 - **accounting-policy** *reference*
 - **collect-stats** *boolean*
 - **stat-mode** *keyword*
- **entropy-label** *keyword*
- **exclude-admin-group** *reference*
- **fallback-path-computation-method** *keyword*
- **family** *keyword*
- **fast-reroute**
 - **frr-method** *keyword*
 - **hop-limit** *number*
 - **node-protect** *boolean*

configure router mpls lsp-template fast-reroute propagate-admin-group

- **propagate-admin-group** *boolean*
- **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **hop-limit** *number*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **allow-sr-over-srte** *boolean*
 - **lfa-type** *keyword*
 - **relative-metric** *number*
- **include-admin-group** *reference*
- **label-stack-reduction** *boolean*
- **ldp-over-rsvp** *boolean*
- **least-fill** *boolean*
- **load-balancing-weight** *number*
- **local-sr-protection** *keyword*
- **lsp-self-ping** *keyword*
- **main-ct-retry-limit** *number*
- **max-sr-labels**
 - **additional-frr-labels** *number*
 - **label-stack-size** *number*
- **metric** *number*
- **metric-type** *keyword*
- **override-tunnel-elc** *boolean*
- **path-computation-method** *keyword*
- **path-profile** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **path-group** *number*
- **pce-associations**
 - **diversity** *reference*
 - **policy** *reference*
- **pce-control** *boolean*
- **pce-report** *keyword*
- **priority**
 - **hold-priority** *number*
 - **setup-priority** *number*
- **propagate-admin-group** *boolean*
- **record** *boolean*
- **record-label** *boolean*
- **retry-limit** *number*
- **retry-timer** *number*
- **soft-preemption** *boolean*
- **template-id** (*number* | *keyword*)
- **type** *keyword*
- **vprn-auto-bind** *boolean*
- **max-bypass-associations** *number*
- **max-bypass-plr-associations** *number*
- **mbb-prefer-current-hops** *boolean*
- **p2mp-resignal-timer** *number*
- **p2mp-s2l-fast-retry** *number*
- **p2p-active-path-fast-retry** *number*
- **path** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hop** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **sid-label** *number*
 - **type** *keyword*
- **pce-init-lsp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sr-te**

configure router mpls pce-init-lsp sr-te admin-state

- **admin-state** *keyword*
- **pce-report**
 - **rsvp-te** *boolean*
 - **sr-te** *boolean*
- **resignal-on-igp-overload** *boolean*
- **resignal-timer** *number*
- **retry-on-igp-overload** *boolean*
- **secondary-fast-retry-timer** *number*
- **shortcut-local-ttl-propagate** *boolean*
- **shortcut-transit-ttl-propagate** *boolean*
- **sr-te-resignal**
 - **resignal-on-igp-event** *boolean*
 - **resignal-on-igp-overload** *boolean*
 - **resignal-timer** *number*
- **srlg-database**
 - **router-id** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface** *string* **srlg-group** *reference*
- **srlg-frr** *keyword*
- **static-lsp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **metric** *number*
 - **push**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop** *string*
 - **out-label** (*number* | *keyword*)
 - **to** *string*
- **static-lsp-fast-retry** *number*
- **strict-ero-nhop-direct-resolution** *boolean*
- **tunnel-table-pref**
 - **rsvp-te** *number*
 - **sr-te** *number*
- **user-srlg-db** *boolean*
- **mpls-labels**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bgp-labels-hold-timer** *number*
 - **reserved-label-block** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end-label** *number*
 - **start-label** *number*
- **sr-labels**
 - **end** *number*
 - **start** *number*
- **static-label-range** *number*
- **msdp**
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **data-encapsulation** *boolean*
 - **export-policy** *reference*
 - **group** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **export-policy** *reference*

configure router msdp group import-policy

- **import-policy** *reference*
- **local-address** *string*
- **mode** *keyword*
- **peer** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **default-peer** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **local-address** *string*
 - **receive-message-rate**
 - **rate** *number*
 - **threshold** *number*
 - **time** *number*
 - **receive-message-rate**
 - **rate** *number*
 - **threshold** *number*
 - **time** *number*
- **import-policy** *reference*
- **local-address** *string*
- **peer** *string*
 - **active-source-limit** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **default-peer** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **local-address** *string*
 - **receive-message-rate**
 - **rate** *number*
 - **threshold** *number*
 - **time** *number*
 - **receive-message-rate**
 - **rate** *number*
 - **threshold** *number*
 - **time** *number*
- **rpf-table** *keyword*
- **source** *string*
 - **active-source-limit** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source-active-cache-lifetime** *number*
- **mss-adjust**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **nat-group** *number*
 - **segment-size** *number*
- **mtrace2**
 - **admin-state** *keyword*
 - **udp-port** *number*
- **multicast-info-policy** *reference*
- **nat**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inside**
 - **l2-aware**
 - **force-unique-ip-addresses** *boolean*
 - **subscribers** *string*
 - **large-scale**

configure router nat inside large-scale dnat-only

- **dnat-only**
 - **source-prefix-list** *reference*
- **dual-stack-lite**
 - **admin-state** *keyword*
 - **deterministic**
 - **prefix-map** *string nat-policy reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **map** *string to string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **first-outside-address** *string*
 - **endpoint** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-fragmentation** *keyword*
 - **min-first-fragment-size-rx** *number*
 - **reassembly** *boolean*
 - **tunnel-mtu** *number*
 - **max-subscriber-limit** *number*
 - **subscriber-prefix-length** *number*
- **nat-policy** *reference*
- **nat44**
 - **destination-prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **nat-policy** *reference*
 - **deterministic**
 - **prefix-map** *string nat-policy reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **map** *string to string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **first-outside-address** *string*
 - **max-subscriber-limit** *number*
 - **nat-import** *reference*
- **nat64**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-zero-ipv4-checksum** *boolean*
 - **insert-ipv6-fragment-header** *boolean*
 - **ip-fragmentation** *keyword*
 - **ipv6-mtu** *number*
 - **prefix** *string*
 - **subscriber-prefix-length** *number*
 - **tos**
 - **downstream**
 - **use-ipv4** *boolean*
 - **upstream**
 - **set-tos** *(keyword | number)*
- **redundancy**
 - **peer** *string*
 - **peer6** *string*
 - **steering-route** *string*
- **subscriber-identification**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **attribute**
 - **type** *keyword*

configure router nat inside large-scale subscriber-identification attribute vendor

- **vendor** *keyword*
- **description** *string*
- **drop-unidentified-traffic** *boolean*
- **radius-proxy-server**
 - **router-instance** *string*
 - **server** *string*
- **map**
 - **map-domain** *reference*
- **outside**
 - **dnat-only**
 - **route-limit** *number*
 - **filters**
 - **downstream**
 - **ipv4** *reference*
 - **ipv6** *reference*
 - **upstream**
 - **ipv4** *reference*
 - **ipv6** *reference*
- **mtu** *number*
- **pool** *string*
 - **address-pooling** *keyword*
 - **address-range** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **drain** *boolean*
 - **admin-state** *keyword*
 - **applications**
 - **agnostic** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **icmp-echo-reply** *boolean*
 - **l2-aware**
 - **default-host**
 - **inside-router-instance** *string*
 - **ip-address** *string*
 - **rate-limit** *number*
 - **external-assignment** *boolean*
 - **port-block-extension**
 - **ports** *number*
 - **subscriber**
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **subscriber-limit** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **large-scale**
 - **default-host**
 - **inside-router-instance** *string*
 - **ip-address** *string*
 - **rate-limit** *number*
 - **deterministic**
 - **port-reservation** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **redundancy**
 - **admin-state** *keyword*
 - **export-route** *string*
 - **follow**
 - **name** *string*

configure router nat outside pool large-scale redundancy follow router-instance

```

    - router-instance string
      - monitor-route string
    - subscriber-limit number
  - mode keyword
  - nat-group reference
  - port-forwarding
    - dynamic-block-reservation boolean
    - range-end number
    - range-start number
  - port-reservation
    - port-blocks number
    - ports number
  - type keyword
  - watermarks
    - high number
    - low number
  - wlan-gw-group reference
- network-domains
  - network-domain string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
- origin-validation
  - apply-groups reference
  - apply-groups-exclude reference
  - rpki-session (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connect-retry number
    - description string
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - port number
    - refresh-time
      - hold-time number
      - value number
    - stale-time number
  - static-entry (ipv4-prefix | ipv6-prefix) upto number origin-as number
    - apply-groups reference
    - apply-groups-exclude reference
    - valid boolean
- ospf number
  - admin-state keyword
  - advertise-router-capability keyword
  - advertise-tunnel-link boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range string
      - advertise boolean
      - apply-groups reference
      - apply-groups-exclude reference
  - bier
    - admin-state keyword
    - template reference
  - blackhole-aggregate boolean
  - database-export-exclude boolean
  - export-policy reference
  - import-policy reference
  - interface string
    - adjacency-set reference

```

configure router ospf area interface adjacency-sid

- **adjacency-sid**
 - **label** *number*
- **admin-state** *keyword*
- **advertise-router-capability** *boolean*
- **advertise-subnet** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **authentication-type** *keyword*
- **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **strict** *boolean*
 - **strict-mode-holddown** *number*
- **dead-interval** *number*
- **flex-algo** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **node-sid**
 - **index** *number*
 - **label** *number*
- **hello-interval** *number*
- **interface-type** *keyword*
- **load-balancing-weight** *number*
- **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
- **lsa-filter-out** *keyword*
- **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
- **metric** *number*
- **mtu** *number*
- **neighbor** *string*
- **node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
- **passive** *boolean*
- **poll-interval** *number*
- **priority** *number*
- **retransmit-interval** *number*
- **rib-priority** *keyword*
- **sid-protection** *boolean*
- **transit-delay** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
 - **area-range** *string*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*
 - **type-nssa** *boolean*
 - **redistribute-external** *boolean*
 - **summaries** *boolean*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure router ospf area virtual-link apply-groups-exclude

- **apply-groups-exclude** *reference*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **authentication-type** *keyword*
- **dead-interval** *number*
- **hello-interval** *number*
- **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
- **retransmit-interval** *number*
- **transit-delay** *number*
- **asbr**
 - **trace-path** (*number* | *keyword*)
- **compatible-rfc1583** *boolean*
- **database-export**
 - **bgp-ls-identifier**
 - **value** *number*
 - **igp-identifier** *number*
- **entropy-label**
 - **override-tunnel-elc** *boolean*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
 - **interval** *number*
 - **limit** *number*
- **external-preference** *number*
- **flexible-algorithms**
 - **admin-state** *keyword*
 - **advertise-admin-group** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **flex-algo** *number*
 - **advertise** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **loopfree-alternate**
 - **participate** *boolean*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **strict-lsa-checking** *boolean*
- **igp-shortcut**
 - **admin-state** *keyword*
 - **allow-sr-over-srte** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **resolution** *keyword*
 - **resolution-filter**
 - **rsvp** *boolean*
 - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **loopfree-alternate**
 - **augment-route-table** *boolean*
 - **exclude**
 - **prefix-policy** *reference*
 - **multi-homed-prefix**

configure router ospf loopfree-alternate multi-homed-prefix preference

- **preference** *keyword*
- **remote-lfa**
 - **max-pq-cost** *number*
 - **node-protect**
 - **max-pq-nodes** *number*
- **ti-lfa**
 - **max-sr-frr-labels** *number*
 - **node-protect**
- **multi-instance** *boolean*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **segment-routing**
 - **adj-sid-hold** (*number* | *keyword*)
 - **adjacency-set** *number*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parallel** *boolean*
 - **sid**
 - **label** *number*
 - **adjacency-sid**
 - **allocate-dual-sids** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-node-sid**
 - **index** *number*
 - **ip-prefix** *string*
 - **label** *number*
 - **class-forwarding** *boolean*
 - **egress-statistics**
 - **adj-set** *boolean*
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **entropy-label** *boolean*
 - **export-tunnel-table** *keyword*
 - **ingress-statistics**
 - **adj-set** *boolean*
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **mapping-server**
 - **admin-state** *keyword*
 - **node-sid-map** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-prefix** *string*
 - **range** *number*
 - **scope**

configure router ospf segment-routing mapping-server node-sid-map scope area

```

    - area reference
      - as
    - maximum-sid-depth
      - override-bmi number
      - override-erld number
    - prefix-sid-range
      - global
      - max-index number
      - start-label number
    - srlb reference
    - tunnel-mtu number
    - tunnel-table-pref number
  - timers
    - incremental-spf-wait number
    - lsa-accumulate number
    - lsa-arrival number
    - lsa-generate
      - lsa-initial-wait number
      - lsa-second-wait number
      - max-lsa-wait number
    - redistribute-delay number
    - spf-wait
      - spf-initial-wait number
      - spf-max-wait number
      - spf-second-wait number
  - traffic-engineering boolean
  - traffic-engineering-options
    - advertise-delay boolean
    - sr-te keyword
  - unicast-import boolean
- ospf3 number
  - admin-state keyword
  - advertise-router-capability keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range (ipv4-prefix | ipv6-prefix)
      - advertise boolean
      - apply-groups reference
      - apply-groups-exclude reference
    - blackhole-aggregate boolean
    - database-export-exclude boolean
    - export-policy reference
    - extended-lsa keyword
    - import-policy reference
  - interface string
    - admin-state keyword
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - inbound reference
      - outbound reference
    - bfd-liveness
      - remain-down-on-failure boolean
      - strict boolean
      - strict-mode-holddown number
    - dead-interval number
    - hello-interval number
    - interface-type keyword
    - load-balancing-weight number

```


configure router ospf3 area interface loopfree-alternate

- **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
- **lsa-filter-out** *keyword*
- **metric** *number*
- **mtu** *number*
- **neighbor** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **node-sid**
 - **clear-n-flag** *boolean*
 - **index** *number*
 - **label** *number*
- **passive** *boolean*
- **poll-interval** *number*
- **priority** *number*
- **retransmit-interval** *number*
- **rib-priority** *keyword*
- **sid-protection** *boolean*
- **transit-delay** *number*
- **key-rollover-interval** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
 - **area-range** (*ipv4-prefix* | *ipv6-prefix*)
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*
 - **type-nssa** *boolean*
 - **redistribute-external** *boolean*
 - **summaries** *boolean*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **inbound** *reference*
 - **outbound** *reference*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **retransmit-interval** *number*
 - **transit-delay** *number*
- **asbr**
- **database-export**
 - **bgp-ls-identifier**
 - **value** *number*
 - **igp-identifier** *number*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **extended-lsa** *keyword*
- **external-db-overflow**
 - **interval** *number*
 - **limit** *number*
- **external-preference** *number*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **strict-lsa-checking** *boolean*
- **igp-shortcut**
 - **admin-state** *keyword*

configure router ospf3 igp-shortcut apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **tunnel-next-hop**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **resolution** *keyword*
 - **resolution-filter**
 - **rsvp** *boolean*
 - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-sync** *boolean*
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** *reference*
- **remote-lfa**
 - **max-pq-cost** *number*
 - **node-protect**
 - **max-pq-nodes** *number*
- **ti-lfa**
 - **max-sr-frr-labels** *number*
 - **node-protect**
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **segment-routing**
 - **adj-sid-hold** (*number* | *keyword*)
 - **adjacency-sid**
 - **allocate-dual-sids** *boolean*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress-statistics**
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **ingress-statistics**
 - **adj-sid** *boolean*
 - **node-sid** *boolean*
 - **prefix-sid-range**
 - **global**
 - **max-index** *number*
 - **start-label** *number*
 - **tunnel-mtu** *number*
 - **tunnel-table-pref** *number*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**

configure router ospf3 timers lsa-generate lsa-initial-wait

```

    - lsa-initial-wait number
    - lsa-second-wait number
    - max-lsa-wait number
  - redistribute-delay number
  - spf-wait
    - spf-initial-wait number
    - spf-max-wait number
    - spf-second-wait number
  - unicast-import boolean
- p2mp-sr-tree
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness keyword
  - p2mp-policy string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - candidate-path string
      - active-instance reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - path-instances number
        - apply-groups reference
        - apply-groups-exclude reference
        - instance-id number
      - preference number
    - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - tree-id number
  - replication-segment string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - downstream-nodes number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - label
      - sid-list number
        - apply-groups reference
        - apply-groups-exclude reference
        - replication-sid number
      - next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)
      - next-hop-interface-name string
      - protect-nexthop-id reference
    - instance-id number
    - replication-sid number
    - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - sid-action keyword
    - tree-id number
  - reserved-label-block reference
- pcep
  - apply-groups reference
  - apply-groups-exclude reference
- pcc
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - dead-timer number
  - keepalive number
  - local-address string
  - local-address-ipv6 string
  - max-srte-pce-init-lsps number

```

configure router pcep pcc pce-associations

- **pce-associations**
 - **diversity** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **association-id** *number*
 - **association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **disjointness-reference** *boolean*
 - **disjointness-type** *keyword*
 - **diversity-type** *keyword*
 - **policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **association-id** *number*
 - **association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **preference** *number*
 - **route-preference** *keyword*
 - **tls-client-profile** *reference*
 - **tls-wait-timer** *number*
 - **redelegation-timer** *number*
 - **report-path-constraints** *boolean*
 - **state-timer**
 - **timer** *number*
 - **timer-action** *keyword*
 - **unknown-message-rate** *number*
- **pcp**
 - **server** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **dual-stack-lite-address** *string*
 - **fwd-inside-router** *string*
 - **interface** *reference*
 - **policy** *reference*
- **pim**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **apply-to** *keyword*
 - **import**
 - **join-policy** *reference*
 - **register-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **assert-period** *number*
 - **bfd-liveness**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **bier-signaling-type**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **bsm-check-rtr-alert** *boolean*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **improved-assert** *boolean*
 - **instant-prune-echo** *boolean*
 - **ipv4**
 - **apply-groups** *reference*

configure router pim interface ipv4 apply-groups-exclude

```

- apply-groups-exclude reference
- monitor-oper-group
  - name reference
  - operation keyword
  - priority-delta number
- multicast boolean
- ipv6
  - apply-groups reference
  - apply-groups-exclude reference
  - monitor-oper-group
    - name reference
    - operation keyword
    - priority-delta number
  - multicast boolean
- max-groups number
- mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - mc-constraints
    - admin-state keyword
    - level number
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth number
    - number-down number
    - apply-groups reference
    - apply-groups-exclude reference
    - level number
    - use-lag-port-weight boolean
  - policy reference
- multicast-senders keyword
- p2mp-ldp-tree-join
  - ipv4 boolean
  - ipv6 boolean
- priority number
- sticky-dr
  - priority number
- three-way-hello boolean
- tracking-support boolean
- ipv4
  - admin-state keyword
  - gtm
    - auto-discovery keyword
  - multicast-fast-failover boolean
  - rpf-table keyword
  - source-address
    - register-message string
  - ssm-assert-compatible-mode boolean
  - ssm-default-range boolean
- ipv6
  - admin-state keyword
  - multicast-fast-failover boolean
  - rpf-table keyword
  - source-address
    - register-message string
  - ssm-default-range boolean
- lag-usage-optimization boolean
- mc-ecmp-balance boolean
- mc-ecmp-balance-hold number
- mc-ecmp-hashing
  - rebalance boolean
- mdt-spt boolean

```

configure router pim non-dr-attract-traffic

```

- non-dr-attract-traffic boolean
- pim-ssm-scaling boolean
- rp
  - bootstrap
    - export reference
    - import reference
  - ipv4
    - anycast string rp-set-peer string
    - auto-rp-discovery boolean
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - candidate boolean
    - mapping-agent boolean
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean
  - ipv6
    - anycast string rp-set-peer string
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - embedded-rp
      - admin-state keyword
      - group-range string
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean
- rpfv
  - core boolean
  - mvpn boolean
- spt-switchover (ipv4-prefix | ipv6-prefix)
  - apply-groups reference
  - apply-groups-exclude reference
  - threshold (number | keyword)
- ssm-groups
  - group-range (ipv4-prefix | ipv6-prefix)
- radius
  - apply-groups reference
  - apply-groups-exclude reference
  - proxy string
  - admin-state keyword

```

configure router radius proxy apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **attribute-matching**
 - **entry** *number*
 - **accounting-server-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-server-policy** *string*
 - **prefix-string** *string*
 - **suffix-string** *string*
 - **type** *number*
 - **vendor** (*number* | *keyword*)
- **cache**
 - **admin-state** *keyword*
 - **key**
 - **attribute-type** *number*
 - **packet-type** *keyword*
 - **vendor** (*number* | *keyword*)
 - **timeout** *number*
 - **track-accounting**
 - **accounting-off** *boolean*
 - **accounting-on** *boolean*
 - **interim-update** *boolean*
 - **start** *boolean*
 - **stop** *boolean*
 - **track-authentication**
 - **accept** *boolean*
 - **track-delete-hold-time** *number*
- **defaults**
 - **accounting-server-policy** *string*
 - **authentication-server-policy** *string*
- **description** *string*
- **interface** *string*
- **load-balance-key**
 - **attribute-1**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-2**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-3**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-4**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **attribute-5**
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
 - **accept-coa** *boolean*
 - **acct-port** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

configure router radius server apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auth-port** *number*
- **description** *string*
- **pending-requests-limit** *number*
- **python-policy** *reference*
- **secret** *string*
- **reassembly**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **nat-group** *number*
 - **to-base-network** *boolean*
- **rib-api**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mpls**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **label-name** *reference*
- **rip**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-type** *keyword*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-limit**
 - **log-percent** *number*
 - **number** *number*
 - **export-policy** *reference*
 - **group** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-type** *keyword*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **message-size** *number*
 - **metric-in** *number*
 - **metric-out** *number*
 - **neighbor** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-type** *keyword*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **message-size** *number*
 - **metric-in** *number*
 - **metric-out** *number*
 - **preference** *number*
 - **receive** *keyword*
 - **send** *keyword*

configure router rip group neighbor split-horizon

```

    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- ripng
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - check-zero boolean
    - description string
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - check-zero boolean
      - description string
      - export-policy reference
      - import-policy reference
      - message-size number
      - metric-in number
      - metric-out number
      - preference number
      - receive keyword
      - send keyword

```

configure router ripng group neighbor split-horizon

```

    - split-horizon boolean
    - timers
      - flush number
      - timeout number
      - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
- router-id string
- rsvp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-over-bypass boolean
  - dbw-accounting
    - dbw-multiplier number
    - down-threshold
      - bw number
      - percent number
    - sample-interval number
    - sample-multiplier number
    - up-threshold
      - bw number
      - percent number
  - diffserv-te
    - admission-control-model keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type-bw
      - ct0 number
      - ct1 number
      - ct2 number
      - ct3 number
      - ct4 number
      - ct5 number
      - ct6 number
      - ct7 number
    - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type number
  - te-class number
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type number
    - priority number

```

configure router rsvp entropy-label-capability

- **entropy-label-capability** *boolean*
- **graceful-restart**
 - **max-recovery** *number*
 - **max-restart** *number*
- **graceful-shutdown** *boolean*
- **implicit-null-label** *boolean*
- **include-node-id-in-rro** *boolean*
- **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **bfd-liveness** *boolean*
 - **class-type-bw**
 - **ct0** *number*
 - **ct1** *number*
 - **ct2** *number*
 - **ct3** *number*
 - **ct4** *number*
 - **ct5** *number*
 - **ct6** *number*
 - **ct7** *number*
 - **dbw-down-threshold**
 - **bw** *number*
 - **percent** *number*
 - **dbw-multiplier** *number*
 - **dbw-up-threshold**
 - **bw** *number*
 - **percent** *number*
 - **graceful-restart-helper-mode** *boolean*
 - **graceful-shutdown** *boolean*
 - **hello-interval** *number*
 - **implicit-null-label** *boolean*
 - **refresh-reduction**
 - **reliable-delivery** *boolean*
 - **subscription** *number*
 - **te-down-threshold**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
 - **te-up-threshold**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
- **keep-multiplier** *number*
- **msg-pacing**
 - **max-burst** *number*
 - **period** *number*
- **p2mp-merge-point-abort-timer** *number*
- **p2p-merge-point-abort-timer** *number*
- **preemption-timer** *number*
- **rapid-retransmit-time** *number*
- **rapid-retry-limit** *number*
- **refresh-reduction-over-bypass** *boolean*
- **refresh-time** *number*
- **te-down-threshold** *number*
- **te-threshold-update**
 - **on-cac-failure** *boolean*
 - **update-timer** *number*
- **te-up-threshold** *number*
- **segment-routing**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure router segment-routing maintenance-policy

- **maintenance-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **bfd-template** *reference*
 - **hold-down-timer** *number*
 - **mode** *keyword*
 - **return-path-label** *number*
 - **revert-timer** *number*
 - **threshold** *number*
- **segment-routing-v6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **base-routing-instance**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **end** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **srh-mode** *keyword*
 - **end-dt4**
 - **value** *number*
 - **end-dt46**
 - **value** *number*
 - **end-dt6**
 - **value** *number*
 - **end-x** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *reference*
 - **protection** *keyword*
 - **srh-mode** *keyword*
 - **end-x-auto-allocate** *keyword* **protection** *keyword*
 - **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **ua** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *reference*
 - **protection** *keyword*
 - **srh-mode** *keyword*
 - **ua-auto-allocate** *keyword* **protection** *keyword*
 - **udt4**
 - **value** *number*
 - **udt46**
 - **value** *number*
 - **udt6**
 - **value** *number*
 - **locator** *string*
 - **admin-state** *keyword*
 - **algorithm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block-length** *number*
 - **function-length** *number*
 - **label-block** *reference*
 - **prefix**

configure router segment-routing segment-routing-v6 locator prefix ip-prefix

- **ip-prefix** *string*
- **static-function**
 - **label-block** *reference*
 - **max-entries** *number*
- **termination-fpe** *reference*
- **micro-segment**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **label-block** *reference*
 - **prefix**
 - **ip-prefix** *string*
 - **static-function**
 - **max-entries** *number*
 - **termination-fpe** *reference*
 - **block-length** *number*
 - **global-sid-entries** *number*
 - **sid-length** *number*
- **micro-segment-locator** *string*
 - **admin-state** *keyword*
 - **algorithm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block** *reference*
 - **un**
 - **srh-mode** *keyword*
 - **value** *number*
- **origination-fpe** *reference*
- **source-address** *string*
- **sr-mpls**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-sids** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-sid**
 - **index** *number*
 - **label** *number*
 - **ipv6-sid**
 - **index** *number*
 - **label** *number*
 - **node-sid** *boolean*
- **sr-policies**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **reserved-label-block** *reference*
 - **static-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **binding-sid** *number*
 - **color** *number*

configure router segment-routing sr-policies static-policy distinguisher

- **distinguisher** *number*
- **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **head-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)
- **maintenance-policy** *reference*
- **preference** *number*
- **segment-list** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **segment** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mpls-label** *number*
 - **srv6-sid** *string*
 - **weight** *number*
- **segment-routing-v6**
 - **binding-sid** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-address** *string*
 - **locator**
 - **function** *keyword*
 - **function-value** *number*
 - **locator-name** *reference*
 - **return-path-bfd-sid** *string*
 - **type** *keyword*
- **selective-fib** *boolean*
- **sfm-overload**
 - **holdoff-time** *number*
- **sgt-qos**
 - **dot1p**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dot1p** (*keyword* | *number*)
 - **dscp**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dscp** (*keyword* | *number*)
 - **dscp-map** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
- **static-routes**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-down**
 - **initial** *number*
 - **max-value** *number*
 - **multiplier** *number*
 - **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-tag** *number*
 - **blackhole**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **description** *string*
 - **dynamic-bgp** *boolean*
 - **generate-icmp** *boolean*
 - **metric** *number*

configure router static-routes route blackhole preference

- **preference** *number*
- **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
- **tag** *number*
- **community** *string*
- **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *string*
 - **destination-class** *number*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **qos**
 - **forwarding-class** *keyword*
 - **priority** *keyword*
 - **source-class** *number*
 - **tag** *number*
 - **tunnel-next-hop**
 - **disallow-igp** *boolean*
 - **flex-algo** *number*
 - **resolution** *keyword*
 - **resolution-filter**
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp-te**
 - **lsp** *string*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-te**
 - **lsp** *string*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *string*
 - **destination-class** *number*
 - **load-balancing-weight** *number*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*

configure router static-routes route interface prefix-list name

```

- name reference
- qos
  - forwarding-class keyword
  - priority keyword
- source-class number
- tag number
- ipsec-tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- community string
- description string
- metric number
- preference number
- tag number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- backup-next-hop
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
- bfd-liveness boolean
- community string
- cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-count number
  - interval number
  - log boolean
  - padding-size number
- description string
- destination-class number
- ldp-sync boolean
- load-balancing-weight number
- metric number
- preference number
- prefix-list
  - flag keyword
  - name reference
- qos
  - forwarding-class keyword
  - priority keyword
  - source-class number
  - tag number
  - validate-next-hop boolean
- tag number
- subscriber-mgmt
- apply-groups reference
- apply-groups-exclude reference
- dhcpv4
  - apply-groups reference
  - apply-groups-exclude reference
  - routed-subnet-transparent-forward boolean
- triggered-policy boolean
- ttl-propagate
- apply-groups reference
- apply-groups-exclude reference
- label-route-local keyword
- label-route-transit keyword
- lsr-label-route keyword
- vprn-local keyword
- vprn-transit keyword
- tunnel-interface
  - ldp-p2mp-leaf number sender-address string

```


configure router tunnel-interface ldp-p2mp-leaf apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- description string
- ldp-p2mp-root number sender-address string
- apply-groups reference
- apply-groups-exclude reference
- description string
- rsvp-p2mp-leaf string sender-address string
- apply-groups reference
- apply-groups-exclude reference
- description string
- rsvp-p2mp-root string
- apply-groups reference
- apply-groups-exclude reference
- description string
- twamp-light
- apply-groups reference
- apply-groups-exclude reference
- reflector
- admin-state keyword
- allow-ipv6-udp-checksum-zero boolean
- apply-groups reference
- apply-groups-exclude reference
- description string
- prefix (ipv4-prefix | ipv6-prefix)
- apply-groups reference
- apply-groups-exclude reference
- description string
- type keyword
- udp-port number
- vrgw
- lanext
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- vxlan-port number
- vxlan-vtep-range
- end (ipv4-address-no-zone | ipv6-address-no-zone)
- start (ipv4-address-no-zone | ipv6-address-no-zone)
- wlan-gw-group reference
- weighted-ecmp keyword
- wlan-gw
- apply-groups reference
- apply-groups-exclude reference
- distributed-subscriber-mgmt
- apply-groups reference
- apply-groups-exclude reference
- ipv6-tcp-mss-adjust number
- mobility-triggered-accounting
- admin-state keyword
- hold-down number
- include-counters boolean
- xconnect
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- tunnel-source-ip string
- wlan-gw-group reference
- wpp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- portal string
- ack-auth-retry-count number

```

configure router wpp portal address

- **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ntf-logout-retry-count** *number*
- **port-format** *keyword*
- **retry-interval** *number*
- **secret** *string*
- **version** *number*

3.39.1 router command descriptions

router [**router-name**] *string*

Synopsis	Enter the router list instance
Context	configure router <i>string</i>
Tree	router
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[router-name] *string*

Synopsis	Administrative router name
Context	configure router <i>string</i>
Tree	router
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

aggregates

Synopsis	Enter the aggregates context
Context	configure router <i>string</i> aggregates
Tree	aggregates
Introduced	16.0.R1
Platforms	All

aggregate [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the aggregate list instance
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aggregate

Description	Commands in this context add aggregate routes to the routing table when there are one or more component routes. A component route is any route installed in the forwarding table that is a more-specific match of the aggregate. The use of aggregate routes can lead to smaller routing table sizes by reducing the number of routes that need to be advertised to neighbor routes.
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	aggregate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

aggregator

Synopsis	Enter the aggregator context
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator
Tree	aggregator
Description	Commands in this context configure the BGP AGGREGATOR path attribute for the aggregate route.
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Aggregator IP address
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Aggregator AS number
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

as-set *boolean*

Synopsis	Use AS_SET path segment type for the aggregate route
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) as-set <i>boolean</i>
Tree	as-set
Description	When configured to true , the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes. When configured to false , the AS_PATH attribute contains no AS_SET and will be originated by the ESR.
Default	false
Introduced	16.0.R1
Platforms	All

blackhole

Synopsis	Enable the blackhole context
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole
Tree	blackhole
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	16.0.R1
Platforms	All

generate-icmp *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes
----------	---

Context	configure router string aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) blackhole generate-icmp boolean
Tree	generate-icmp
Description	When configured to true , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to false , ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

community string

Synopsis	Community name that is added to the aggregate route
Context	configure router string aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) community string
Tree	community
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure router string aggregates aggregate (<i>ipv4-prefix ipv6-prefix</i>) description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

discard-component-communities *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) discard-component-communities <i>boolean</i>
Tree	discard-component-communities
Default	false
Introduced	19.7.R1
Platforms	All

indirect (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: blackhole or indirect .
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Local preference used when aggregate route is exported
Context	configure router <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) local-preference <i>number</i>
Tree	local-preference
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1

Platforms All

policy reference

Synopsis Policy name for the aggregated route

Context **configure** **router** *string* **aggregates aggregate** (*ipv4-prefix* | *ipv6-prefix*) **policy reference**

Tree **policy**

Description This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.

If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.

Reference **configure** **policy-options policy-statement** *string*

Introduced 20.10.R1

Platforms All

summary-only boolean

Synopsis Advertise the aggregate route only

Context **configure** **router** *string* **aggregates aggregate** (*ipv4-prefix* | *ipv6-prefix*) **summary-only boolean**

Tree **summary-only**

Description When configured to **true**, the router suppresses the advertisement of more specific component routes for the aggregate.

When configured to **false**, the router advertises both the aggregate route and its contributing routes.

Default false

Introduced 16.0.R1

Platforms All

tunnel-group number

Synopsis Tunnel group from which to associate the MC IPsec state

Context **configure** **router** *string* **aggregates aggregate** (*ipv4-prefix* | *ipv6-prefix*) **tunnel-group number**

Tree **tunnel-group**

Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

allow-icmp-redirect *boolean*

Synopsis	Allow ICMP redirects on the management interface
Context	configure <i>router</i> <i>string</i> allow-icmp-redirect <i>boolean</i>
Tree	allow-icmp-redirect
Description	When configured to true , ICMP redirect messages can be received on the management interface. When configured to false , all received ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

allow-icmp6-redirect *boolean*

Synopsis	Allow IPv6 ICMP redirects on the management interface
Context	configure <i>router</i> <i>string</i> allow-icmp6-redirect <i>boolean</i>
Tree	allow-icmp6-redirect
Description	When configured to true , IPv6 ICMP redirect messages can be received on the management interface. When configured to false , all received IPv6 ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

autonomous-system *number*

Synopsis	AS number advertised to peers for this router
Context	configure <i>router</i> <i>string</i> autonomous-system <i>number</i>

Tree	autonomous-system
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated. If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> bfd
Tree	bfd
Introduced	19.7.R1
Platforms	All

seamless-bfd

Synopsis	Enter the seamless-bfd context
Context	configure router <i>string</i> bfd seamless-bfd
Tree	seamless-bfd
Introduced	19.7.R1
Platforms	All

peer [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> bfd seamless-bfd peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Max. Instances	8000
Introduced	19.7.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address of the remote node
Context	configure router <i>string</i> bfd seamless-bfd peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

discriminator *number*

Synopsis	Discriminator of the remote node
Context	configure router <i>string</i> bfd seamless-bfd peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) discriminator <i>number</i>
Tree	discriminator
Range	1 to 4294967295
Introduced	19.7.R1
Platforms	All

bgp

Synopsis	Enable the bgp context
Context	configure router <i>string</i> bgp
Tree	bgp
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the add-paths context
Context	configure router <i>string</i> bgp add-paths
Tree	add-paths
Description	Commands in this context configure add-paths support for the specified address families of the BGP instance. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.
Introduced	16.0.R1

Platforms All

evpn

Synopsis Enter the **evpn** context

Context **configure router string bgp add-paths evpn**

Tree **evpn**

Description Commands in this context configure the Add-Paths capability for EVPN routes. By default, Add-Paths is not enabled for EVPN routes.

Introduced 21.10.R1

Platforms All

receive *boolean*

Synopsis Receive multiple EVPN paths per prefix from a peer

Context **configure router string bgp add-paths evpn receive *boolean***

Tree **receive**

Default false

Introduced 21.10.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum number of EVPN paths to send

Context **configure router string bgp add-paths evpn send (*number* | *keyword*)**

Tree **send**

Range 1 to 16

Options multipaths

Introduced 21.10.R1

Platforms All

ipv4

Synopsis Enter the **ipv4** context

Context **configure router string bgp add-paths ipv4**

Tree	ipv4
Description	Commands in this context configure add-paths support for the IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv4 prefix
Context	configure router <i>string</i> bgp add-paths ipv4 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv4 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
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Context	configure router string <code>bgp add-paths ipv6</code>
Tree	<code>ipv6</code>
Description	Commands in this context configure add-paths support for the IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per unlabeled IPv6 prefix
Context	configure router string <code>bgp add-paths ipv6 receive boolean</code>
Tree	<code>receive</code>
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router string <code>bgp add-paths ipv6 send (<i>number</i> <i>keyword</i>)</code>
Tree	<code>send</code>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per unlabeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for unlabeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>string</i> bgp add-paths label-ipv4
Tree	label-ipv4
Description	Commands in this context configure add-paths support for the labeled IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>string</i> bgp add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Max paths advertised per labeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp add-paths label-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>string</i> bgp add-paths label-ipv6
Tree	label-ipv6
Description	Commands in this context configure add-paths support for the labeled IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router <i>string</i> bgp add-paths label-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Max paths advertised per labeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, add-paths send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1

Platforms All

mcast-vpn-ipv4

Synopsis Enter the **mcast-vpn-ipv4** context

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4**

Tree **mcast-vpn-ipv4**

Description Commands in this context configure add-paths support for the multicast IPv4 VPN address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple multicast routes per IPv4 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4 receive** *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast IPv4 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv4 send** *number*

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast IPv4 VPN routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

mcast-vpn-ipv6

Synopsis Enter the **mcast-vpn-ipv6** context

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6**

Tree **mcast-vpn-ipv6**

Description Commands in this context configure add-paths support for the multicast IPv6 VPN address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple multicast routes per IPv6 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6 receive** *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast IPv6 VPN prefix

Context **configure** *router string* **bgp add-paths mcast-vpn-ipv6 send** *number*

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast IPv6 VPN routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

mvpn-ipv4

Synopsis Enter the **mvpn-ipv4** context

Context **configure router string bgp add-paths mvpn-ipv4**

Tree **mvpn-ipv4**

Description Commands in this context configure add-paths support for the multicast VPN IPv4 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per multicast VPN IPv4 NRLI

Context **configure router string bgp add-paths mvpn-ipv4 receive boolean**

Tree **receive**

Description When configured to **true**, this command allows multiple routes per multicast VPN IPv4 NRLI to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast VPN IPv4 NRLI

Context **configure router string bgp add-paths mvpn-ipv4 send number**

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast VPN IPv4 routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

mvpn-ipv6

Synopsis Enter the **mvpn-ipv6** context

Context **configure router string** `bgp add-paths mvpn-ipv6`

Tree `mvpn-ipv6`

Description Commands in this context configure add-paths support for the multicast VPN IPv6 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per multicast VPN IPv6 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv6 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per multicast VPN IPv6 NRLI to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send *number*

Synopsis Maximum paths advertised per multicast VPN IPv6 NRLI

Context **configure router string** `bgp add-paths mvpn-ipv6 send number`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for multicast VPN IPv6 routes.

Range 1 to 16

Introduced 16.0.R1

Platforms All

vpn-ipv4

Synopsis Enter the **vpn-ipv4** context

Context **configure** [router](#) *string* [bgp add-paths vpn-ipv4](#)

Tree [vpn-ipv4](#)

Description Commands in this context configure add-paths support for the VPN-IPv4 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per VPN-IPv4 prefix

Context **configure** [router](#) *string* [bgp add-paths vpn-ipv4 receive boolean](#)

Tree [receive](#)

Description When configured to **true**, this command allows multiple routes per VPN-IPv4 prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths advertised per VPN-IPv4 prefix

Context **configure** [router](#) *string* [bgp add-paths vpn-ipv4 send](#) (*number* | *keyword*)

Tree [send](#)

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for VPN-IPv4 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

vpn-ipv6

Synopsis Enter the **vpn-ipv6** context

Context **configure router string** `bgp add-paths vpn-ipv6`

Tree `vpn-ipv6`

Description Commands in this context configure add-paths support for the VPN-IPv6 address family.

Introduced 16.0.R1

Platforms All

receive *boolean*

Synopsis Receive multiple routes per VPN-IPv6 prefix

Context **configure router string** `bgp add-paths vpn-ipv6 receive boolean`

Tree `receive`

Description When configured to **true**, this command allows multiple routes per VPN-IPv6 prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (*number* | *keyword*)

Synopsis Maximum paths advertised per VPN-IPv6 prefix

Context **configure router string** `bgp add-paths vpn-ipv6 send (number | keyword)`

Tree `send`

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, add-paths send capability is not enabled for VPN-IPv6 routes.

Range 1 to 16

Options multipaths

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the BGP instance
 Context **configure** *router string bgp admin-state keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

advertise-external

Synopsis Enter the **advertise-external** context
 Context **configure** *router string bgp advertise-external*
 Tree [advertise-external](#)
 Description Commands in this context allow BGP to advertise its best external route to a destination for specified address families even when its best overall route is an internal route.
 Introduced 16.0.R1
 Platforms All

ipv4 *boolean*

Synopsis Enable support for unlabeled unicast IPv4 routes
 Context **configure** *router string bgp advertise-external ipv4 boolean*
 Tree [ipv4](#)
 Default false
 Introduced 16.0.R1
 Platforms All

ipv6 *boolean*

Synopsis Enable support for unlabeled unicast IPv6 routes
 Context **configure** *router string bgp advertise-external ipv6 boolean*

Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp advertise-external label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp advertise-external label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	configure router <i>string</i> bgp advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	When configured to true , this command allows any inactive BGP route to be advertised, even though it is not the used route. When configured to false , the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enter the advertise-ipv6-next-hops context
Context	configure <i>router string</i> bgp advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure <i>router string</i> bgp advertise-ipv6-next-hops evpn <i>boolean</i>
Tree	evpn
Description	When configured to true , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure <i>router string</i> bgp advertise-ipv6-next-hops ipv4 <i>boolean</i>
Tree	ipv4
Description	When configured to true , IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to false , IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1

Platforms All

label-ipv4 *boolean*

Synopsis Advertise label IPv4 route with IPv6 next-hop address

Context **configure** *router string* **bgp advertise-ipv6-next-hops label-ipv4** *boolean*

Tree [label-ipv4](#)

Description When configured to **true**, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.

When configured to **false**, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default false

Introduced 16.0.R1

Platforms All

label-ipv6 *boolean*

Synopsis Advertise label IPv6 route with IPv6 next-hop address

Context **configure** *router string* **bgp advertise-ipv6-next-hops label-ipv6** *boolean*

Tree [label-ipv6](#)

Description When configured to **true**, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.

When configured to **false**, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.

Default false

Introduced 16.0.R1

Platforms All

vpn-ipv4 *boolean*

Synopsis Advertise VPN IPv4 route with IPv6 next-hop address

Context **configure** *router string* **bgp advertise-ipv6-next-hops vpn-ipv4** *boolean*

Tree	vpn-ipv4
Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	configure router <i>string</i> bgp aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Description	<p>When configured to true, the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.</p> <p>When configured to false, the AS number and router ID are added to the AGGREGATOR path attribute.</p>
Default	false

Introduced	16.0.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	configure router <i>string</i> bgp asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key for all peers
Context	configure router <i>string</i> bgp authentication-key <i>string</i>
Tree	authentication-key
Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>string</i> bgp authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

backup-path

Synopsis	Enter the backup-path context
Context	configure <i>router string</i> bgp backup-path
Tree	backup-path
Description	<p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p>
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure <i>router string</i> bgp backup-path ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure <i>router string</i> bgp backup-path ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure <i>router string</i> bgp backup-path label-ipv4 <i>boolean</i>

Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp backup-path label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

best-path-selection

Synopsis	Enter the best-path-selection context
Context	configure router <i>string</i> bgp best-path-selection
Tree	best-path-selection
Introduced	16.0.R1
Platforms	All

always-compare-med

Synopsis	Enter the always-compare-med context
Context	configure router <i>string</i> bgp best-path-selection always-compare-med
Tree	always-compare-med
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

med-value *keyword*

Synopsis	Action for a missing MED attribute
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Context	configure <i>router</i> <i>string</i> bgp best-path-selection always-compare-med med-value <i>keyword</i>
Tree	med-value
Default	off
Options	off, missing-med-zero, missing-med-infinity, on
Introduced	16.0.R1
Platforms	All

strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	configure <i>router</i> <i>string</i> bgp best-path-selection always-compare-med strict-as <i>boolean</i>
Tree	strict-as
Description	When configured to true , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS. When configured to false , the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.
Default	true
Introduced	16.0.R1
Platforms	All

as-path-ignore

Synopsis	Enter the as-path-ignore context
Context	configure <i>router</i> <i>string</i> bgp best-path-selection as-path-ignore
Tree	as-path-ignore
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	configure <i>router</i> <i>string</i> bgp best-path-selection as-path-ignore ipv4 <i>boolean</i>
Tree	ipv4

Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Ignore AS path length for L2-VPN routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Ignore AS path length for labeled-unicast IPv6 routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore label-ipv6 <i>boolean</i>

Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 multicast routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 multicast routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Ignore AS path length for IPv4 MVPN routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mvpn-ipv4 <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Ignore AS path length for IPv6 MVPN routes
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Context	configure router <i>string</i> bgp best-path-selection as-path-ignore mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Ignore AS path length for VPN IPv4 (SAFI 128) routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Ignore AS path length for VPN IPv6 (SAFI 128) routes
Context	configure router <i>string</i> bgp best-path-selection as-path-ignore vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

compare-origin-validation-state *boolean*

Synopsis	Compare RPKI origin validation state of usable routes
Context	configure router <i>string</i> bgp best-path-selection compare-origin-validation-state <i>boolean</i>
Tree	compare-origin-validation-state
Description	<p>When configured to true, the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state.</p> <p>When configured to false, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.</p>
Default	false
Introduced	16.0.R1

Platforms All

d-path-length-ignore *boolean*

Synopsis Enable D-PATH length ignore

Context **configure** *router string* *bgp best-path-selection d-path-length-ignore* *boolean*

Tree *d-path-length-ignore*

Description When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.

At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.

At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default false

Introduced 21.10.R1

Platforms All

deterministic-med *boolean*

Synopsis Group paths based on AS before MED attribute comparison

Context **configure** *router string* *bgp best-path-selection deterministic-med* *boolean*

Tree *deterministic-med*

Description When configured to **true**, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.

When configured to **false**, paths are not grouped and the overall best-path selection can depend on the order of route arrival.

Default false

Introduced	16.0.R1
Platforms	All

ebgp-ibgp-equal

Synopsis	Enter the ebgp-ibgp-equal context
Context	configure router string bgp best-path-selection ebgp-ibgp-equal
Tree	ebgp-ibgp-equal
Description	<p>Commands in this context allow BGP to ignore the difference between EBGP and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.</p>
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Consider EBGP and IBGP EVPN routes equal
Context	configure router string bgp best-path-selection ebgp-ibgp-equal evpn boolean
Tree	evpn
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 boolean

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	configure router string bgp best-path-selection ebgp-ibgp-equal ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv4 routes equal
Context	configure router <i>string</i> bgp best-path-selection ebgp-ibgp-equal vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv6 routes equal
Context	configure <i>router string</i> <i>bgp best-path-selection</i> <i>ebgp-ibgp-equal</i> <i>vpn-ipv6 boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ignore-nh-metric *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	configure <i>router string</i> <i>bgp best-path-selection</i> <i>ignore-nh-metric boolean</i>
Tree	ignore-nh-metric
Description	<p>When configured to true, BGP ignores the resolved distance to the BGP next hop in its route selection process.</p> <p>When configured to false, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the router context) or IP prefix learned from VPRN BGP peers (in the vprn context).</p>
Default	false
Introduced	16.0.R1
Platforms	All

ignore-router-id

Synopsis	Enable the ignore-router-id context
Context	configure <i>router string</i> <i>bgp best-path-selection</i> <i>ignore-router-id</i>
Tree	ignore-router-id
Description	<p>Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.</p> <p>By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.</p>
Introduced	16.0.R1
Platforms	All

include-internal

Synopsis	Enter the include-internal context
Context	configure router <i>string</i> bgp best-path-selection ignore-router-id include-internal
Tree	include-internal
Description	Commands in this context specify the internal address families for which the router ID values are ignored, even when comparing two IBGP paths or an EBGP and an IBGP path.
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv4 routes
Context	configure router <i>string</i> bgp best-path-selection ignore-router-id include-internal mvpn-ipv4 <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv6 routes
Context	configure router <i>string</i> bgp best-path-selection ignore-router-id include-internal mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

origin-invalid-unusable *boolean*

Synopsis	Deem invalid routes unusable for best-path selection
Context	configure router <i>string</i> bgp best-path-selection origin-invalid-unusable <i>boolean</i>
Tree	origin-invalid-unusable

Description	When configured to true , routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers. When configured to false , routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix according to the BGP decision process.
Default	false
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure <i>router string</i> bgp <i>bfd-liveness</i> <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations. When configured to false , BFD is not enabled globally for all BGP sessions.
Default	false
Introduced	16.0.R1
Platforms	All

bgp-tunnel-metric

Synopsis	Enter the bgp-tunnel-metric context
Context	configure <i>router string</i> bgp <i>bgp-tunnel-metric</i>
Tree	bgp-tunnel-metric
Description	Commands in this context control the tunnel table metrics associated with BGP label unicast routes.
Introduced	20.5.R1
Platforms	All

prefer-aigp *boolean*

Synopsis	Use the AIGP attribute as tunnel metric when present
Context	configure <i>router string</i> bgp <i>bgp-tunnel-metric</i> <i>prefer-aigp</i> <i>boolean</i>
Tree	prefer-aigp

Description	When configured to true , the TTM metric is based on the AIGP metric if the route has the path attribute. When the BGP-LU route is selected for installation in TTM and it is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the resolved cost to the BGP next-hop of the route; otherwise, the metric is set to the value in the value setting. When configured to false , the AIGP attribute is ignored for purposes to TTM metric derivation.
Default	false
Introduced	20.5.R1
Platforms	All

prefer-med *boolean*

Synopsis	Use the MED attribute as tunnel metric when present
Context	configure <i>router string</i> bgp <i>bgp-tunnel-metric</i> prefer-med <i>boolean</i>
Tree	prefer-med
Description	When configured to true , the TTM metric is based on the MED metric value of the BGP-LU route. When a BGP-LU route is selected for installation in TTM and is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the resolved cost to the BGP next hop of the route added to it. Otherwise, the metric is set to the value configured using the value command. When configured to false , the MED attribute is ignored for TTM metric derivation. Note: prefer-aigp takes precedence over this command if the received BGP-LU has both attributes.
Default	false
Introduced	23.3.R1
Platforms	All

value *number*

Synopsis	BGP tunnel metric value
Context	configure <i>router string</i> bgp <i>bgp-tunnel-metric</i> value <i>number</i>
Tree	value
Description	This command configures a BGP tunnel metric for label IPv4 routes that do not have their metric set by more specific means. If a BGP-LU route is selected for installation in the TTM and there is no tunnel metric policy action that applies to the route, the TTM metric of the associated tunnel is set to this value if either:

- **prefer-aigp** is set to **false**
- **prefer-aigp** is set to **true** but the BGP-LU route does not have an AIGP attribute

Range	0 to 4294967295
Default	1000
Introduced	20.5.R1
Platforms	All

bgp-tunnel-preference *number*

Synopsis	BGP tunnel table preference
Context	configure <i>router string</i> bgp bgp-tunnel-preference <i>number</i>
Tree	bgp-tunnel-preference
Description	<p>This command configures the tunnel table preference for BGP-LU tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p>
Range	1 to 255
Default	12
Introduced	21.10.R1
Platforms	All

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	configure <i>router string</i> bgp block-prefix-sid <i>boolean</i>
Tree	block-prefix-sid
Description	<p>When configured to true, all prefix SID attributes are removed from label IPv4 and label IPv6 routes when they are exchanged with EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to false, all prefix SID attributes associated with label IPv4 and label IPv6 routes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1

Platforms All

client-reflect *boolean*

Synopsis Allow client reflection of routes by route reflector

Context **configure** *router string bgp client-reflect boolean*

Tree [client-reflect](#)

Description When configured to **true**, routes received from neighbors considered to be RR clients are reflected to other peers as expected.

When configured to **false**, routes received from neighbors considered to be RR clients are not reflected to other clients.

Default true

Introduced 16.0.R1

Platforms All

cluster

Synopsis Enter the **cluster** context

Context **configure** *router string bgp cluster*

Tree [cluster](#)

Introduced 16.0.R1

Platforms All

allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology location for ORR

Context **configure** *router string bgp cluster allow-local-fallback boolean*

Tree [allow-local-fallback](#)

Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.

When configured to **false**, no route is advertised to the clients when there are no reachable routes from the client's ORR location.

Default false

Introduced 16.0.R1

Platforms All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure <i>router string</i> <i>bgp cluster cluster-id string</i>
Tree	<i>cluster-id</i>
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure <i>router string</i> <i>bgp cluster orr-location number</i>
Tree	<i>orr-location</i>
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure <i>router string</i> <i>bgp connect-retry number</i>
Tree	<i>connect-retry</i>
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

convergence

Synopsis	Enter the convergence context
Context	configure router string bgp convergence
Tree	convergence
Description	Commands in this context configure the route convergence delay.
Introduced	19.7.R1
Platforms	All

family [family-type] keyword

Synopsis	Enter the family list instance
Context	configure router string bgp convergence family keyword
Tree	family
Description	Commands in this context configure route convergence options for a specific BGP address family, specifically, the maximum amount of time BGP waits until it advertises the routes of the address family to its BGP peers.
Introduced	19.7.R1
Platforms	All

[family-type] keyword

Synopsis	Address family for which convergence selection applies
Context	configure router string bgp convergence family keyword
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

max-wait-to-advertise number

Synopsis	Maximum wait time before advertising routes
Context	configure router string bgp convergence family keyword max-wait-to-advertise number
Tree	max-wait-to-advertise

Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

min-wait-to-advertise *number*

Synopsis	Minimum wait time before advertising routes
Context	configure <i>router string</i> bgp convergence min-wait-to-advertise <i>number</i>
Tree	min-wait-to-advertise
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure <i>router string</i> bgp damp-peer-oscillations
Tree	damp-peer-oscillations
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure <i>router string</i> bgp damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048

Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time initial-wait <i>number</i>
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time max-wait <i>number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each session failure
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Context	configure router <i>string</i> bgp damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure router <i>string</i> bgp damping <i>boolean</i>
Tree	damping
Description	<p>When configured to true, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> • Half-life: 15 minutes • Max-suppress: 60 minutes • Suppress-threshold: 3000 • Reuse-threshold: 750 <p>When configured to false, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>string</i> bgp def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.
Default	mpls

Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure router <i>string</i> bgp default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>string</i> bgp default-label-preference ebgp number
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
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Context	configure <i>router string</i> bgp default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure <i>router string</i> bgp default-preference ebgp number
Tree	ebgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure <i>router string</i> bgp default-preference ibgp number
Tree	ibgp
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

description string

Synopsis	Text description
Context	configure <i>router string</i> bgp description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-neighbor-limit *number*

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	configure <i>router string</i> <i>bgp dynamic-neighbor-limit number</i>
Tree	dynamic-neighbor-limit
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enter the ebgp-default-reject-policy context
Context	configure <i>router string</i> <i>bgp ebgp-default-reject-policy</i>
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure <i>router string</i> <i>bgp ebgp-default-reject-policy export boolean</i>
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure <i>router string</i> <i>bgp ebgp-default-reject-policy import boolean</i>
Tree	import
Default	true
Introduced	19.5.R1

Platforms All

egress-peer-engineering

Synopsis Enable the **egress-peer-engineering** context

Context **configure** *router string* **bgp egress-peer-engineering**

Tree [egress-peer-engineering](#)

Introduced 21.7.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of BGP egress engineering

Context **configure** *router string* **bgp egress-peer-engineering admin-state** *keyword*

Tree [admin-state](#)

Description This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.

Default disable

Options enable, disable

Introduced 21.7.R1

Platforms All

enforce-first-as *boolean*

Synopsis Enforce the configured peer AS value in received routes

Context **configure** *router string* **bgp enforce-first-as** *boolean*

Tree [enforce-first-as](#)

Description When configured to **true** for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**).

This command does not flap an established session because it applies only to routes received after the command is issued.

When configured to **false**, received routes are not checked for compliance with the rule.

Default false

Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure router <i>string</i> bgp error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure router <i>string</i> bgp error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	When configured to true , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset. When configured to false , most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure router <i>string</i> bgp export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to all peers. Route policies are configured in the configure policy-options context. When no export policies are specified in this context, BGP-learned routes are advertised by default and non-BGP routes are not advertised.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	List of export policy names
Context	configure router <i>string</i> bgp export policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>When no export policies are specified, BGP-learned routes are advertised by default and non-BGP routes are not advertised.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enter the extended-nh-encoding context
Context	configure router <i>string</i> bgp extended-nh-encoding
Tree	extended-nh-encoding
Description	<p>Commands in this context specify the IPv4-related address families that can receive IPv6 next hops from peers. The peers should not send such routes unless the peers receive notification of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p>
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise encoding capability for IPv4 routes
Context	configure router <i>string</i> bgp extended-nh-encoding ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	configure router <i>string</i> bgp extended-nh-encoding label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure router <i>string</i> bgp extended-nh-encoding vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enter the family context
Context	configure router <i>string</i> bgp family
Tree	family
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>bgp-ls</i> <i>boolean</i>
Tree	bgp-ls
Default	false
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>evpn</i> <i>boolean</i>
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-ipv4</i> <i>boolean</i>
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-ipv6</i> <i>boolean</i>
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-vpn-ipv4</i> <i>boolean</i>
Tree	flow-vpn-ipv4
Default	false
Introduced	22.7.R1
Platforms	All

flow-vpn-ipv6 *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-vpn-ipv6</i> <i>boolean</i>
Tree	flow-vpn-ipv6
Default	false
Introduced	22.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv4</i> <i>boolean</i>
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv6</i> <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure router <i>string</i> bgp family l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>string</i> bgp family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>string</i> bgp family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>string</i> bgp family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mcast-ipv6</i> <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mcast-vpn-ipv4</i> <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mcast-vpn-ipv6</i> <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mdt-safi</i> <i>boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ms-pw</i> <i>boolean</i>
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mvpn-ipv4</i> <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>mvpn-ipv6</i> <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>route-target</i> <i>boolean</i>
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>string</i> bgp family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>string</i> bgp family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure router <i>string</i> bgp family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure router <i>string</i> bgp family vpn-ipv6 <i>boolean</i>

Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure router <i>string</i> bgp fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	When configured to true , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to false , the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

flowspec

Synopsis	Enter the flowspec context
Context	configure router <i>string</i> bgp flowspec
Tree	flowspec
Introduced	16.0.R1
Platforms	All

validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	configure router <i>string</i> bgp flowspec validate-dest-prefix <i>boolean</i>
Tree	validate-dest-prefix
Description	When configured to true , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none"> • it was originated outside the local AS of the receiving BGP router

- the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix

An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers.

When configured to **false**, destination-prefix validation is disabled.

Default	false
Introduced	16.0.R1
Platforms	All

validate-redirect-ip *boolean*

Synopsis	Validate the redirect-to-IPv4 action in FlowSpec route
Context	configure <i>router string bgp flowspec validate-redirect-ip boolean</i>
Tree	validate-redirect-ip
Description	<p>When configured to true, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.</p> <p>A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.</p> <p>When configured to false, the validation check is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure <i>router string bgp graceful-restart</i>
Tree	graceful-restart
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform Graceful Restart procedures
Context	configure <i>router string</i> bgp graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to false , NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure <i>router string</i> bgp graceful-restart long-lived
Tree	long-lived
Description	Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures. LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort. The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure <i>router string</i> bgp graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1

Platforms All

advertised-stale-time *number*

Synopsis LLGR stale routes time

Context **configure** **router** *string* **bgp graceful-restart long-lived advertised-stale-time** *number*

Tree [advertised-stale-time](#)

Range 0 to 16777215

Default 86400

Introduced 16.0.R1

Platforms All

family [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance

Context **configure** **router** *string* **bgp graceful-restart long-lived family** *keyword*

Tree [family](#)

Introduced 16.0.R1

Platforms All

[family-type] *keyword*

Synopsis Family type for family-specific LLGR configuration

Context **configure** **router** *string* **bgp graceful-restart long-lived family** *keyword*

Tree [family](#)

Options ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

advertised-stale-time *number*

Synopsis LLGR stale routes time for family override

Context **configure** **router** *string* **bgp graceful-restart long-lived family** *keyword* **advertised-stale-time** *number*

Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>string</i> bgp graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
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Context	configure router string bgp graceful-restart long-lived helper-override-restart-time number
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router string bgp graceful-restart long-lived helper-override-stale-time number
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router string bgp graceful-restart long-lived without-no-export boolean
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.

Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>string</i> bgp graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>string</i> bgp graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group [*group-name*] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> bgp group <i>string</i>
Tree	group
Description	Commands in this context define BGP peer groups and their group-specific command options. The options in this context are identical to the global BGP options. Any options that are not overridden by the group-specific commands inherit the configuration settings from the BGP global level.
Introduced	16.0.R1
Platforms	All

[group-name] *string*

Synopsis	BGP peer group name
Context	configure <i>router string bgp group string</i>
Tree	<i>group</i>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the add-paths context
Context	configure <i>router string bgp group string add-paths</i>
Tree	<i>add-paths</i>
Description	<p>Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure <i>router string bgp group string add-paths evpn</i>
Tree	<i>evpn</i>
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
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Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths evpn receive</i> <i>boolean</i>
Tree	<i>receive</i>
Default	false
Introduced	21.10.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths evpn send</i> (<i>number</i> <i>keyword</i>)
Tree	<i>send</i>
Range	1 to 16
Options	multipaths
Introduced	21.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv4</i>
Tree	<i>ipv4</i>
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv4 receive</i> <i>boolean</i>
Tree	<i>receive</i>
Description	When configured to true , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv4 send</i> (<i>number</i> <i>keyword</i>)
Tree	<i>send</i>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp <i>group string</i> add-paths ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	<p>This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.</p>
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>string</i> bgp <i>group string</i> add-paths label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>string</i> bgp <i>group string</i> add-paths label-ipv4 receive <i>boolean</i>
Tree	receive
Description	<p>When configured to true, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths label-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>string</i> bgp group <i>string</i> add-paths label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths label-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp <i>group string</i> add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4

Synopsis	Enter the mcast-vpn-ipv4 context
Context	configure router <i>string</i> bgp <i>group string</i> add-paths mcast-vpn-ipv4
Tree	mcast-vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	configure router <i>string</i> bgp <i>group string</i> add-paths mcast-vpn-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths mcast-vpn-ipv4</i> <i>send number</i>
Tree	<i>send</i>
Description	<p>This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.</p> <p>When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.</p>
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6

Synopsis	Enter the mcast-vpn-ipv6 context
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths mcast-vpn-ipv6</i>
Tree	<i>mcast-vpn-ipv6</i>
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	configure <i>router string</i> <i>bgp group string</i> <i>add-paths mcast-vpn-ipv6</i> <i>receive boolean</i>
Tree	<i>receive</i>
Description	<p>When configured to true, this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.</p> <p>When configured to false, the ADD-PATH receive capability is not enabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	configure <i>router string bgp group string add-paths mcast-vpn-ipv6 send number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv4

Synopsis	Enter the mvpn-ipv4 context
Context	configure <i>router string bgp group string add-paths mvpn-ipv4</i>
Tree	mvpn-ipv4
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	configure <i>router string bgp group string add-paths mvpn-ipv4 receive boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	configure <i>router string bgp group string add-paths mvpn-ipv4 send number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv6

Synopsis	Enter the mvpn-ipv6 context
Context	configure <i>router string bgp group string add-paths mvpn-ipv6</i>
Tree	mvpn-ipv6
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	configure <i>router string bgp group string add-paths mvpn-ipv6 receive boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	configure <i>router string bgp group string add-paths mvpn-ipv6 send number</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

vpn-ipv4

Synopsis	Enter the vpn-ipv4 context
Context	configure <i>router string bgp group string add-paths vpn-ipv4</i>
Tree	<i>vpn-ipv4</i>
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	configure <i>router string bgp group string add-paths vpn-ipv4 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to true , this command allows multiple VPN-IPv4 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths vpn-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure router <i>string</i> bgp group <i>string</i> add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths vpn-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	configure router <i>string</i> bgp group <i>string</i> add-paths vpn-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP group
Context	configure router <i>string</i> bgp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure router <i>string</i> bgp group <i>string</i> advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	When configured to true , this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors. <ul style="list-style-type: none"> • If the active route for the IP prefix is a BGP route, that route is advertised. • If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the advertise-ipv6-next-hops context
Context	configure <i>router string bgp group string advertise-ipv6-next-hops</i>
Tree	advertise-ipv6-next-hops
Description	Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure <i>router string bgp group string advertise-ipv6-next-hops evpn boolean</i>
Tree	evpn
Description	When configured to true , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

ipv4 boolean

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	configure <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>ipv4 boolean</i>
Tree	ipv4
Description	<p>When configured to true, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 boolean

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	configure <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv4 boolean</i>
Tree	label-ipv4
Description	<p>When configured to true, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 boolean

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv6 boolean</i>

Tree	label-ipv6
Description	<p>When configured to true, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp group <i>string</i> advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	<p>When configured to true, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to false, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure router <i>string</i> bgp group <i>string</i> advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Description	<p>When configured to true, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to false, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false

Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure <i>router string bgp group string aggregator-id-zero boolean</i>
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	configure <i>router string bgp group string aigp boolean</i>
Tree	aigp
Description	<p>When configured to true, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.</p> <p>When configured to false, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.</p>
Default	false
Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	configure <i>router string bgp group string as-override boolean</i>
Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When configured to false, no AS override is performed.</p>
Default	false

Introduced	19.7.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure <i>router string bgp group string</i> asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Description	When this command inherits a value of true , the use of 4-byte ASNs is supported. When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true . When configured to false , this command disables the use of 4-byte ASNs.
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key for peers in the group
Context	configure <i>router string bgp group string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure <i>router string bgp group string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure <i>system security keychains</i> keychain <i>string</i>
Introduced	16.0.R3

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD

Context **configure** *router string bgp group string bfd-liveness boolean*

Tree [bfd-liveness](#)

Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.

Introduced 16.0.R1

Platforms All

block-prefix-sid *boolean*

Synopsis Block the prefix SID attribute

Context **configure** *router string bgp group string block-prefix-sid boolean*

Tree [block-prefix-sid](#)

Description When configured to **true**, all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.

When configured to **false**, all prefix SID attributes are propagated without restriction.

A change of this configuration causes the affected BGP sessions to flap.

Default false

Introduced 19.10.R1

Platforms All

capability-negotiation *boolean*

Synopsis Enable capability negotiation

Context **configure** *router string bgp group string capability-negotiation boolean*

Tree [capability-negotiation](#)

Description When configured to **true**, this command enables the exchange of capabilities.

When configured to **false** and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.

Default	true
Introduced	16.0.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	configure <i>router string bgp group string client-reflect boolean</i>
Tree	<i>client-reflect</i>
Description	When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true . When the command inherits a value of true , client reflection of routes is enabled. When configured to false , this command disables client reflection of routes.
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the cluster context
Context	configure <i>router string bgp group string cluster</i>
Tree	<i>cluster</i>
Introduced	16.0.R1
Platforms	All

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology location
Context	configure <i>router string bgp group string cluster allow-local-fallback boolean</i>
Tree	<i>allow-local-fallback</i>
Description	When configured to true , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to true . When configured to false , no route is advertised to the client.
Default	false

Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure router <i>string</i> bgp group <i>string</i> cluster cluster-id <i>string</i>
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure router <i>string</i> bgp group <i>string</i> cluster orr-location <i>number</i>
Tree	orr-location
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure router <i>string</i> bgp group <i>string</i> connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure router <i>string</i> bgp group <i>string</i> damp-peer-oscillations
Tree	damp-peer-oscillations
Description	<p>Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.</p> <p>When unconfigured, command settings are inherited from the global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure router <i>string</i> bgp group <i>string</i> damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

idle-hold-time

Synopsis	Enter the idle-hold-time context
Context	configure router <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time
Tree	idle-hold-time
Introduced	16.0.R1
Platforms	All

initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
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Context	configure <i>router string</i> <i>bgp group string</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>initial-wait number</i>
Tree	initial-wait
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	configure <i>router string</i> <i>bgp group string</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>max-wait number</i>
Tree	max-wait
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

second-wait *number*

Synopsis	Time that doubles after each repeated session failure
Context	configure <i>router string</i> <i>bgp group string</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>second-wait number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure <i>router string</i> <i>bgp group string</i> <i>damping</i> <i>boolean</i>

Tree	damping
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>string</i> bgp group <i>string</i> def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community. When unconfigured, the setting for this command is inherited from the BGP global-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
Context	configure router <i>string</i> bgp group <i>string</i> default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp *number*

Synopsis	Default preference for EBGp
Context	configure router <i>string</i> bgp group <i>string</i> default-label-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp group <i>string</i> default-label-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure router <i>string</i> bgp group <i>string</i> default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>string</i> bgp group <i>string</i> default-preference ebgp number
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp group <i>string</i> default-preference ibgp number
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-route-target *boolean*

Synopsis	Send default RTC route (zero prefix length) to peers
Context	configure <i>router string</i> <i>bgp group string</i> default-route-target <i>boolean</i>
Tree	default-route-target
Description	When configured to true , this command sends the default RTC route (zero prefix length) toward the selected peers. When configured to false , a default RTC route is not sent.
Default	false
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router string</i> <i>bgp group string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dynamic-neighbor

Synopsis	Enter the dynamic-neighbor context
Context	configure <i>router string</i> <i>bgp group string</i> dynamic-neighbor
Tree	dynamic-neighbor
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure <i>router string</i> <i>bgp group string</i> dynamic-neighbor interface <i>string</i>
Tree	interface

Description	<p>Commands in this context configure an unnumbered base router network interface for dynamic neighbors.</p> <p>If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.</p> <p>The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.</p> <p>When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.</p>
Introduced	22.10.R1
Platforms	All

[interface-name] *string*

Synopsis	Name of the dynamic neighbor interface
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

allowed-peer-as *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i> allowed-peer-as <i>string</i>
Tree	allowed-peer-as
Description	<p>This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i>.</p> <p>All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].</p>

Max. Instances	32
Notes	This element is ordered by the user.
Introduced	22.10.R1
Platforms	All

max-sessions *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>string</i> max-sessions <i>number</i>
Tree	max-sessions
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

match

Synopsis	Enter the match context
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor match
Tree	match
Description	Commands in this context configure match conditions for the dynamic neighbors.
Introduced	19.5.R1
Platforms	All

prefix [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	19.5.R1

Platforms All

[**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Dynamic peer prefix for the group

Context **configure** **router** *string* **bgp group** *string* **dynamic-neighbor match prefix** (*ipv4-prefix* | *ipv6-prefix*)

Tree **prefix**

Notes This element is part of a list key.

Introduced 19.5.R1

Platforms All

allowed-peer-as *string*

Synopsis Allowed peer AS value or range of acceptable values

Context **configure** **router** *string* **bgp group** *string* **dynamic-neighbor match prefix** (*ipv4-prefix* | *ipv6-prefix*) **allowed-peer-as** *string*

Tree **allowed-peer-as**

Description This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1..n2*.
All values greater than or equal to *n1* and less than or equal to *n2* are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

Max. Instances 32

Notes This element is ordered by the user.

Introduced 19.5.R1

Platforms All

dynamic-neighbor-limit *number*

Synopsis Maximum dynamic BGP sessions to accept from remote peer

Context **configure** **router** *string* **bgp group** *string* **dynamic-neighbor-limit** *number*

Tree **dynamic-neighbor-limit**

Description This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.

When unconfigured, the setting is inherited from the BGP global-level configuration.

Range	1 to 8192
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure router <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

egress-engineering

Synopsis	Enable the egress-engineering context
Context	configure router <i>string</i> bgp group <i>string</i> egress-engineering

Tree	egress-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure router <i>string</i> bgp group <i>string</i> egress-engineering admin-state <i>keyword</i>
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	All

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for group
Context	configure router <i>string</i> bgp group <i>string</i> egress-peer-engineering-label-unicast <i>boolean</i>
Tree	egress-peer-engineering-label-unicast
Description	When configured to true , BGP generates a label-unicast route for each /32 or /128 prefix that corresponds to the BGP group address in the scope of the command. These routes can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. They support the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure router <i>string</i> bgp group <i>string</i> enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Introduced	16.0.R1

Platforms All

error-handling

Synopsis Enter the **error-handling** context

Context **configure** [router](#) *string* [bgp group](#) *string* [error-handling](#)

Tree [error-handling](#)

Introduced 16.0.R1

Platforms All

update-fault-tolerance *boolean*

Synopsis Tolerate non-critical errors in UPDATE messages

Context **configure** [router](#) *string* [bgp group](#) *string* [error-handling](#) [update-fault-tolerance](#) *boolean*

Tree [update-fault-tolerance](#)

Description When configured to **true**, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, all errors trigger a session reset.

Introduced 16.0.R1

Platforms All

export

Synopsis Enable the **export** context

Context **configure** [router](#) *string* [bgp group](#) *string* [export](#)

Tree [export](#)

Description Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the **configure policy-options** context.

When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.

Introduced 16.0.R1

Platforms All

policy (*policy-expr-string* | *string*)

Synopsis	BGP export policy name
Context	configure <i>router string</i> <i>bgp group string</i> <i>export policy (policy-expr-string string)</i>
Tree	<i>policy</i>
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure <i>router string</i> <i>bgp group string</i> <i>extended-nh-encoding</i>
Tree	<i>extended-nh-encoding</i>
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	16.0.R1

Platforms All

ipv4 *boolean*

Synopsis Advertise encoding capability for IPv4 routes
Context **configure** *router string bgp group string extended-nh-encoding ipv4 boolean*
Tree [ipv4](#)
Default false
Introduced 19.5.R1
Platforms All

label-ipv4 *boolean*

Synopsis Advertise encoding capability for label-IPv4 routes
Context **configure** *router string bgp group string extended-nh-encoding label-ipv4 boolean*
Tree [label-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

vpn-ipv4 *boolean*

Synopsis Advertise encoding capability for VPN-IPv4 routes
Context **configure** *router string bgp group string extended-nh-encoding vpn-ipv4 boolean*
Tree [vpn-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

family

Synopsis Enable the **family** context
Context **configure** *router string bgp group string family*
Tree [family](#)
Introduced 16.0.R1

Platforms All

bgp-ls *boolean*

Synopsis Advertise MP-BGP support for the BGP-LS address family
 Context **configure** *router* *string* *bgp group* *string* *family* *bgp-ls* *boolean*
 Tree [bgp-ls](#)
 Default false
 Introduced 16.0.R1
 Platforms All

evpn *boolean*

Synopsis Advertise MP-BGP support for the EVPN address family
 Context **configure** *router* *string* *bgp group* *string* *family* *evpn* *boolean*
 Tree [evpn](#)
 Default false
 Introduced 16.0.R1
 Platforms All

flow-ipv4 *boolean*

Synopsis Advertise support for the flowspec-IPv4 address family
 Context **configure** *router* *string* *bgp group* *string* *family* *flow-ipv4* *boolean*
 Tree [flow-ipv4](#)
 Default false
 Introduced 16.0.R1
 Platforms All

flow-ipv6 *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family
 Context **configure** *router* *string* *bgp group* *string* *family* *flow-ipv6* *boolean*
 Tree [flow-ipv6](#)
 Default false

Introduced 16.0.R1
Platforms All

flow-vpn-ipv4 *boolean*

Synopsis Advertise support for FlowSpec-VPN IPv4 address family
Context **configure** *router string bgp group string family flow-vpn-ipv4 boolean*
Tree [flow-vpn-ipv4](#)
Default false
Introduced 22.7.R1
Platforms All

flow-vpn-ipv6 *boolean*

Synopsis Advertise support for FlowSpec-VPN IPv6 address family
Context **configure** *router string bgp group string family flow-vpn-ipv6 boolean*
Tree [flow-vpn-ipv6](#)
Default false
Introduced 22.7.R1
Platforms All

ipv4 *boolean*

Synopsis Add support for the IPv4 address family
Context **configure** *router string bgp group string family ipv4 boolean*
Tree [ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

ipv6 *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family
Context **configure** *router string bgp group string family ipv6 boolean*
Tree [ipv6](#)

Default	false
Introduced	16.0.R1
Platforms	All

l2-vpn *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family mcast-ipv4 <i>boolean</i>

Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure router <i>string</i> bgp group <i>string</i> family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	configure router <i>string</i> bgp group <i>string</i> family mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure router <i>string</i> bgp group <i>string</i> family mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
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Context	configure <i>router string bgp group string family mdt-safi boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure <i>router string bgp group string family ms-pw boolean</i>
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	configure <i>router string bgp group string family mvpn-ipv4 boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	configure <i>router string bgp group string family mvpn-ipv6 boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family route-target <i>boolean</i>
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AF11/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4

Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> family vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> fast-external-failover <i>boolean</i>
Tree	fast-external-failover
Description	<p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> graceful-restart
Tree	graceful-restart
Description	<p>Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.</p> <p>When the context is unconfigured, the command settings are inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1

Platforms All

gr-notification *boolean*

Synopsis Perform graceful restart procedures after NOTIFICATION

Context **configure** [router](#) *string* [bgp group](#) *string* [graceful-restart](#) [gr-notification](#) *boolean*

Tree [gr-notification](#)

Description When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to **false**, NOTIFICATION messages are not supported.

Default false

Introduced 16.0.R1

Platforms All

long-lived

Synopsis Enable the **long-lived** context

Context **configure** [router](#) *string* [bgp group](#) *string* [graceful-restart](#) [long-lived](#)

Tree [long-lived](#)

Description Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.

LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.

The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.

Introduced 16.0.R1

Platforms All

advertise-stale-to-all-neighbors *boolean*

Synopsis Advertise stale routes to all BGP peers

Context **configure** [router](#) *string* [bgp group](#) *string* [graceful-restart](#) [long-lived](#) [advertise-stale-to-all-neighbors](#) *boolean*

Tree [advertise-stale-to-all-neighbors](#)

Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i>
Tree	family
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and

the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.

This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).

Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp group <i>string</i> graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure <i>router string</i> <i>bgp group string</i> <i>graceful-restart long-lived without-no-export boolean</i>
Tree	without-no-export
Description	<p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure <i>router string</i> <i>bgp group string</i> <i>graceful-restart restart-time number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure <i>router string</i> <i>bgp group string</i> <i>graceful-restart stale-routes-time number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure** *router string* *bgp group string* **hold-time**

Tree **hold-time**

Introduced 16.0.R1

Platforms All

minimum-hold-time *number*

Synopsis Minimum hold time between successive messages

Context **configure** *router string* *bgp group string* **hold-time** **minimum-hold-time** *number*

Tree **minimum-hold-time**

Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.

When unconfigured, the command value is inherited from the BGP global-level setting.

Range 0 | 3 to 65536

Default 0

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis Maximum time BGP waits between successive messages

Context **configure** *router string* *bgp group string* **hold-time** **seconds** *number*

Tree **seconds**

Description This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.

Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances.

- If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.

- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP global-level configuration.

Range	0 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure <i>router string</i> <i>bgp group string</i> import
Tree	import
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	configure <i>router string</i> <i>bgp group string</i> import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".</p>
String Length	1 to 255

Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure <i>router string bgp group string initial-send-delay-zero boolean</i>
Tree	initial-send-delay-zero
Description	<p>When configured to true, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure <i>router string bgp group string keepalive number</i>
Tree	keepalive
Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the hold-time seconds context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> • If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value. • If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.

- If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command inherits the BGP global-level setting.

Range	0 to 21845
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>string</i> bgp group <i>string</i> label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

link-bandwidth

Synopsis	Enter the link-bandwidth context
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth
Tree	link-bandwidth
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	16.0.R3
Platforms	All

accept-from-ebgp

Synopsis	Enter the accept-from-ebgp context
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth accept-from-ebgp
Tree	accept-from-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth accept-from-ebgp ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth accept-from-ebgp ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth accept-from-ebgp label-ipv4 boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth accept-from-ebgp label-ipv6 boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R4

Platforms All

vpn-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** *router string* *bgp group string* *link-bandwidth* *accept-from-ebgp* *vpn-ipv4* *boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** *router string* *bgp group string* *link-bandwidth* *accept-from-ebgp* *vpn-ipv6* *boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

add-to-received-ebgp

Synopsis Enter the **add-to-received-ebgp** context

Context **configure** *router string* *bgp group string* *link-bandwidth* *add-to-received-ebgp*

Tree [add-to-received-ebgp](#)

Introduced 16.0.R3

Platforms All

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** *router string* *bgp group string* *link-bandwidth* *add-to-received-ebgp* *ipv4* *boolean*

Tree [ipv4](#)

Default	false
Introduced	16.0.R3
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth add-to-received-ebgp ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth add-to-received-ebgp label-ipv4 boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth add-to-received-ebgp label-ipv6 boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> link-bandwidth add-to-received-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> link-bandwidth add-to-received-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enter the aggregate-used-paths context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> link-bandwidth aggregate-used-paths ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth aggregate-used-paths ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth aggregate-used-paths label-ipv4 boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure <i>router string bgp group string link-bandwidth aggregate-used-paths label-ipv6 boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure <i>router string bgp group string link-bandwidth aggregate-used-paths vpn-ipv4 boolean</i>
Tree	vpn-ipv4

Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth aggregate-used-paths vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enter the send-to-ebgp context
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6

Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp vpn-ipv6 <i>boolean</i>

Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

local-address (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	configure router <i>string</i> bgp group <i>string</i> local-address (<i>ipv4-address-no-zone ipv6-address-no-zone interface-name</i>)
Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure router <i>string</i> bgp group <i>string</i> local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure router <i>string</i> bgp group <i>string</i> local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure router <i>string</i> bgp group <i>string</i> local-as prepend-global-as <i>boolean</i>

Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>string</i> bgp group <i>string</i> local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>string</i> bgp group <i>string</i> local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>string</i> bgp group <i>string</i> loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route

Introduced 16.0.R1
Platforms All

loop-detect-threshold *number*

Synopsis Threshold for the global ASN in a received AS path
Context **configure** *router string bgp group string loop-detect-threshold number*
Tree [loop-detect-threshold](#)
Range 0 to 15
Introduced 16.0.R6
Platforms All

med-out (*number | keyword*)

Synopsis Default MED attribute value to advertise to peers
Context **configure** *router string bgp group string med-out (number | keyword)*
Tree [med-out](#)
Max. Range 0 to 4294967295
Options *igp-cost*
Introduced 16.0.R1
Platforms All

min-route-advertisement *number*

Synopsis Minimum time before a prefix can be advertised to peer
Context **configure** *router string bgp group string min-route-advertisement number*
Tree [min-route-advertisement](#)
Range 1 to 255
Introduced 16.0.R1
Platforms All

monitor

Synopsis Enable the **monitor** context
Context **configure** *router string bgp group string monitor*

Tree	monitor
Description	Commands in this context specify BMP-related configurations at the BGP group level. When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure router <i>string</i> bgp group <i>string</i> monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure router <i>string</i> bgp group <i>string</i> monitor all-stations <i>boolean</i>
Tree	all-stations
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to false , the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure router <i>string</i> bgp group <i>string</i> monitor route-monitoring
Tree	route-monitoring

Introduced 16.0.R1
 Platforms All

post-policy *boolean*

Synopsis Allow post-policy route-monitoring messages to be sent
 Context **configure** *router string bgp group string monitor route-monitoring post-policy boolean*
 Tree [post-policy](#)
 Default false
 Introduced 16.0.R1
 Platforms All

pre-policy *boolean*

Synopsis Allow pre-policy route-monitoring messages to be sent
 Context **configure** *router string bgp group string monitor route-monitoring pre-policy boolean*
 Tree [pre-policy](#)
 Default false
 Introduced 16.0.R1
 Platforms All

station [[station-name](#)] *reference*

Synopsis Add a list entry for **station**
 Context **configure** *router string bgp group string monitor station reference*
 Tree [station](#)
 Description This command identifies a BMP monitoring station for which BMP messages are to be sent.
 Max. Instances 8
 Introduced 16.0.R1
 Platforms All

[station-name] *reference*

Synopsis BMP monitoring station

Context	configure router <i>string</i> bgp group <i>string</i> monitor station <i>reference</i>
Tree	station
Reference	configure bmp station <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure router <i>string</i> bgp group <i>string</i> multihop <i>number</i>
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	configure router <i>string</i> bgp group <i>string</i> multipath-eligible <i>boolean</i>
Tree	multipath-eligible
Default	false
Introduced	19.5.R1
Platforms	All

next-hop-self *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	configure router <i>string</i> bgp group <i>string</i> next-hop-self <i>boolean</i>
Tree	next-hop-self
Default	false
Introduced	16.0.R1
Platforms	All

next-hop-unchanged

Synopsis	Enter the next-hop-unchanged context
Context	configure <i>router string</i> <i>bgp group string</i> next-hop-unchanged
Tree	next-hop-unchanged
Description	Commands in this context specify the IP address families that allow unchanged BGP next-hops when sending BGP routes to peers in the group.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	configure <i>router string</i> <i>bgp group string</i> next-hop-unchanged evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	20.2.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	configure <i>router string</i> <i>bgp group string</i> next-hop-unchanged label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	configure <i>router string</i> <i>bgp group string</i> next-hop-unchanged label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	configure <i>router string bgp group string next-hop-unchanged vpn-ipv4 boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	20.2.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	configure <i>router string bgp group string next-hop-unchanged vpn-ipv6 boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	20.2.R1
Platforms	All

origin-validation

Synopsis	Enter the origin-validation context
Context	configure <i>router string bgp group string origin-validation</i>
Tree	origin-validation
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure <i>router string bgp group string origin-validation ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>origin-validation</i> <i>ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>origin-validation</i> <i>label-ipv4 boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	configure <i>router string</i> <i>bgp group string</i> <i>origin-validation</i> <i>label-ipv6 boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

outbound-route-filtering

Synopsis	Enable the outbound-route-filtering context
Context	configure <i>router string</i> <i>bgp group string</i> <i>outbound-route-filtering</i>
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When this context is unconfigured, the group command settings are inherited from the BGP global-level configuration.

Introduced	16.0.R1
Platforms	All

extended-community

Synopsis	Enable the extended-community context
Context	configure router <i>string</i> bgp group <i>string</i> outbound-route-filtering extended-community
Tree	extended-community
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities. When this context is unconfigured, the command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure router <i>string</i> bgp group <i>string</i> outbound-route-filtering extended-community accept-orf <i>boolean</i>
Tree	accept-orf
Description	When configured to true , the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers. When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the send-orf context
Context	configure router <i>string</i> bgp group <i>string</i> outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community

filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.

When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.

Introduced 16.0.R1
Platforms All

route-target [*community-name*] *string*

Synopsis Add a list entry for **route-target**
Context **configure** *router string* *bgp group string* *outbound-route-filtering extended-community send-orf route-target string*
Tree *route-target*
Introduced 16.0.R1
Platforms All

[community-name] *string*

Synopsis Route target community name
Context **configure** *router string* *bgp group string* *outbound-route-filtering extended-community send-orf route-target string*
Tree *route-target*
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

passive *boolean*

Synopsis Enable passive mode for BGP communication
Context **configure** *router string* *bgp group string* *passive boolean*
Tree *passive*
Default false
Introduced 16.0.R1
Platforms All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure <i>router string bgp group string path-mtu-discovery boolean</i>
Tree	path-mtu-discovery
Description	<p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	16.0.R1
Platforms	All

peer-as *number*

Synopsis	Peer AS number
Context	configure <i>router string bgp group string peer-as number</i>
Tree	peer-as
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure <i>router string bgp group string peer-ip-tracking boolean</i>
Tree	peer-ip-tracking
Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p>

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure <i>router string bgp group string preference number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [[family](#)] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure <i>router string bgp group string prefix-limit keyword</i>
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[family] *keyword*

Synopsis	Address family to which the limit applies
Context	configure <i>router string bgp group string prefix-limit keyword</i>
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

idle-timeout *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> idle-timeout <i>number</i>
Tree	idle-timeout
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes that can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false

Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure router <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
Context	configure router <i>string</i> bgp group <i>string</i> remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>string</i> bgp group <i>string</i> remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>string</i> bgp group <i>string</i> remove-private replace <i>boolean</i>
Tree	replace

Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> segment-routing-v6
Tree	segment-routing-v6
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-advertisement

Synopsis	Enable the route-advertisement context
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> segment-routing-v6 route-advertisement
Tree	route-advertisement
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	configure router <i>string</i> bgp <i>group</i> <i>string</i> segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs <i>boolean</i>
Tree	drop-routes-with-srv6-tlvs

Description	When configured to true , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to false , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp group <i>string</i> segment-routing-v6 route-advertisement family <i>keyword</i>
Tree	family
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[family-type] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	configure router <i>string</i> bgp group <i>string</i> segment-routing-v6 route-advertisement family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

strip-srv6-tlvs *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	configure router <i>string</i> bgp group <i>string</i> segment-routing-v6 route-advertisement family <i>keyword</i> strip-srv6-tlvs <i>boolean</i>
Tree	strip-srv6-tlvs
Description	When configured to true , BGP routes that belong to the address family specified using the family command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed.

	When configured to false , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for bgp label-ipv4 routes
Context	configure <i>router string</i> <i>bgp group string</i> selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure <i>router string</i> <i>bgp group string</i> send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure <i>router string</i> <i>bgp group string</i> send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure <i>router string bgp group string send-communities large boolean</i>
Tree	<i>large</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure <i>router string bgp group string send-communities standard boolean</i>
Tree	<i>standard</i>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enable the send-default context
Context	configure <i>router string bgp group string send-default</i>
Tree	<i>send-default</i>
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>string</i> bgp group <i>string</i> send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	configure router <i>string</i> bgp group <i>string</i> send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	configure router <i>string</i> bgp group <i>string</i> send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>string</i> bgp group <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	When configured to true , this command enables the use of split-horizon. This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.

Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the use of split-horizon is disabled.

Introduced	16.0.R1
Platforms	All

static-group *boolean*

Synopsis	Use group for static peers
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>static-group</i> <i>boolean</i>
Tree	<i>static-group</i>
Default	true
Introduced	16.0.R1
Platforms	All

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>tcp-mss</i> (<i>number</i> <i>keyword</i>)
Tree	<i>tcp-mss</i>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	configure <i>router string bgp group string third-party-nexthop boolean</i>
Tree	<i>third-party-nexthop</i>
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure <i>router string bgp group string ttl-security number</i>
Tree	<i>ttl-security</i>
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	BGP peer type
Context	configure <i>router string bgp group string type keyword</i>
Tree	<i>type</i>
Default	no-type
Options	no-type, internal, external
Introduced	16.0.R1

Platforms All

vpn-apply-export *boolean*

Synopsis Apply base-instance BGP export policies to VPN routes

Context **configure** *router string bgp group string vpn-apply-export boolean*

Tree [vpn-apply-export](#)

Description When configured to **true**, base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the export policies are not applied.

Introduced 16.0.R1

Platforms All

vpn-apply-import *boolean*

Synopsis Apply base-instance BGP import policies to VPN routes

Context **configure** *router string bgp group string vpn-apply-import boolean*

Tree [vpn-apply-import](#)

Description When configured to **true**, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced 16.0.R1

Platforms All

hold-time

Synopsis Enter the **hold-time** context

Context **configure** *router string bgp hold-time*

Tree [hold-time](#)

Introduced 16.0.R1

Platforms All

minimum-hold-time *number*

Synopsis	Minimum hold time between successive messages
Context	configure router <i>string</i> bgp hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range	0 3 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum time BGP waits between successive messages
Context	configure router <i>string</i> bgp hold-time seconds <i>number</i>
Tree	seconds
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.
Range	0 3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

ibgp-multipath *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	configure router <i>string</i> bgp ibgp-multipath <i>boolean</i>
Tree	ibgp-multipath

Description	When configured to true , this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops. When configured to false , this command disables IBGP multipath load balancing.
Default	false
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure router <i>string</i> bgp import
Tree	import
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context. When no import policies are specified in this context, BGP routes are accepted by default.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	configure router <i>string</i> bgp import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies a list of objects, where each object is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by this command is allowed to be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".
String Length	1 to 255
Max. Instances	15

Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>initial-send-delay-zero</i> <i>boolean</i>
Tree	initial-send-delay-zero
Default	false
Introduced	16.0.R1
Platforms	All

inter-as-vpn *boolean*

Synopsis	Allow advertisement of VPN routes across AS boundaries
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>inter-as-vpn</i> <i>boolean</i>
Tree	inter-as-vpn
Description	When configured to true , this command allows VPNs to exchange routes across AS boundaries, providing model B connectivity. When configured to false , ASBRs are prevented from advertising VPN routes to peers in other ASs.
Default	false
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>keepalive</i> <i>number</i>
Tree	keepalive
Range	0 to 21845
Default	30
Introduced	16.0.R1

Platforms All

label-allocation

Synopsis Enter the **label-allocation** context

Context **configure router string bgp label-allocation**

Tree [label-allocation](#)

Introduced 20.10.R1

Platforms All

label-ipv6

Synopsis Enter the **label-ipv6** context

Context **configure router string bgp label-allocation label-ipv6**

Tree [label-ipv6](#)

Description This command controls the label allocation behavior for labeled unicast IPv6 routes. The label options are **explicit-null** and **normal**.

Introduced 20.10.R1

Platforms All

explicit-null *boolean*

Synopsis Apply advertised label and associated programming rules

Context **configure router string bgp label-allocation label-ipv6 explicit-null *boolean***

Tree [explicit-null](#)

Description When configured to **true**, this command uses the advertised label and associated programming rules on this instance of BGP. The following applies:

- The router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising. It sets the BGP label value to IPv6 explicit null (value 2), forcing a POP behavior for received packets.
- The received label-unicast IPv6 routes never create tunnels in TTM that can be used to resolve other BGP routes (with an IPv6 next-hop).
- A received label-unicast IPv6 route can be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).

When configured to **false**, advertised label IPv6 programming rules are not used. The following applies

- When the router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising, it sets the BGP label value to a proper value in the dynamic

label range and programs a POP or SWAP operation for that label, depending on the origin of the route and various import policy actions that could apply to the route.

- Received label-unicast IPv6 routes that have a prefix length of 128 bits are automatically installed in TTM so that they can be used to resolve other (non-labeled-unicast) BGP routes (with an IPv6 next-hop).
- A received label-unicast IPv6 route cannot be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).
- The label-ipv6 routes used for ECMP toward an IPv6 destination cannot be a mix of routes with regular label values and routes with special (IPv6 explicit null) label values.

Changes in the value of this leaf do not cause the BGP sessions of the base router to reset.

Default	true
Introduced	20.10.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>string</i> bgp label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

link-state-route-export *boolean*

Synopsis	Allow the export of the TED NLRI database
Context	configure router <i>string</i> bgp link-state-route-export <i>boolean</i>
Tree	link-state-route-export
Description	When configured to true , this command allows BGP to export link-state information to BGP neighbors. When configured to false , link-state information is not exported.
Default	false
Introduced	16.0.R1
Platforms	All

link-state-route-import *boolean*

Synopsis	Allow the import of the TED NLRI database
Context	configure <i>router string</i> bgp link-state-route-import <i>boolean</i>
Tree	link-state-route-import
Description	When configured to true , this command enables the import of link-state information into the BGP-LS address family for advertisement to other BGP neighbors. When configured to false , this command disables the import of link-state information.
Default	false
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure <i>router string</i> bgp local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure <i>router string</i> bgp local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	configure <i>router string</i> bgp local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.

When configured to **false**, the global ASN is hidden in paths announced to the EBGP peer.

Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>string</i> bgp local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local ASN is hidden in paths learned from the peering. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>string</i> bgp local-preference <i>number</i>
Tree	local-preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>string</i> bgp loop-detect <i>keyword</i>
Tree	loop-detect
Default	ignore-loop
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1

Platforms All

loop-detect-threshold *number*

Synopsis Threshold for the global ASN in a received AS path

Context **configure** **router** *string* **bgp** **loop-detect-threshold** *number*

Tree [loop-detect-threshold](#)

Range 0 to 15

Default 0

Introduced 16.0.R6

Platforms All

med-out (*number* | *keyword*)

Synopsis Default MED attribute value to advertise to peers

Context **configure** **router** *string* **bgp** **med-out** (*number* | *keyword*)

Tree [med-out](#)

Max. Range 0 to 4294967295

Options **igp-cost**

Introduced 16.0.R1

Platforms All

min-route-advertisement *number*

Synopsis Minimum time before a prefix can be advertised to peer

Context **configure** **router** *string* **bgp** **min-route-advertisement** *number*

Tree [min-route-advertisement](#)

Range 1 to 255

Default 30

Introduced 16.0.R1

Platforms All

monitor

Synopsis Enable the **monitor** context

Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>monitor</i>
Tree	<i>monitor</i>
Description	Commands in this context specify BMP-related configurations. When this context is unconfigured, the sending of BMP messages to BMP monitoring stations is disabled.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>monitor</i> <i>admin-state</i> <i>keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>monitor</i> <i>all-stations</i> <i>boolean</i>
Tree	<i>all-stations</i>
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to false , the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>monitor</i> <i>route-monitoring</i>

Tree	route-monitoring
Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp monitor route-monitoring post-policy <i>boolean</i>
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [[station-name](#)] *reference*

Synopsis	Add a list entry for station
Context	configure router <i>string</i> bgp monitor station <i>reference</i>
Tree	station
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[station-name] reference

Synopsis	BMP monitoring station
Context	configure <i>router string bgp monitor station reference</i>
Tree	<i>station</i>
Reference	configure <i>bmp station string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mp-bgp-keep boolean

Synopsis	Keep rejected VPN-IP routes in RIB-IN
Context	configure <i>router string bgp mp-bgp-keep boolean</i>
Tree	<i>mp-bgp-keep</i>
Description	When configured to true , the RIB-IN retains all MP-BGP routes, including VPN routes rejected by import policies or not imported by any services. As a result, sending Route Refresh messages is not required when an import policy changes. When configured to false , these VPN routes are deleted from the RIB-IN.
Default	false
Introduced	16.0.R1
Platforms	All

multihop number

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	configure <i>router string bgp multihop number</i>
Tree	<i>multihop</i>
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGp peer multiple hops away. This command applies only to EBGp.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath

Synopsis	Enter the multipath context
Context	configure <i>router string</i> bgp multipath
Tree	multipath
Introduced	16.0.R1
Platforms	All

ebgp number

Synopsis	Maximum multipaths per prefix for EBGp learned routes
Context	configure <i>router string</i> bgp multipath ebgp number
Tree	ebgp
Range	1 to 64
Introduced	16.0.R1
Platforms	All

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure <i>router string</i> bgp multipath family keyword
Tree	family
Introduced	19.5.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family for which multipath selection applies
Context	configure <i>router string</i> bgp multipath family keyword
Tree	family
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	configure router <i>string</i> bgp multipath family <i>keyword</i> ebgp number
Tree	ebgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	configure router <i>string</i> bgp multipath family <i>keyword</i> ibgp number
Tree	ibgp
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

max-paths number

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	configure router <i>string</i> bgp multipath family <i>keyword</i> max-paths number
Tree	max-paths
Description	This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the family command. Consider the following when configuring this command: <ul style="list-style-type: none"> • If the best path is an EBGp-learned route and the ebgp command is configured, the limit configured in the ebgp command overrides the limit configured in this command. • If the best path is an IBGP-learned route and the ibgp command is configured, the limit configured in the ibgp command overrides the limit configured in this command.

- If the best path is an EBGP-learned route and the **ebgp** command is not configured, and this command is configured to 1, multipaths are disabled.
- If the best path is an IBGP-learned route and the **ibgp** command is not configured, and this command is configured to 1, multipaths are disabled.

Range	1 to 64
Introduced	19.5.R1
Platforms	All

restrict *keyword*

Synopsis	AS path restriction for the non-best path
Context	configure router <i>string</i> bgp multipath family <i>keyword</i> restrict <i>keyword</i>
Tree	restrict
Default	same-as-path-length
Options	same-as-path-length, same-neighbor-as, exact-as-path
Introduced	19.5.R1
Platforms	All

unequal-cost *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	configure router <i>string</i> bgp multipath family <i>keyword</i> unequal-cost <i>boolean</i>
Tree	unequal-cost
Description	When configured to true , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

ibgp *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	configure router <i>string</i> bgp multipath ibgp <i>number</i>
Tree	ibgp
Range	1 to 64
Introduced	16.0.R1

Platforms All

max-paths *number*

Synopsis Maximum multipaths per prefix
 Context **configure** *router string* **bgp multipath max-paths** *number*
 Tree **max-paths**
 Range 1 to 64
 Default 1
 Introduced 16.0.R1
 Platforms All

restrict *keyword*

Synopsis AS path restriction for the non-best path
 Context **configure** *router string* **bgp multipath restrict** *keyword*
 Tree **restrict**
 Default same-as-path-length
 Options same-as-path-length, same-neighbor-as, exact-as-path
 Introduced 16.0.R1
 Platforms All

unequal-cost *boolean*

Synopsis Ignore differences in the next-hop cost for multipath
 Context **configure** *router string* **bgp multipath unequal-cost** *boolean*
 Tree **unequal-cost**
 Default false
 Introduced 19.5.R1
 Platforms All

mvpn-vrf-import-subtype-new *boolean*

Synopsis Encode the IANA value of 0x010b in advertised routes
 Context **configure** *router string* **bgp mvpn-vrf-import-subtype-new** *boolean*

Tree	mvpn-vrf-import-subtype-new
Description	When configured to true , this command encodes the value of 0x010b for the type or subtype in advertised routes. When configured to false , BGP encodes the extended community type or subtype as 0x010a to preserve backwards compatibility.
Default	false
Introduced	16.0.R1
Platforms	All

neighbor [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the neighbor list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the BGP peer router
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

add-paths

Synopsis	Enable the add-paths context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths
Tree	add-paths
Description	Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer. When unconfigured, command settings are inherited from a higher level BGP configuration.

Introduced	16.0.R1
Platforms	All

evpn

Synopsis	Enter the evpn context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths evpn
Tree	evpn
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths evpn receive <i>boolean</i>
Tree	receive
Default	false
Introduced	21.10.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths evpn send (<i>number</i> <i>keyword</i>)
Tree	send
Range	1 to 16
Options	multipaths
Introduced	21.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4 receive boolean
Tree	receive
Description	When configured to true , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple routes per IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (number | keyword)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1

Platforms All

label-ipv4

Synopsis Enter the **label-ipv4** context

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
add-paths label-ipv4

Tree **label-ipv4**

Introduced 16.0.R1

Platforms All

receive boolean

Synopsis Receive multiple labeled-unicast routes per IPv4 prefix

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
add-paths label-ipv4 receive boolean

Tree **receive**

Description When configured to **true**, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer.
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

send (number | keyword)

Synopsis Maximum paths per labeled IPv4 unicast prefix

Context **configure router string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
add-paths label-ipv4 send (*number | keyword*)

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.
When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.

Range 1 to 16

Options	multipaths
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths label-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4

Synopsis	Enter the mcast-vpn-ipv4 context
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv4
Tree	mcast-vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv4 send <i>number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of

advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.

Range	1 to 16
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6

Synopsis	Enter the mcast-vpn-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv6
Tree	mcast-vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv6 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mcast-vpn-ipv6 send number
Tree	send

Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv4

Synopsis	Enter the mvpn-ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv4
Tree	mvpn-ipv4
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv4 receive boolean
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send number

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv4 send number

Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

mvpn-ipv6

Synopsis	Enter the mvpn-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv6
Tree	mvpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths mvpn-ipv6 send <i>number</i>
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

vpn-ipv4

Synopsis	Enter the vpn-ipv4 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4
Tree	vpn-ipv4
Introduced	16.0.R1
Platforms	All

receive boolean

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple VPN-IPv4 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv4 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

vpn-ipv6

Synopsis	Enter the vpn-ipv6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6
Tree	vpn-ipv6
Introduced	16.0.R1
Platforms	All

receive *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6 receive <i>boolean</i>
Tree	receive
Description	When configured to true , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to false , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

send (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) add-paths vpn-ipv6 send (<i>number</i> <i>keyword</i>)
Tree	send
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-inactive *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-inactive <i>boolean</i>
Tree	advertise-inactive
Description	When configured to true , this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors. <ul style="list-style-type: none"> • If the active route for the IP prefix is a BGP route, that route is advertised.

- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced	16.0.R1
Platforms	All

advertise-ipv6-next-hops

Synopsis	Enable the advertise-ipv6-next-hops context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops
Tree	advertise-ipv6-next-hops
Description	Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied. When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops evpn <i>boolean</i>
Tree	evpn
Description	When configured to true , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1

Platforms All

ipv4 *boolean*

Synopsis Advertise IPv4 route with IPv6 next-hop address

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-ipv6-next-hops** **ipv4** *boolean*

Tree [ipv4](#)

Description When configured to **true**, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.

When configured to **false**, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default false

Introduced 19.5.R1

Platforms All

label-ipv4 *boolean*

Synopsis Advertise label IPv4 route with IPv6 next-hop address

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-ipv6-next-hops** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Description When configured to **true**, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.

When configured to **false**, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default false

Introduced 16.0.R1

Platforms All

label-ipv6 *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops label-ipv6 <i>boolean</i>
Tree	label-ipv6
Description	When configured to true , label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Description	When configured to true , VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop. When configured to false , VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	configure <i>router</i> <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ipv6-next-hops vpn-ipv6 <i>boolean</i>

Tree	vpn-ipv6
Description	When configured to true , VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to false , VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

advertise-ldp-prefix *boolean*

Synopsis	Advertise active /32 LDP FEC prefixes to BGP peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) advertise-ldp-prefix <i>boolean</i>
Tree	advertise-ldp-prefix
Default	false
Introduced	16.0.R1
Platforms	All

aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) aggregator-id-zero <i>boolean</i>
Tree	aggregator-id-zero
Introduced	16.0.R1
Platforms	All

aigp *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) aigp <i>boolean</i>
Tree	aigp
Description	When configured to true , this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an

associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.

Introduced	16.0.R1
Platforms	All

as-override *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) as-override <i>boolean</i>
Tree	as-override
Description	<p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). This command cannot be explicitly configured to false.</p> <p>When configured to false, no AS override is performed.</p>
Introduced	19.7.R1
Platforms	All

asn-4-byte *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) asn-4-byte <i>boolean</i>
Tree	asn-4-byte
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	BGP authentication key
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All

block-prefix-sid *boolean*

Synopsis	Block the prefix SID attribute
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) block-prefix-sid <i>boolean</i>
Tree	block-prefix-sid
Description	When configured to true , all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed. When configured to false , all prefix SID attributes are propagated without restriction. A change of this configuration causes the affected BGP sessions to flap.
Default	false
Introduced	19.10.R1
Platforms	All

capability-negotiation *boolean*

Synopsis	Enable capability negotiation
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) capability-negotiation <i>boolean</i>
Tree	capability-negotiation
Introduced	16.0.R1
Platforms	All

client-reflect *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) client-reflect <i>boolean</i>
Tree	client-reflect
Introduced	16.0.R1
Platforms	All

cluster

Synopsis	Enter the cluster context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster

Tree	cluster
Introduced	16.0.R1
Platforms	All

allow-local-fallback *boolean*

Synopsis	Allow fallback to RR topology
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster allow-local-fallback <i>boolean</i>
Tree	allow-local-fallback
Description	When configured to true , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to true . When configured to false , this command no route is advertised to the client.
Default	false
Introduced	16.0.R1
Platforms	All

cluster-id *string*

Synopsis	Route reflector cluster ID
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster cluster-id <i>string</i>
Tree	cluster-id
Introduced	16.0.R1
Platforms	All

orr-location *number*

Synopsis	Optimal route reflection location for the cluster
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster orr-location <i>number</i>
Tree	orr-location
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location. With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS

implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

connect-retry *number*

Synopsis	BGP connect retry timer value
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

damp-peer-oscillations

Synopsis	Enable the damp-peer-oscillations context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations
Tree	damp-peer-oscillations
Introduced	16.0.R1
Platforms	All

error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations error-interval <i>number</i>
Tree	error-interval
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1

Platforms All

idle-hold-time

Synopsis Enter the **idle-hold-time** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
damp-peer-oscillations **idle-hold-time**

Tree **idle-hold-time**

Introduced 16.0.R1

Platforms All

initial-wait *number*

Synopsis Time session remains in idle state after stabilization

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
damp-peer-oscillations **idle-hold-time** **initial-wait** *number*

Tree **initial-wait**

Range 0 to 2048

Default 0

Introduced 16.0.R1

Platforms All

max-wait *number*

Synopsis Maximum session idle time after repeated instability

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
damp-peer-oscillations **idle-hold-time** **max-wait** *number*

Tree **max-wait**

Range 1 to 2048

Default 60

Introduced 16.0.R1

Platforms All

second-wait *number*

Synopsis Time that doubles after each repeated session failure

Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time second-wait <i>number</i>
Tree	second-wait
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

damping *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damping <i>boolean</i>
Tree	damping
Introduced	16.0.R1
Platforms	All

def-recv-evpn-encap *keyword*

Synopsis	Default EVPN encapsulation type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) def-recv-evpn-encap <i>keyword</i>
Tree	def-recv-evpn-encap
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community. When unconfigured, the setting for this command is inherited from the BGP group-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

default-label-preference

Synopsis	Enter the default-label-preference context
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference
Tree	default-label-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGp
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-preference

Synopsis	Enter the default-preference context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference
Tree	default-preference
Introduced	19.5.R1
Platforms	All

ebgp number

Synopsis	Default preference for EBGP
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ebgp <i>number</i>
Tree	ebgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

ibgp number

Synopsis	Default preference for IBGP
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-preference ibgp <i>number</i>
Tree	ibgp
Range	0 to 255
Introduced	19.5.R1
Platforms	All

default-route-target boolean

Synopsis	Send default RTC route (zero prefix length) to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-route-target <i>boolean</i>
Tree	default-route-target
Description	When configured to true , this command sends the default RTC route (zero prefix length) toward the selected peers. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , a default RTC route is not sent.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) <i>description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ebgp-default-reject-policy

Synopsis	Enable the ebgp-default-reject-policy context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy
Tree	ebgp-default-reject-policy
Introduced	19.5.R1
Platforms	All

export *boolean*

Synopsis	Enable default reject export policy for external peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy export <i>boolean</i>
Tree	export
Default	true
Introduced	19.5.R1
Platforms	All

import *boolean*

Synopsis	Enable default reject import policy for external peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy import <i>boolean</i>
Tree	import
Default	true
Introduced	19.5.R1
Platforms	All

egress-engineering

Synopsis	Enable the egress-engineering context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-engineering
Tree	egress-engineering
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-engineering admin-state keyword
Tree	admin-state
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	All

egress-peer-engineering-label-unicast *boolean*

Synopsis	Generate EPE label-unicast routes for neighbor
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) egress-peer-engineering-label-unicast boolean
Tree	egress-peer-engineering-label-unicast
Description	When configured to true , BGP generates a label-unicast route for the /32 or /128 prefix that corresponds to the BGP neighbor address. This route can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. This supports the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

enforce-first-as *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) enforce-first-as <i>boolean</i>
Tree	enforce-first-as
Description	<p>When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, received routes are not checked for compliance with the rule.</p>
Introduced	16.0.R1
Platforms	All

error-handling

Synopsis	Enter the error-handling context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling
Tree	error-handling
Introduced	16.0.R1
Platforms	All

update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling update-fault-tolerance <i>boolean</i>
Tree	update-fault-tolerance
Description	When configured to true , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, all errors trigger a session reset.

Introduced	16.0.R1
Platforms	All

export

Synopsis	Enable the export context
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) export
Tree	export
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the configure policy-options context. When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string | string*)

Synopsis	BGP export policy name
Context	configure router string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) export policy (<i>policy-expr-string string</i>)
Tree	policy
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers. Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route. Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 255
Max. Instances	15

Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-nh-encoding

Synopsis	Enable the extended-nh-encoding context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding
Tree	extended-nh-encoding
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Advertise encoding capability for IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding ipv4 boolean
Tree	ipv4
Default	false
Introduced	19.5.R1
Platforms	All

label-ipv4 boolean

Synopsis	Advertise encoding capability for label-IPv4 routes
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) extended-nh-encoding vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

family

Synopsis	Enable the family context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family
Tree	family
Introduced	16.0.R1
Platforms	All

bgp-ls *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family bgp-ls <i>boolean</i>
Tree	bgp-ls
Default	false
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family evpn boolean
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv4 boolean

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-ipv4 boolean
Tree	flow-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

flow-ipv6 boolean

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-ipv6 boolean
Tree	flow-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

flow-vpn-ipv4 boolean

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-vpn-ipv4 boolean
Tree	flow-vpn-ipv4
Default	false

Introduced 22.7.R1
Platforms All

flow-vpn-ipv6 *boolean*

Synopsis Advertise support for FlowSpec-VPN IPv6 address family
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family flow-vpn-ipv6 boolean
Tree [flow-vpn-ipv6](#)
Default false
Introduced 22.7.R1
Platforms All

ipv4 *boolean*

Synopsis Add support for the IPv4 address family
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family ipv4 boolean
Tree [ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

ipv6 *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
family ipv6 boolean
Tree [ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

l2-vpn *boolean*

Synopsis Advertise MP-BGP support for the L2-VPN address family

Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) family l2-vpn <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) family label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) family label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv4 *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) family mcast-ipv4 <i>boolean</i>
Tree	mcast-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-ipv6 *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv6 <i>boolean</i>
Tree	mcast-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-vpn-ipv4 <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mdt-safi <i>boolean</i>
Tree	mdt-safi

Default	false
Introduced	16.0.R1
Platforms	All

ms-pw *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ms-pw <i>boolean</i>
Tree	ms-pw
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mvpn-ipv4 <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

route-target *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family route-target <i>boolean</i>
Tree	route-target
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family sr-policy-ipv4 <i>boolean</i>
Tree	sr-policy-ipv4
Description	This command allows the router to advertise the capability for AF11/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family sr-policy-ipv6 <i>boolean</i>
Tree	sr-policy-ipv6
Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) <i>family vpn-ipv4 boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) <i>family vpn-ipv6 boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

fast-external-failover *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) <i>fast-external-failover boolean</i>
Tree	fast-external-failover
Description	When this command inherits a value of true , the router drops an external BGP session on a single-hop route immediately when the local interface goes down. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true . When configured to false , the BGP session remains up until the hold time expires.
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) <i>graceful-restart</i>
Tree	graceful-restart

Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers. When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart gr-notification <i>boolean</i>
Tree	gr-notification
Description	When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error. When configured to false , NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

long-lived

Synopsis	Enable the long-lived context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived
Tree	long-lived
Description	Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures. LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort. The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.
Introduced	16.0.R1
Platforms	All

advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i>
Tree	advertise-stale-to-all-neighbors
Default	false
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i>
Tree	family

Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-stale-time *number*

Synopsis	LLGR stale routes time for family override
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i>
Tree	advertised-stale-time
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

forwarding-bits-set *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived forwarding-bits-set <i>keyword</i>
Tree	forwarding-bits-set
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Default	none
Options	none, all, non-fwd
Introduced	16.0.R1
Platforms	All

helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-restart-time <i>number</i>
Tree	helper-override-restart-time
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-stale-time <i>number</i>
Tree	helper-override-stale-time

Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived without-no-export <i>boolean</i>
Tree	without-no-export
Description	When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0. When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

restart-time *number*

Synopsis	Restart time advertised by GR capability
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart restart-time <i>number</i>
Tree	restart-time
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

stale-routes-time *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart stale-routes-time <i>number</i>
Tree	stale-routes-time
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

group *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP peer group
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) group <i>reference</i>
Tree	group
Reference	configure router <i>string</i> bgp group <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

hold-time

Synopsis	Enter the hold-time context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time
Tree	hold-time
Introduced	16.0.R1
Platforms	All

minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time minimum-hold-time <i>number</i>
Tree	minimum-hold-time
Range	0 3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Maximum hold time between successive messages
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time seconds <i>number</i>
Tree	seconds
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP group-level configuration.</p>
Range	0 3 to 65535
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enable the import context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import

Tree	import
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the configure policy-options context.</p> <p>When this context is unconfigured, the policy association is inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Names of the BGP import policies
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) initial-send-delay-zero <i>boolean</i>

Tree	initial-send-delay-zero
Description	When configured to true , BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

keepalive *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) keepalive <i>number</i>
Tree	keepalive
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

l2vpn-cisco-interop *boolean*

Synopsis	Allow translation from Cisco non-compliant NLRI format
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) l2vpn-cisco-interop <i>boolean</i>
Tree	l2vpn-cisco-interop
Default	false
Introduced	16.0.R1
Platforms	All

label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) label-preference <i>number</i>
Tree	label-preference
Range	1 to 255
Introduced	16.0.R1

Platforms All

link-bandwidth

Synopsis Enter the **link-bandwidth** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth

Tree **link-bandwidth**

Introduced 16.0.R3

Platforms All

accept-from-ebgp

Synopsis Enable the **accept-from-ebgp** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp

Tree **accept-from-ebgp**

Introduced 16.0.R4

Platforms All

ipv4 boolean

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp ipv4 boolean

Tree **ipv4**

Default false

Introduced 16.0.R4

Platforms All

ipv6 boolean

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp ipv6 boolean

Tree **ipv6**

Default false

Introduced 16.0.R4
Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp label-ipv4 boolean
Tree [label-ipv4](#)
Default false
Introduced 16.0.R4
Platforms All

label-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp label-ipv6 boolean
Tree [label-ipv6](#)
Default false
Introduced 16.0.R4
Platforms All

vpn-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
link-bandwidth accept-from-ebgp vpn-ipv4 boolean
Tree [vpn-ipv4](#)
Default false
Introduced 16.0.R4
Platforms All

vpn-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp vpn-ipv6 boolean
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

add-to-received-ebgp

Synopsis	Enable the add-to-received-ebgp context
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp
Tree	add-to-received-ebgp
Introduced	16.0.R3
Platforms	All

ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R3
Platforms	All

ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R3
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false

Introduced	16.0.R3
Platforms	All

aggregate-used-paths

Synopsis	Enable the aggregate-used-paths context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths
Tree	aggregate-used-paths
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths ipv4 boolean
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths ipv6 boolean
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv4 boolean

Tree	label-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv6 boolean
Tree	label-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths vpn-ipv4 boolean
Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths vpn-ipv6 boolean
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

send-to-ebgp

Synopsis	Enable the send-to-ebgp context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp
Tree	send-to-ebgp
Introduced	16.0.R4
Platforms	All

ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R4
Platforms	All

ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R4
Platforms	All

label-ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R4

Platforms All

label-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth send-to-ebgp label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth send-to-ebgp vpn-ipv4** *boolean*

Tree [vpn-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

vpn-ipv6 *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth send-to-ebgp vpn-ipv6** *boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis Local IP address used when communicating with BGP peers

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Tree	local-address
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

local-as

Synopsis	Enter the local-as context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as
Tree	local-as
Introduced	16.0.R1
Platforms	All

as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as as-number <i>number</i>
Tree	as-number
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as prepend-global-as <i>boolean</i>
Tree	prepend-global-as
Description	When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to false , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

private *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as private <i>boolean</i>
Tree	private
Description	When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

local-preference *number*

Synopsis	Default local preference if not in incoming routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-preference <i>number</i>
Tree	local-preference
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loop-detect *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect <i>keyword</i>
Tree	loop-detect
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

loop-detect-threshold *number*

Synopsis	Threshold for the global ASN in a received AS path
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect-threshold <i>number</i>
Tree	loop-detect-threshold
Range	0 to 15
Introduced	16.0.R6
Platforms	All

med-out (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) med-out (<i>number</i> <i>keyword</i>)
Tree	med-out
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

min-route-advertisement *number*

Synopsis	Minimum interval between successive prefix updates
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) min-route-advertisement <i>number</i>
Tree	min-route-advertisement
Range	1 to 255
Introduced	16.0.R1
Platforms	All

monitor

Synopsis	Enable the monitor context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor
Tree	monitor
Description	Commands in this context specify BMP-related configurations at the BGP neighbor level.

When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor all-stations <i>boolean</i>
Tree	all-stations
Description	When configured to true , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations. When configured to false , the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

route-monitoring

Synopsis	Enter the route-monitoring context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring
Tree	route-monitoring

Introduced	16.0.R1
Platforms	All

post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring post-policy <i>boolean</i>
Tree	post-policy
Default	false
Introduced	16.0.R1
Platforms	All

pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring pre-policy <i>boolean</i>
Tree	pre-policy
Default	false
Introduced	16.0.R1
Platforms	All

station [[station-name](#)] *reference*

Synopsis	Add a list entry for station
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station <i>reference</i>
Tree	station
Description	This command configures the set of BMP monitoring stations for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[station-name] reference

Synopsis	BMP monitoring station
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station reference
Tree	station
Reference	configure bmp station <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

multihop number

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multihop number
Tree	multihop
Range	1 to 255
Introduced	16.0.R1
Platforms	All

multipath-eligible boolean

Synopsis	Allow routes from this peer in multipath eligibility
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) multipath-eligible boolean
Tree	multipath-eligible
Introduced	19.5.R1
Platforms	All

next-hop-self boolean

Synopsis	Advertise routes with local address as next-hop address
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-self boolean
Tree	next-hop-self

Description	<p>When configured to true, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the configure router bgp rr-vpn-forwarding command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, protocol standard behavior is applied to determine whether to set next-hop-self in advertised routes.</p>
Introduced	16.0.R1
Platforms	All

next-hop-unchanged

Synopsis	Enable the next-hop-unchanged context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged
Tree	next-hop-unchanged
Description	Commands in this context specify the IP address families where the next hop remains unchanged when sending BGP routes to peers of the neighbor.
Introduced	16.0.R1
Platforms	All

evpn boolean

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	20.2.R1
Platforms	All

label-ipv4 boolean

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged label-ipv4 <i>boolean</i>

Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged label-ipv6 <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	20.2.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) next-hop-unchanged vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	20.2.R1
Platforms	All

origin-validation

Synopsis	Enable the origin-validation context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation
Tree	origin-validation
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv4 <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1

Platforms All

label-ipv6 *boolean*

Synopsis Enable support for labeled-unicast IPv6 routes

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **origin-validation label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R1

Platforms All

outbound-route-filtering

Synopsis Enable the **outbound-route-filtering** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **outbound-route-filtering**

Tree [outbound-route-filtering](#)

Description Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).
When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced 16.0.R1

Platforms All

extended-community

Synopsis Enable the **extended-community** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **outbound-route-filtering extended-community**

Tree [extended-community](#)

Description Commands in this context configure the ORF send and receive capabilities based on Extended Communities.
When this context is unconfigured, the command settings are inherited from the group-level configuration.

Introduced 16.0.R1

Platforms All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) outbound-route-filtering extended-community accept-orf boolean
Tree	accept-orf
Description	<p>When configured to true, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the send-orf context
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

route-target [*community-name*] *string*

Synopsis	Add a list entry for route-target
Context	configure <i>router string</i> bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf route-target string
Tree	route-target
Introduced	16.0.R1
Platforms	All

[community-name] string

Synopsis	Route target community name
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) outbound-route-filtering extended-community send-orf route-target <i>string</i>
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

passive boolean

Synopsis	Use passive mode for BGP communication
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) passive <i>boolean</i>
Tree	passive
Introduced	16.0.R1
Platforms	All

path-mtu-discovery boolean

Synopsis	Enable path MTU discovery
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced	16.0.R1
Platforms	All

peer-as *number*

Synopsis	Peer AS number
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-as <i>number</i>
Tree	peer-as
Description	This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer. For EBGp peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router. For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

peer-creation-type *keyword*

Synopsis	Peer creation type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-creation-type <i>keyword</i>
Tree	peer-creation-type
Default	static
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking

Description	<p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference <i>number</i>
Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p> <p>When unconfigured, the command setting is inherited from the group-level configuration.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

prefix-limit [*family*] *keyword*

Synopsis	Enter the prefix-limit list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

[family] keyword

Synopsis	Address family to which the limit applies
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i>
Tree	prefix-limit
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

idle-timeout number

Synopsis	Time which BGP peering remains idle before reconnecting
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> idle-timeout <i>number</i>
Tree	idle-timeout
Description	This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer. When unconfigured, the command inherits the value from the group-level configuration.
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

log-only boolean

Synopsis	Send warning message at threshold instead of take-down
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

maximum *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> maximum <i>number</i>
Tree	maximum
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

post-import *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> post-import <i>boolean</i>
Tree	post-import
Default	false
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Percentage threshold that triggers a warning message
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private
Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6
Tree	segment-routing-v6
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

route-advertisement

Synopsis	Enable the route-advertisement context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement
Tree	route-advertisement
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs <i>boolean</i>
Tree	drop-routes-with-srv6-tlvs
Description	When configured to true , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to false , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement family <i>keyword</i>
Tree	family

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[family-type] *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement family <i>keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

strip-srv6-tlvs *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) segment-routing-v6 route-advertisement family <i>keyword</i> strip-srv6-tlvs <i>boolean</i>
Tree	strip-srv6-tlvs
Description	When configured to true , BGP routes that belong to the address family specified using the family command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed. When configured to false , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities extended <i>boolean</i>
Tree	extended
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities large <i>boolean</i>
Tree	large
Description	<p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities standard <i>boolean</i>
Tree	standard
Description	When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true . When this command inherits a value of true , BGP standard communities are sent to peers in the Communities attribute. When configured to false , all standard communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enable the send-default context
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
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Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

tcp-mss (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tcp-mss (<i>number</i> <i>keyword</i>)
Tree	tcp-mss
Description	This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command). The configured value controls two properties of the TCP connection as follows: TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router. TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

third-party-nexthop *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) third-party-nexthop <i>boolean</i>
Tree	third-party-nexthop
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ttl-security <i>number</i>
Tree	ttl-security
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

When unconfigured, the command inherits the value of the group-level setting.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	BGP peer type
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) type <i>keyword</i>
Tree	type
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) vpn-apply-export <i>boolean</i>
Tree	vpn-apply-export
Description	When configured to true , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false . When this command inherits a value of false , the export policies are not applied.
Introduced	16.0.R1
Platforms	All

vpn-apply-import *boolean*

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	configure router <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) vpn-apply-import <i>boolean</i>
Tree	vpn-apply-import
Description	When configured to true , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced	16.0.R1
Platforms	All

neighbor-trust

Synopsis	Enter the neighbor-trust context
Context	configure <i>router string</i> bgp neighbor-trust
Tree	neighbor-trust
Description	<p>Commands in this context enable a label security feature at an inter-AS boundary for the specified IP families.</p> <p>This label security feature allows the configuration of a router, acting in a PE or in an ASBR role, to accept packets of VPN-IP or EVPN prefixes only from direct EBGP neighbors to which it advertised a service label.</p> <p>The untrusted state identifies the participating interfaces. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>At a high level, BGP tracks each direct EBGP neighbor over an untrusted interface and to which it sent a prefix label. For each of those prefixes, BGP programs a bit map in the ILM record that indicates, on a per-untrusted interface basis, whether the matching received packets must be forwarded or dropped.</p>
Introduced	16.0.R4
Platforms	All

evpn boolean

Synopsis	Enable inter-AS label security for the EVPN family
Context	configure <i>router string</i> bgp neighbor-trust evpn boolean
Tree	evpn
Default	false
Introduced	23.3.R1
Platforms	All

vpn-ipv4 boolean

Synopsis	Enable inter-AS label security for the VPN-IPv4 family
Context	configure <i>router string</i> bgp neighbor-trust vpn-ipv4 boolean

Tree	vpn-ipv4
Default	false
Introduced	16.0.R4
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Enable inter-AS label security for the VPN-IPv6 family
Context	configure router <i>string</i> bgp neighbor-trust vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R4
Platforms	All

next-hop-resolution

Synopsis	Enter the next-hop-resolution context
Context	configure router <i>string</i> bgp next-hop-resolution
Tree	next-hop-resolution
Introduced	16.0.R1
Platforms	All

allow-unresolved-leaking *boolean*

Synopsis	Allow unresolved BGP routes to be leaked to VPRN routes
Context	configure router <i>string</i> bgp next-hop-resolution allow-unresolved-leaking <i>boolean</i>
Tree	allow-unresolved-leaking
Description	When configured to true , this command instructs BGP in the base router instance to allow its routes to be leaked to other (VPRN) BGP instances even if the routes to be leaked do not have a BGP next-hop that can be resolved by the base instance. When configured to false , VPRN cannot import a route.
Default	false
Introduced	19.10.R1
Platforms	All

labeled-routes

Synopsis	Enter the labeled-routes context
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes
Tree	labeled-routes
Introduced	16.0.R1
Platforms	All

allow-static *boolean*

Synopsis	Allow static routes to resolve BGP next-hop
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes allow-static <i>boolean</i>
Tree	allow-static
Description	<p>When configured to true, the BGP next-hop of label-IPv4, label-IPv6, VPN-IPv4, and VPN-IPv6 routes received from any EBGP or IBGP peer can be resolved using static routes, except for static default routes (0/0 and ::/0).</p> <p>A static route is less preferred than a local or interface route for resolving the BGP next-hop of labeled route but is more preferred than other IGP routes or tunnels.</p> <p>When configured to false, BGP next-hop resolution using static routes is not allowed.</p> <p>A label-IPv4 or label-IPv6 route can be resolved by a static blackhole route, even when this command is configured to false, but only if the static blackhole route is the longest prefix match (LPM) static route for the BGP next-hop address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

rr-use-route-table *boolean*

Synopsis	Use RTM to resolve BGP next-hop if TTM resolution fails
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes rr-use-route-table <i>boolean</i>
Tree	rr-use-route-table
Description	<p>When configured to true, this command enables BGP to perform a lookup of IGP routes in the route table to resolve the BGP next-hop of label-IPv4 and label-IPv6 routes. This is useful for a Route Reflector (RR) that does not participate in tunnel signaling protocols such as LDP and RSVP and therefore, does not have tunnels to resolve the BGP next-hops of label-unicast routes.</p> <p>Disable route table installation (via the route-table-install command) before setting this command to true; otherwise, forwarding of label routes resolved in this way will be incorrect.</p>

When configured to **false**, RTM next-hop resolution is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

transport-tunnel

Synopsis	Enter the transport-tunnel context
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel
Tree	transport-tunnel
Description	Commands in this context configure options for the next-hop resolution of BGP labeled routes (VPN-IP and labeled-unicast) using tunnels in TTM.
Introduced	16.0.R1
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[[family-type](#)] *keyword*

Synopsis	Address family type for tunnel selection
Context	configure <i>router string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i>
Tree	family
Options	vpn, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>allow-flex-algo-fallback</i> <i>boolean</i>
Tree	allow-flex-algo-fallback
Description	When configured to true , a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available. When configured to false , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>enforce-strict-tunnel-tagging</i> <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Description	When configured to true , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered. When configured to false , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution</i> <i>keyword</i>
Tree	resolution
Default	filter

Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to false , BGP tunneling for next-hop resolution is not enabled.
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	When configured to true , this command enables the selection of LDP tunneling for next-hop resolution and specifies the LDP tunnels in the tunnel table corresponding to /32 IPv4 FECs and /128 IPv6 FECs. When configured to false , LDP tunneling for next-hop resolution is not enabled.
Default	true

Introduced 16.0.R1
 Platforms All

mpls-fwd-policy *boolean*

Synopsis Use MPLS forwarding policy for next-hop resolution
 Context **configure** *router string* [bgp next-hop-resolution](#) [labeled-routes](#) [transport-tunnel family](#)
keyword [resolution-filter](#) [mpls-fwd-policy](#) *boolean*
 Tree [mpls-fwd-policy](#)
 Default false
 Introduced 16.0.R4
 Platforms All

rib-api *boolean*

Synopsis Use RIB API gRPC service for next-hop resolution
 Context **configure** *router string* [bgp next-hop-resolution](#) [labeled-routes](#) [transport-tunnel family](#)
keyword [resolution-filter](#) [rib-api](#) *boolean*
 Tree [rib-api](#)
 Default false
 Introduced 16.0.R4
 Platforms All

rsvp *boolean*

Synopsis Use RSVP tunneling for next-hop resolution
 Context **configure** *router string* [bgp next-hop-resolution](#) [labeled-routes](#) [transport-tunnel family](#)
keyword [resolution-filter](#) [rsvp](#) *boolean*
 Tree [rsvp](#)
 Description When configured to **true**, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations. This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.
 When configured to **false**, this command disables the selection of RSVP tunneling for next-hop resolution.
 Default false

Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family keyword resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p> <p>When configured to false, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family keyword resolution-filter sr-ospf <i>boolean</i>
Tree	sr-ospf
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel <i>family</i> <i>keyword</i> resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Description	<p>When configured to true, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R6
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel <i>family</i> <i>keyword</i> resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy. Next hop resolution of VPN-IP routes by SR policies is not supported.</p> <p>When configured to false, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Description	When configured to true , this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution. In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID. When configured to false , the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes transport-tunnel family <i>keyword</i> resolution-filter udp <i>boolean</i>
Tree	udp
Default	false
Introduced	16.0.R1
Platforms	All

use-bgp-routes

Synopsis	Enter the use-bgp-routes context
Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes use-bgp-routes
Tree	use-bgp-routes
Introduced	21.2.R1
Platforms	All

label-ipv6-explicit-null *boolean*

Synopsis	Use BGP routes to resolve address family routes
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Context	configure router <i>string</i> bgp next-hop-resolution labeled-routes use-bgp-routes label-ipv6-explicit-null <i>boolean</i>
Tree	label-ipv6-explicit-null
Description	<p>When configured to true, a labeled IPv6 route with the explicit-null label can be resolved by other routes, and also by unlabeled IPv4 routes and unlabeled IPv6 routes that are resolved by static routes, interface routes, or tunnels. Up to four levels of recursive resolution are supported when the top route is a labeled IPv6 route with an explicit-null label. When disabled, a labeled IPv6 route cannot be resolved by other labeled IPv6 routes.</p> <p>A labeled IPv6 route with a regular label (not explicit-null) is never resolved by other labeled IPv6 routes.</p>
Default	false
Introduced	21.2.R1
Platforms	All

policy reference

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution policy reference
Tree	policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

shortcut-tunnel

Synopsis	Enter the shortcut-tunnel context
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel
Tree	shortcut-tunnel
Description	Commands in this context configure the tunnel types that can be used to resolve unlabeled IPv4 and IPv6 BGP routes.
Introduced	16.0.R1
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
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Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] *keyword*

Synopsis	Address family type for shortcut tunnel selection
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword</i>
Tree	family
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

allow-flex-algo-fallback *boolean*

Synopsis	Enable flexible algorithm fallback
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword allow-flex-algo-fallback boolean</i>
Tree	allow-flex-algo-fallback
Description	<p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	20.10.R1
Platforms	All

disallow-igp *boolean*

Synopsis	Do not perform route table lookup to resolve BGP route
Context	configure <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword disallow-igp boolean</i>
Tree	disallow-igp

Description	When configured to true , no attempt is made to resolve the IPv4 or IPv6 BGP route using route table lookup if no resolving tunnel can be found in the tunnel table. When configured to false , route table lookup can be performed if no resolving tunnel is found in the tunnel table.
Default	false
Introduced	16.0.R1
Platforms	All

enforce-strict-tunnel-tagging *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> enforce-strict-tunnel-tagging <i>boolean</i>
Tree	enforce-strict-tunnel-tagging
Description	When configured to true , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered. When configured to false , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

resolution *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter bgp <i>boolean</i>
Tree	bgp
Description	When configured to true , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes. When configured to false , BGP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter ldp <i>boolean</i>
Tree	ldp
Description	When configured to true , BGP selects the LDP FEC that is the longest prefix match to the BGP next-hop address. When configured to false , LDP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>mpls-fwd-policy</i> <i>boolean</i>
Tree	<i>mpls-fwd-policy</i>
Default	false
Introduced	16.0.R4
Platforms	All

rib-api *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>rib-api</i> <i>boolean</i>
Tree	<i>rib-api</i>
Default	false
Introduced	16.0.R4
Platforms	All

rsvp *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>rsvp</i> <i>boolean</i>
Tree	<i>rsvp</i>
Description	<p>When configured to true, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to false, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-isis boolean

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	configure <i>router string</i> bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-isis boolean
Tree	sr-isis
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p> <p>When configured to false, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf boolean

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	configure <i>router string</i> bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-ospf boolean
Tree	sr-ospf
Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 boolean

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
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Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-ospf3 <i>boolean</i>
Tree	sr-ospf3
Description	<p>When configured to true, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to false, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R6
Platforms	All

sr-policy *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-policy <i>boolean</i>
Tree	sr-policy
Description	<p>When configured to true, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy.</p> <p>When configured to false, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>string</i> bgp next-hop-resolution shortcut-tunnel family <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te

Description	<p>When configured to true, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to false, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

use-bgp-routes *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution use-bgp-routes <i>boolean</i>
Tree	use-bgp-routes
Description	<p>This command enables the use of BGP routes to resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p>
Default	false
Introduced	16.0.R1
Platforms	All

vpn-family-policy *reference*

Synopsis	Policy to filter routes for next-hop resolution
Context	configure <i>router</i> <i>string</i> bgp next-hop-resolution vpn-family-policy <i>reference</i>
Tree	vpn-family-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	20.5.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Use weighted ECMP for next-hop tunnel selection for 6PE
Context	configure router <i>string</i> bgp next-hop-resolution weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, this command enables weighted ECMP for next-hop tunnel selection for 6PE. When weighted ECMP is enabled, the RSVP-TE tunnel used to forward 6PE packets to the ECMP next hop that is chosen according to the outcome of the hash on the packet at the normalized load-balancing weight of the tunnel.</p> <p>When configured to false, weighted ECMP is disabled for next-hop tunnel selection for 6PE.</p>
Default	false
Introduced	16.0.R1
Platforms	All

optimal-route-reflection

Synopsis	Enter the optimal-route-reflection context
Context	configure router <i>string</i> bgp optimal-route-reflection
Tree	optimal-route-reflection
Introduced	16.0.R1
Platforms	All

location [[location-id](#)] *number*

Synopsis	Enter the location list instance
Context	configure router <i>string</i> bgp optimal-route-reflection location <i>number</i>
Tree	location
Description	<p>Commands in this context configure the location ID for the route reflector. A BGP neighbor can be associated with a location if it is a route-reflector client.</p> <p>Up to three IPv4 addresses and three IPv6 addresses can be specified per location.</p> <p>If the TE DB is unable find a node in its topology database that matches a primary address of the location, it tries to find a node matching a secondary address. If this attempt also fails, the TE DB tries to find a node matching a tertiary address.</p> <p>The IP addresses specified for a location should be topologically “close” to a set of clients that should all receive the same optimal path for that location.</p>
Introduced	16.0.R1
Platforms	All

[location-id] number

Synopsis	Optimal route reflection location ID
Context	configure router <i>string</i> bgp optimal-route-reflection location number
Tree	location
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

primary-ip-address string

Synopsis	Primary IPv4 address of the reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location number primary-ip-address string
Tree	primary-ip-address
Introduced	16.0.R1
Platforms	All

primary-ipv6-address string

Synopsis	Primary IPv6 address of the reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location number primary-ipv6-address string
Tree	primary-ipv6-address
Introduced	16.0.R4
Platforms	All

secondary-ip-address string

Synopsis	Secondary IPv4 address of reference location for ORR
Context	configure router <i>string</i> bgp optimal-route-reflection location number secondary-ip-address string
Tree	secondary-ip-address
Introduced	16.0.R1
Platforms	All

secondary-ipv6-address *string*

Synopsis	Secondary IPv6 address of reference location for ORR
Context	configure <i>router string</i> bgp optimal-route-reflection location number secondary-ipv6-address string
Tree	secondary-ipv6-address
Introduced	16.0.R4
Platforms	All

tertiary-ip-address *string*

Synopsis	Tertiary IPv4 address of the reference location for ORR
Context	configure <i>router string</i> bgp optimal-route-reflection location number tertiary-ip-address string
Tree	tertiary-ip-address
Introduced	16.0.R1
Platforms	All

tertiary-ipv6-address *string*

Synopsis	Tertiary IPv6 address of the reference location for ORR
Context	configure <i>router string</i> bgp optimal-route-reflection location number tertiary-ipv6-address string
Tree	tertiary-ipv6-address
Introduced	16.0.R4
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure <i>router string</i> bgp optimal-route-reflection spf-wait
Tree	spf-wait
Description	Commands in this context specify the interval between consecutive SPF calculations performed by the TE DB in support of BGP optimal route reflection. The time components implement an exponential back-off algorithm.
Introduced	16.0.R1

Platforms All

initial-wait *number*

Synopsis Initial SPF calculation delay after a topology change

Context **configure** *router string bgp optimal-route-reflection spf-wait initial-wait number*

Tree [initial-wait](#)

Range 1 to 300

Default 5

Introduced 16.0.R1

Platforms All

max-wait *number*

Synopsis Maximum interval between consecutive SPF calculations

Context **configure** *router string bgp optimal-route-reflection spf-wait max-wait number*

Tree [max-wait](#)

Range 1 to 600

Default 60

Introduced 16.0.R1

Platforms All

second-wait *number*

Synopsis Delay between first and second SPF calculation

Context **configure** *router string bgp optimal-route-reflection spf-wait second-wait number*

Tree [second-wait](#)

Range 1 to 300

Default 15

Introduced 16.0.R1

Platforms All

outbound-route-filtering

Synopsis Enable the **outbound-route-filtering** context

Context	configure <i>router string</i> bgp outbound-route-filtering
Tree	outbound-route-filtering
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When unconfigured, the ORF capabilities are not enabled.
Introduced	16.0.R1
Platforms	All

extended-community

Synopsis	Enable the extended-community context
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community
Tree	extended-community
Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities. When this context is unconfigured, the ORF capabilities for Extended Communities is not enabled.
Introduced	16.0.R1
Platforms	All

accept-orf *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	configure <i>router string</i> bgp outbound-route-filtering extended-community accept-orf boolean
Tree	accept-orf
Description	When configured to true , the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers. When configured to false , the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.
Default	false
Introduced	16.0.R1
Platforms	All

send-orf

Synopsis	Enable the send-orf context
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Context	configure router <i>string</i> bgp outbound-route-filtering extended-community send-orf
Tree	send-orf
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, ORF send capability is not enabled.</p>
Introduced	16.0.R1
Platforms	All

route-target [[community-name](#)] *string*

Synopsis	Add a list entry for route-target
Context	configure router <i>string</i> bgp outbound-route-filtering extended-community send-orf route-target string
Tree	route-target
Introduced	16.0.R1
Platforms	All

[community-name] *string*

Synopsis	Route target community name
Context	configure router <i>string</i> bgp outbound-route-filtering extended-community send-orf route-target string
Tree	route-target
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Enable entropy label capability on BGP tunnels
Context	configure router <i>string</i> bgp override-tunnel-elc boolean
Tree	override-tunnel-elc
Description	When configured to true , this command renders all far ends for BGP tunnels as entropy-label-capable, regardless of any received capability signaling. This ensures that the

entropy label will be inserted on BGP tunnels in the absence of capability signaling support by the far end.

This is a system-wide configuration, since efficient entropy label operation requires that all LSRs in a network support entropy labels. This command should be used with care, particularly in inter-AS use cases, as entropy label capability may differ between domains.

When configured to **false**, this command disables all far ends for BGP tunnels as entropy-label-capable.

Default	false
Introduced	16.0.R1
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Enable Path MTU Discovery
Context	configure router <i>string</i> bgp path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Description	When configured to true , Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Default	false
Introduced	16.0.R1
Platforms	All

peer-ip-tracking *boolean*

Synopsis	Enable BGP peer tracking
Context	configure router <i>string</i> bgp peer-ip-tracking <i>boolean</i>
Tree	peer-ip-tracking
Default	false

Introduced	16.0.R1
Platforms	All

peer-tracking-policy *reference*

Synopsis	Policy for BGP peer tracking on router instance
Context	configure router <i>string</i> bgp peer-tracking-policy <i>reference</i>
Tree	peer-tracking-policy
Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Route preference for routes learned from all peers
Context	configure router <i>string</i> bgp preference <i>number</i>
Tree	preference
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p>
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

purge-timer *number*

Synopsis	Maximum time before stale routes are purged
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Context	configure router <i>string</i> bgp purge-timer <i>number</i>
Tree	purge-timer
Description	This command configures the maximum time before stale routes are purged. When a route refresh request is sent to a peer for VPN-IP routes received from that peer (in the RIB-IN), the routes are set to stale and the purge timer is started. If the routes are not updated (refreshed) before the purge timer expires, the routes are removed.
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

rapid-update

Synopsis	Enter the rapid-update context
Context	configure router <i>string</i> bgp rapid-update
Tree	rapid-update
Description	Commands in this context specify the address families that are configured to support the rapid update functionality. The rapid update functionality overrides the remaining time on a peer's MRAI timer and immediately sends routes belonging the specified address families (and all other pending updates) to the peers receiving these routes.
Introduced	16.0.R1
Platforms	All

evpn *boolean*

Synopsis	Include EVPN address family routes
Context	configure router <i>string</i> bgp rapid-update evpn <i>boolean</i>
Tree	evpn
Default	false
Introduced	16.0.R1
Platforms	All

I2-vpn *boolean*

Synopsis	Include L2 VPN address family routes
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Context	configure <i>router</i> <i>string</i> <i>bgp rapid-update l2-vpn</i> <i>boolean</i>
Tree	l2-vpn
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv4 *boolean*

Synopsis	Include labeled IPv4 address family routes
Context	configure <i>router</i> <i>string</i> <i>bgp rapid-update label-ipv4</i> <i>boolean</i>
Tree	label-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

label-ipv6 *boolean*

Synopsis	Include labeled IPv6 address family routes
Context	configure <i>router</i> <i>string</i> <i>bgp rapid-update label-ipv6</i> <i>boolean</i>
Tree	label-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv4 *boolean*

Synopsis	Include multicast VPN IPv4 address family routes
Context	configure <i>router</i> <i>string</i> <i>bgp rapid-update mcast-vpn-ipv4</i> <i>boolean</i>
Tree	mcast-vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mcast-vpn-ipv6 *boolean*

Synopsis	Include multicast VPN IPv6 address family routes
Context	configure router <i>string</i> bgp rapid-update mcast-vpn-ipv6 <i>boolean</i>
Tree	mcast-vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

mdt-safi *boolean*

Synopsis	Include MDT SAFI address family routes
Context	configure router <i>string</i> bgp rapid-update mdt-safi <i>boolean</i>
Tree	mdt-safi
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv4 *boolean*

Synopsis	Include MVPN IPv4 address family routes
Context	configure router <i>string</i> bgp rapid-update mvpn-ipv4 <i>boolean</i>
Tree	mvpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

mvpn-ipv6 *boolean*

Synopsis	Include MVPN IPv6 address family routes
Context	configure router <i>string</i> bgp rapid-update mvpn-ipv6 <i>boolean</i>
Tree	mvpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv4 *boolean*

Synopsis	Include VPN IPv4 address family routes
Context	configure router <i>string</i> bgp rapid-update vpn-ipv4 <i>boolean</i>
Tree	vpn-ipv4
Default	false
Introduced	16.0.R1
Platforms	All

vpn-ipv6 *boolean*

Synopsis	Include VPN IPv6 address family routes
Context	configure router <i>string</i> bgp rapid-update vpn-ipv6 <i>boolean</i>
Tree	vpn-ipv6
Default	false
Introduced	16.0.R1
Platforms	All

rapid-withdrawal *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	configure router <i>string</i> bgp rapid-withdrawal <i>boolean</i>
Tree	rapid-withdrawal
Description	<p>When configured to true, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.</p> <p>When configured to false, withdrawal processing continues with the normal behavior.</p>
Default	false
Introduced	16.0.R1
Platforms	All

remove-private

Synopsis	Enable the remove-private context
Context	configure router <i>string</i> bgp remove-private

Tree	remove-private
Introduced	16.0.R1
Platforms	All

limited *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	configure router <i>string</i> bgp remove-private limited <i>boolean</i>
Tree	limited
Default	false
Introduced	16.0.R1
Platforms	All

replace *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	configure router <i>string</i> bgp remove-private replace <i>boolean</i>
Tree	replace
Default	false
Introduced	19.10.R1
Platforms	All

skip-peer-as *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	configure router <i>string</i> bgp remove-private skip-peer-as <i>boolean</i>
Tree	skip-peer-as
Default	false
Introduced	16.0.R1
Platforms	All

rib-management

Synopsis	Enter the rib-management context
Context	configure router <i>string</i> bgp rib-management

Tree	rib-management
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> bgp rib-management ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure router <i>string</i> bgp rib-management ipv4 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure router <i>string</i> bgp rib-management ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255

Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>string</i> bgp rib-management ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management ipv4 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router string</i> bgp rib-management ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure <i>router string</i> bgp rib-management ipv6 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv6 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure <i>router string</i> bgp rib-management ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure <i>router</i> <i>string</i> <i>bgp rib-management ipv6 route-table-import</i>
Tree	route-table-import
Description	<p>This command enables the context to specify the name of a route to control the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>If this command is configured, then routes dropped or rejected by the configured policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by this command then the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of this command's policy.</p> <p>Route modifications specified in the actions of this command's policy are ignored and have no effect on the imported routes.</p> <p>If this command is not configured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure <i>router</i> <i>string</i> <i>bgp rib-management ipv6 route-table-import policy-name reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>

Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

label-ipv4

Synopsis	Enter the label-ipv4 context
Context	configure router <i>string</i> bgp rib-management label-ipv4
Tree	label-ipv4
Introduced	16.0.R1
Platforms	All

leak-import

Synopsis	Enter the leak-import context
Context	configure router <i>string</i> bgp rib-management label-ipv4 leak-import
Tree	leak-import
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the labeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	configure router <i>string</i> bgp rib-management label-ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>)
Tree	policy
Description	This command specifies one or more leak import policies. Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255

Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>string</i> bgp rib-management label-ipv4 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management label-ipv4 route-table-import policy-name reference
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

label-ipv6

Synopsis	Enter the label-ipv6 context
Context	configure router <i>string</i> bgp rib-management label-ipv6
Tree	label-ipv6
Introduced	16.0.R1
Platforms	All

route-table-import

Synopsis	Enter the route-table-import context
Context	configure router <i>string</i> bgp rib-management label-ipv6 route-table-import
Tree	route-table-import
Introduced	16.0.R1
Platforms	All

policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	configure router <i>string</i> bgp rib-management label-ipv6 route-table-import policy-name <i>reference</i>
Tree	policy-name
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

route-table-install *boolean*

Synopsis	Install all IPv4 and IPv6 BGP routes in FIB and RTM
Context	configure router <i>string</i> bgp route-table-install <i>boolean</i>
Tree	route-table-install
Default	true
Introduced	16.0.R1
Platforms	All

route-target-list [*community-name*] *string*

Synopsis	Add a list entry for route-target-list
Context	configure router <i>string</i> bgp route-target-list <i>string</i>
Tree	route-target-list
Description	This command specifies a route target to be accepted from or advertised to peers. This command is only applicable if the router is a route-reflector server.
Introduced	16.0.R1
Platforms	All

[community-name] *string*

Synopsis	Route target community name
Context	configure router <i>string</i> bgp route-target-list <i>string</i>
Tree	route-target-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

router-id *string*

Synopsis	Router ID for the BGP instance in the AS
Context	configure router <i>string</i> bgp router-id <i>string</i>
Tree	router-id
Description	This command specifies the router ID to be used with the BGP instance.

Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.

When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.

Introduced	16.0.R1
Platforms	All

rr-vpn-forwarding *boolean*

Synopsis	Allow route reflector to forward VPN-IP routes
Context	configure router <i>string</i> bgp rr-vpn-forwarding <i>boolean</i>
Tree	rr-vpn-forwarding
Description	<p>When configured to true, the route reflector resolves VPN-IPv4 and VPN-IPv6 routes, sets itself as the next hop, and generates new labels for all the resolved routes.</p> <p>During this process, all received VPN-IP routes, regardless of route target, are imported into the dummy VRF, where the BGP next hops are resolved. The routes are resolved to next-hop-self, and BGP allocates new VPRN service-label values for the routes, which are then advertised to peers.</p> <p>The transport-tunnel command under the configure router bgp next-hop-resolution labeled-routes context determines what types of tunnels are eligible to resolve the next hops. If a received VPN-IP route from IBGP peer X is resolved and selected as the best path so that it can be re-advertised to an IBGP peer Y, and the BGP next-hop is modified toward peer Y (by using the next-hop-self command in Y's group or neighbor context or by using a next-hop action in an export policy applied to Y), BGP allocates a new VPRN service label value for the route, signals that new label value to Y, and programs the IOM to do the corresponding label swap operation. The supported combinations of X and Y are outlined below:</p> <ul style="list-style-type: none"> • from X (client) to Y (client) • from X (client) to Y (non-client) • from X (non-client) to Y (client) <p>When configured to false, the routes are re-advertised without signaling new VPRN labels, even if the BGP next hop is changed.</p> <p>Nokia recommends setting this command to false for scaling and convergence reasons.</p>
Default	false
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure <i>router string</i> bgp segment-routing
Tree	segment-routing
Description	Commands in this context configure options related to BGP segment routing (including prefix SID support).
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure <i>router string</i> bgp segment-routing admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure <i>router string</i> bgp segment-routing prefix-sid-range
Tree	prefix-sid-range
Introduced	19.10.R1
Platforms	All

global

Synopsis	Allow label allocation from entire SRBG space
Context	configure <i>router string</i> bgp segment-routing prefix-sid-range global
Tree	global
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	19.10.R1
Platforms	All

max-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Last label value available in contiguous range
Context	configure <i>router string</i> bgp segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	19.10.R1
Platforms	All

start-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	First label value available in a contiguous range
Context	configure <i>router string</i> bgp segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	19.10.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure <i>router string</i> bgp segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

family [family-type] keyword

Synopsis Enter the **family** list instance

Context **configure** router string **bgp segment-routing-v6 family** keyword

Tree [family](#)

Description Commands in this context configure family-specific behavior for processing prefix SID attributes containing SRv6 TLVs.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[family-type] keyword

Synopsis IP address type that SRv6 route attributes apply to

Context **configure** router string **bgp segment-routing-v6 family** keyword

Tree [family](#)

Options ipv4, ipv6

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

add-srv6-tlvs

Synopsis Enable the **add-srv6-tlvs** context

Context **configure** router string **bgp segment-routing-v6 family** keyword **add-srv6-tlvs**

Tree [add-srv6-tlvs](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator-name reference

Synopsis SRv6 locator name

Context **configure** router string **bgp segment-routing-v6 family** keyword **add-srv6-tlvs** **locator-name** reference

Tree [locator-name](#)

Reference	configure router string segment-routing segment-routing-v6 base-routing-instance locator reference
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator-name *reference*

Synopsis	Micro-segment SRv6 locator name
Context	configure router string bgp segment-routing-v6 family keyword add-srv6-tlvs micro-segment-locator-name reference
Tree	micro-segment-locator-name
Description	This command adds a prefix SID attribute containing an SRv6 TLV to routes that belong to the family and that are redistributed from another protocol to BGP. This command also adds a prefix SID attribute with SRv6 TLV to BGP routes that are received from other peers without the SRv6 TLV and that are propagated to other peers with next-hop-self applied.
Reference	configure router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ignore-received-srv6-tlvs *boolean*

Synopsis	Ignore SRv6 TLVs for received routes
Context	configure router string bgp segment-routing-v6 family keyword ignore-received-srv6-tlvs boolean
Tree	ignore-received-srv6-tlvs
Description	<p>When configured to true, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is ignored and the route resolution is based on the BGP next-hop only.</p> <p>When configured to false, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is processed. Such a route is resolved only if its BGP next-hop is reachable and the locator prefix is reachable. The datapath programming and IGP cost to reach the next-hop (used by the BGP decision process) is based on the route to the locator prefix.</p>
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

resolution keyword

Synopsis	Resolution options for routes
Context	configure router string <i>bgp segment-routing-v6 family keyword resolution keyword</i>
Tree	resolution
Default	route-table
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address string

Synopsis	Source address used in SRv6 packet
Context	configure router string <i>bgp segment-routing-v6 source-address string</i>
Tree	source-address
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context.</p> <p>The system does not check if the address entered is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-label-ip keyword

Synopsis	Label IP routes installed for local use on NHS router
Context	configure router string <i>bgp selective-label-ip keyword</i>
Tree	selective-label-ip
Description	<p>This command enables selective installation of labeled unicast routes for resolution by local services and IP shortcuts on a labeled unicast Next-hop=self router.</p> <p>This command is supported for labeled unicast for both IPv4 and IPv6 routes.</p> <p>The no-install option installs labeled IP routes that are required by services. This option conserves labeled route table space in addition to RTM table space on BGP-LU next-hop-self route reflectors. The route-table-install-only option ensures that the</p>

labeled unicast routes are installed in the RTM in full. When **no-install** is specified, the download of labeled unicast routes for NHLFE resolution by services continues.

Options	no-install, route-table-install-only
Introduced	22.10.R1
Platforms	All

selective-label-ip-prioritization *boolean*

Synopsis	Enable BGP selective prioritization for labeled routes
Context	configure <i>router string</i> bgp selective-label-ip-prioritization <i>boolean</i>
Tree	selective-label-ip-prioritization
Description	<p>When this command is set to true, every labeled IPv4 and IPv6 route that is received and potentially usable by a local service is automatically prioritized for fast control plane reconvergence. When the reachability of a BGP next-hop changes, the labeled IPv4 and IPv6 routes are updated into the route table first, along with other routes manually tagged as high priority by import policies. A /32 or /128 labeled unicast route (and associated BGP-LU tunnel) is determined to be potentially usable by a local service if one of the following conditions applies:</p> <ul style="list-style-type: none"> • the route matches the far-end address of a user-provisioned SDP of a Layer 2 service and the SDP is configured to use BGP tunnels as transport • the route matches the BGP next-hop address of a BGP-EVPN or IP VPN route, and this VPN route is either imported into a local service or readvertised by the router acting as a next-hop-self route reflector or a model-B ASBR <p>When this command is set to false, selective-label IP prioritization for BGP is not used.</p>
Default	false
Introduced	21.10.R1
Platforms	All

selective-label-ipv4-install *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	configure <i>router string</i> bgp selective-label-ipv4-install <i>boolean</i>
Tree	selective-label-ipv4-install
Default	false
Introduced	19.10.R1
Platforms	All

send-communities

Synopsis	Enter the send-communities context
Context	configure router <i>string</i> bgp send-communities
Tree	send-communities
Introduced	16.0.R1
Platforms	All

extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	configure router <i>string</i> bgp send-communities extended <i>boolean</i>
Tree	extended
Default	true
Introduced	16.0.R1
Platforms	All

large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	configure router <i>string</i> bgp send-communities large <i>boolean</i>
Tree	large
Default	true
Introduced	16.0.R1
Platforms	All

standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	configure router <i>string</i> bgp send-communities standard <i>boolean</i>
Tree	standard
Default	true
Introduced	16.0.R1
Platforms	All

send-default

Synopsis	Enter the send-default context
Context	configure router <i>string</i> bgp send-default
Tree	send-default
Introduced	19.7.R1
Platforms	All

export-policy *reference*

Synopsis	Export policy name
Context	configure router <i>string</i> bgp send-default export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	19.7.R1
Platforms	All

ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	configure router <i>string</i> bgp send-default ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.7.R1
Platforms	All

ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	configure router <i>string</i> bgp send-default ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.7.R1
Platforms	All

split-horizon *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	configure <i>router string</i> bgp split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to false, the use of split-horizon is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

sr-policy-import *boolean*

Synopsis	Import all segment routing policies into the BGP RIB
Context	configure <i>router string</i> bgp sr-policy-import <i>boolean</i>
Tree	sr-policy-import
Description	<p>When configured to true, statically-configured non-local segment routing policies from the segment routing database are imported into the BGP RIB so that they can be advertised as originated routes toward BGP peers supporting segment routing policies (sr-policy-ipv4 IP family type).</p> <p>When configured to false, the SR policies are not imported into the BGP RIB.</p>
Default	false
Introduced	16.0.R1
Platforms	All

subconfed-vpn-forwarding *boolean*

Synopsis	Allow subconfed route resolution, next hop and labels
Context	configure <i>router string</i> bgp subconfed-vpn-forwarding <i>boolean</i>
Tree	subconfed-vpn-forwarding
Description	<p>When this is set to true, the base router BGP instance retains all received VPN-IPv4 and VPN-IPv6 routes, including those with route targets not matching any VRF import policy of any locally configured VPRN. In addition, when the base router BGP is configured to apply a next-hop-self command to a peer of any type (EBGP, IBGP, or</p>

confed-EBGP), VPN-IPv4 and VPN-IPv6 routes are advertised to the peer with a new BGP label, next hop, and label-swap forwarding entry. These behaviors described above are applied when the **enable-inter-as-vpn** or **enable-rr-vpn-forwarding** commands are enabled in the **configure router bgp context**, in the same BGP instance. This applies regardless of whether the base router has a confederation configuration.

When this command is set to **false**, subconfederation VPN forwarding is not used.

Default	false
Introduced	21.10.R1
Platforms	All

tcp-mss number

Synopsis	TCP maximum segment size override
Context	configure router string bgp tcp-mss number
Tree	tcp-mss
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	21.2.R1
Platforms	All

third-party-nexthop boolean

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	configure router string bgp third-party-nexthop boolean
Tree	third-party-nexthop
Description	<p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p>

When configured to **false**, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.

Default	false
Introduced	16.0.R1
Platforms	All

vpn-apply-export *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	configure <i>router string</i> <i>bgp vpn-apply-export boolean</i>
Tree	vpn-apply-export
Description	When configured to true , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to false , the export policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

vpn-apply-import *boolean*

Synopsis	Apply base-instance import route policies to VPN routes
Context	configure <i>router string</i> <i>bgp vpn-apply-import boolean</i>
Tree	vpn-apply-import
Description	When configured to true , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to false , the import policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enable the bier context
Context	configure <i>router string</i> <i>bier</i>
Tree	bier
Introduced	19.5.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of BIER

Context **configure** *router string bier admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 19.5.R1

Platforms All

bfd-liveness *keyword*

Synopsis BIER next-hops with BFD enabled

Context **configure** *router string bier bfd-liveness keyword*

Tree [bfd-liveness](#)

Options ipv4

Max. Instances 1

Introduced 21.7.R1

Platforms All

fast-reroute *boolean*

Synopsis Enable BIER Fast Reroute

Context **configure** *router string bier fast-reroute boolean*

Tree [fast-reroute](#)

Default false

Introduced 21.7.R1

Platforms All

template [[template-name](#)] *string*

Synopsis Enter the **template** list instance

Context **configure** *router string bier template string*

Tree	template
Description	Commands in this context create a BIER template to be assigned to IGP.
Introduced	19.5.R1
Platforms	All

[template-name] *string*

Synopsis	BIER template name
Context	configure router <i>string</i> bier template <i>string</i>
Tree	template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the BIER template
Context	configure router <i>string</i> bier template <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

sub-domain [[start](#)] *number* [end](#) *number*

Synopsis	Enter the sub-domain list instance
Context	configure router <i>string</i> bier template <i>string</i> sub-domain <i>number</i> end <i>number</i>
Tree	sub-domain
Introduced	19.5.R1
Platforms	All

[start] number

Synopsis	Lower bound of sub-domain range
Context	configure router <i>string</i> bier template <i>string</i> sub-domain number end number
Tree	sub-domain
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

end number

Synopsis	Upper bound of sub-domain range
Context	configure router <i>string</i> bier template <i>string</i> sub-domain number end number
Tree	sub-domain
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

bfr-id number

Synopsis	BIER ID for the sub-domain
Context	configure router <i>string</i> bier template <i>string</i> sub-domain number end number bfr-id number
Tree	bfr-id
Range	1 to 4096
Introduced	19.5.R1
Platforms	All

multi-topology keyword

Synopsis	Multi-topology for the sub-domain
Context	configure router <i>string</i> bier template <i>string</i> sub-domain number end number multi-topology keyword
Tree	multi-topology

Default	ipv4-unicast
Options	ipv4-unicast, ipv6-unicast, ipv4-multicast, ipv6-multicast
Introduced	19.5.R1
Platforms	All

prefix string

Synopsis	IP address used as BFR prefix
Context	configure router string bier template string sub-domain number end number prefix string
Tree	prefix
Description	This command specifies the IP address to be used as the BFR prefix. The prefix can be a loopback interface or system IP address.
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

class-forwarding boolean

Synopsis	Allow class-based forwarding over IGP shortcuts
Context	configure router string class-forwarding boolean
Tree	class-forwarding
Description	When configured to true , this command enables class-based forwarding (CBF) over IGP shortcuts. Weighted ECMP, at the transport-tunnel level of BGP prefixes over IGP shortcuts, and the CBF feature on a per-BGP next-hop basis are mutually exclusive. When configured to false , class-based forwarding (CBF) over IGP shortcuts is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

confederation

Synopsis	Enter the confederation context
Context	configure router string confederation
Tree	confederation

Description	Commands in this context configure members that are to be part of a confederation. Creating confederation autonomous systems within as AS can be used to reduce the number of IBGP sessions required within an AS.
Introduced	16.0.R1
Platforms	All

confed-as-num *number*

Synopsis	Confederation AS number
Context	configure router <i>string</i> confederation confed-as-num <i>number</i>
Tree	confed-as-num
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

members [**as-number**] *number*

Synopsis	Add a list entry for members
Context	configure router <i>string</i> confederation members <i>number</i>
Tree	members
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[as-number] *number*

Synopsis	Confederation member AS number
Context	configure router <i>string</i> confederation members <i>number</i>
Tree	members
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

dhcp-server

Synopsis	Enter the dhcp-server context
Context	configure router <i>string</i> dhcp-server
Tree	dhcp-server
Introduced	16.0.R1
Platforms	All

dhcpv4 [*name*] *string*

Synopsis	Enter the dhcpv4 list instance
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i>
Tree	dhcpv4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	DHCP server name
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i>
Tree	dhcpv4
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the DHCP server
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> failover
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure <i>router string dhcp-server dhcpv4 string failover ignore-mclt-on-takeover boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure <i>router string dhcp-server dhcpv4 string failover maximum-client-lead-time number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router string dhcp-server dhcpv4 string failover partner-down-delay number</i>
Tree	<i>partner-down-delay</i>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [*address*] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>router string dhcp-server dhcpv4 string failover peer reference</i>
Tree	<i>peer</i>
Description	<p>Commands in this context define the peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p>

The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.

Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>router string dhcp-server dhcpv4 string failover peer reference</i>
Tree	<i>peer</i>
Reference	configure <i>redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure <i>router string dhcp-server dhcpv4 string failover peer reference sync-tag string</i>
Tree	<i>sync-tag</i>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure <i>router</i> <i>string</i> <i>dhcp-server dhcpv4</i> <i>string</i> <i>failover startup-wait-time</i> <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-renews *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	configure <i>router</i> <i>string</i> <i>dhcp-server dhcpv4</i> <i>string</i> <i>force-renews</i> <i>boolean</i>
Tree	force-renews
Description	When configured to true , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the lease-hold context
Context	configure <i>router</i> <i>string</i> <i>dhcp-server dhcpv4</i> <i>string</i> <i>lease-hold</i>
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold time <i>number</i>
Tree	time

Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [*pool-name*] *string*

Synopsis	Enter the pool list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string</i>
Tree	<i>pool</i>
Description	Commands in this context configure a DHCP address pool on the router.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[pool-name] *string*

Synopsis	DHCP server pool name
Context	configure <i>router string dhcp-server dhcpv4 string pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>router string dhcp-server dhcpv4 string pool string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure <i>router string dhcp-server dhcpv4 string pool string failover</i>
Tree	failover
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure <i>router string dhcp-server dhcpv4 string pool string failover admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure <i>router string dhcp-server dhcpv4 string pool string failover ignore-mclt-on-takeover boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover partner-down-delay <i>number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i>
Tree	peer
Description	<p>Commands in this context configure peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p> <p>The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag that identifies synchronizing server or pool pairs

Context **configure** *router string dhcp-server dhcpv4 string pool string failover peer reference sync-tag string*

Tree [sync-tag](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Time between initialization and assuming active role

Context **configure** *router string dhcp-server dhcpv4 string pool string failover startup-wait-time number*

Tree [startup-wait-time](#)

Description This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.

Range 60 to 3600

Default 120

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lease-time *number*

Synopsis	Maximum lease time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> max-lease-time <i>number</i>
Tree	max-lease-time
Range	10 to 315446399
Default	864000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-lease-time *number*

Synopsis	Minimum lease time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> min-lease-time <i>number</i>
Tree	min-lease-time
Range	10 to 315446399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the minimum-free context
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free
Tree	minimum-free
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free absolute <i>number</i>

Tree	absolute
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> minimum-free percent <i>number</i>
Tree	percent
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nak-non-matching-subnet *boolean*

Synopsis	Send NAK if no match for request address pool range
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Context	configure <i>router string dhcp-server dhcpv4 string pool string nak-non-matching-subnet boolean</i>
Tree	<i>nak-non-matching-subnet</i>
Description	When configured to true , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK. When configured to false or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-time *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	configure <i>router string dhcp-server dhcpv4 string pool string offer-time number</i>
Tree	<i>offer-time</i>
Range	10 to 600
Default	60
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure <i>router string dhcp-server dhcpv4 string pool string options</i>
Tree	<i>options</i>
Description	Commands in this context define DHCPv4 pool options.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
----------	---------------------------------------

Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword)</i>
Tree	option
Description	This command configures DHCP options at the pool level. The pool options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword)</i>
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword) ascii-string string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time duration
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Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Remove DHCP option from configuration
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
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Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword) ipv4-address string</i>
Tree	ipv4-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	configure <i>router string dhcp-server dhcpv4 string pool string options option (number keyword) netbios-node-type keyword</i>
Tree	netbios-node-type
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet [[ipv4-prefix](#)] *string*

Synopsis	Enter the subnet list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string</i>
Tree	subnet
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-prefix] *string*

Synopsis	IPv4 prefix for the subnet
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string</i>
Tree	subnet

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-range [*start*] *string end string*

Synopsis	Enter the address-range list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	<i>address-range</i>
Description	This command configures the range of IP addresses to be served from the pool subnet. The range includes all the IP addresses between the specified start and end addresses, other than specifically excluded addresses. The start and end addresses must be unique within the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis	Lower bound of the IP address range
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	<i>address-range</i>
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	<i>address-range</i>
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string address-range string end string failover-control-type keyword</i>
Tree	<i>failover-control-type</i>
Default	local
Options	local, remote, access-driven
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string drain boolean</i>
Tree	<i>drain</i>
Description	When configured to true , new leases cannot be assigned and existing leases are kept up until they are released. When configured to false , the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-addresses [*start*] *string end string*

Synopsis	Add a list entry for exclude-addresses
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>

Tree	exclude-addresses
Description	This command configures an IP address to be excluded from the pool of IP addresses in the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis	Lower bound of the IP address range
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i>
Tree	exclude-addresses
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis	Upper bound of the IP address range
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i>
Tree	exclude-addresses
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-declined *number*

Synopsis	Maximum number of declined addresses allowed
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> maximum-declined <i>number</i>
Tree	maximum-declined

Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis	Enter the minimum-free context
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free</i>
Tree	<i>minimum-free</i>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free absolute number</i>
Tree	<i>absolute</i>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Description	When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.

When configured to **false**, no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum free addresses as a percentage
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string options</i>
Tree	<i>options</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [*number*] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure <i>router string dhcp-server dhcpv4 string pool string subnet string options option (number keyword)</i>
Tree	<i>option</i>
Description	This command configures DHCP options at the pool subnet level. The options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis	DHCP option to send identification strings to client
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number keyword</i>)
Tree	option
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis Empty DHCP option

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **options** **option** (*number* | *keyword*) **empty**

Tree **empty**

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis DHCP option specified as hexadecimal string

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **options** **option** (*number* | *keyword*) **hex-string** *string*

Tree **hex-string**

String Length 1 to 256

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4-address *string*

Synopsis DHCP option specified as a list of IPv4 addresses

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **subnet** *string* **options** **option** (*number* | *keyword*) **ipv4-address** *string*

Tree **ipv4-address**

Max.
Instances 4

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis DHCP option specified as a NetBIOS node type

Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string options option (number | keyword) netbios-node-type keyword*

Tree [netbios-node-type](#)

Options b-node, p-node, m-node, h-node

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis Enter the **pool-selection** context

Context **configure** *router string dhcp-server dhcpv4 string pool-selection*

Tree [pool-selection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-gi-address

Synopsis Enable the **use-gi-address** context

Context **configure** *router string dhcp-server dhcpv4 string pool-selection use-gi-address*

Tree [use-gi-address](#)

Description Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.

A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	GI address-matching scope
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool-selection</i> <i>use-gi-address</i> <i>scope</i> <i>keyword</i>
Tree	<i>scope</i>
Default	subnet
Options	subnet, pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool-selection</i> <i>use-pool-from-client</i>
Tree	<i>use-pool-from-client</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool-selection</i> <i>use-pool-from-client</i> <i>delimiter</i> <i>string</i>
Tree	<i>delimiter</i>
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

Synopsis	Local user database for authentication
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>user-db</i> <i>reference</i>

Tree	user-db
Reference	configure subscriber-mgmt local-user-db <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> user-identification <i>keyword</i>
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcpv6 [[name](#)] *string*

Synopsis	Enter the dhcpv6 list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i>
Tree	dhcpv6
Description	Commands in this context configure DHCPv6 parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	DHCP server name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i>
Tree	dhcpv6
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCP server
 Context **configure** *router string dhcp-server dhcpv6 string admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-provisioned *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Auto-provision the pools of this server
 Context **configure** *router string dhcp-server dhcpv6 string auto-provisioned boolean*
 Tree [auto-provisioned](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis Enter the **defaults** context
 Context **configure** *router string dhcp-server dhcpv6 string defaults*
 Tree [defaults](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context

Context	configure <i>router string dhcp-server dhcpv6 string defaults options</i>
Tree	options
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number | keyword*)

Synopsis	Enter the option list instance
Context	configure <i>router string dhcp-server dhcpv6 string defaults options option (number keyword)</i>
Tree	option
Description	This command configures DHCP options at the pool level. The pool options defined here can be overruled by the value of the same option in the local user database.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis	DHCP option to send as identification string
Context	configure <i>router string dhcp-server dhcpv6 string defaults options option (number keyword)</i>
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure <i>router string dhcp-server dhcpv6 string defaults options option (number keyword) ascii-string string</i>
Tree	ascii-string
String Length	1 to 127

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) empty
Tree	empty

Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults preferred-lifetime <i>number</i>
Tree	preferred-lifetime

Description	<p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults rebind-time <i>number</i>
Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	configure <i>router string dhcp-server dhcpv6 string defaults</i> renew-time <i>number</i>
Tree	renew-time
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure <i>router string dhcp-server dhcpv6 string defaults</i> valid-lifetime <i>number</i>
Tree	valid-lifetime
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the</p>

addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Default	86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> failover maximum-client-lead-time <i>number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router string dhcp-server dhcpv6 string failover partner-down-delay number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure <i>router string dhcp-server dhcpv6 string failover peer reference</i>
Tree	peer
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[address](#)] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>router string dhcp-server dhcpv6 string failover peer reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i>
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-rapid-commit *boolean*

Synopsis	Ignore Rapid Commit option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> ignore-rapid-commit <i>boolean</i>
Tree	ignore-rapid-commit
Description	When configured to true , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-id-mapping *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> interface-id-mapping <i>boolean</i>
Tree	interface-id-mapping
Description	When configured to true , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-hold

Synopsis	Enter the lease-hold context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold
Tree	lease-hold
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

additional-scenarios

Synopsis	Enter the additional-scenarios context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios
Tree	additional-scenarios
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i>
Tree	internal-lease-ipsec
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios solicited-release <i>boolean</i>
Tree	solicited-release
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis	Lease hold time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold time <i>number</i>

Tree	time
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-query *boolean*

Synopsis	Handle and reply to lease query messages
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-query <i>boolean</i>
Tree	lease-query
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [[pool-name](#)] *string*

Synopsis	Enter the pool list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i>
Tree	pool
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[pool-name] *string*

Synopsis	DHCP server pool name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i>
Tree	pool
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix

Synopsis	Enter the delegated-prefix context
Context	configure <i>router string dhcp-server dhcpv6 string pool string delegated-prefix</i>
Tree	<i>delegated-prefix</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis	Prefix length for pool if unspecified by client
Context	configure <i>router string dhcp-server dhcpv6 string pool string delegated-prefix length number</i>
Tree	<i>length</i>
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis	Maximum delegated prefix length for this pool
Context	configure <i>router string dhcp-server dhcpv6 string pool string delegated-prefix maximum number</i>
Tree	<i>maximum</i>
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis	Minimum delegated prefix length for this pool
Context	configure <i>router string dhcp-server dhcpv6 string pool string delegated-prefix minimum number</i>
Tree	<i>minimum</i>
Range	48 to 127

Default	48
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure <i>router string dhcp-server dhcpv6 string pool string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-prefix [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for exclude-prefix
Context	configure <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	exclude-prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[\[ipv6-prefix\]](#) *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	exclude-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover</i>
Tree	failover

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i>
Tree	ignore-mclt-on-takeover
Description	<p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
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Context	configure <i>router string dhcp-server dhcpv6 string pool string failover maximum-client-lead-time number</i>
Tree	maximum-client-lead-time
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover partner-down-delay number</i>
Tree	partner-down-delay
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Default	86399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer [[address](#)] *reference*

Synopsis	Enter the peer list instance
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Context	configure <i>router string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	<i>peer</i>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[address] *reference*

Synopsis	IP address of the failover peer
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover peer reference</i>
Tree	<i>peer</i>
Reference	configure <i>redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	configure <i>router string dhcp-server dhcpv6 string pool string failover peer reference sync-tag string</i>
Tree	<i>sync-tag</i>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

startup-wait-time *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i>
Tree	startup-wait-time
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure <i>router string dhcp-server dhcpv6 string pool string options option (number keyword) ipv6-address string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix [[ipv6-prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string</i>
Tree	prefix
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis	No new leases can be assigned
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string drain boolean</i>
Tree	drain
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover-control-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> failover-control-type <i>keyword</i>
Tree	failover-control-type
Default	local
Options	local, remote, access-driven
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis	Enter the options context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options
Tree	options
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [**number**] (*number* | *keyword*)

Synopsis	Enter the option list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options option (<i>number</i> <i>keyword</i>)
Tree	option
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>)
Tree	option
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ascii-string <i>string</i>
Tree	ascii-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) domain-string <i>string</i>
Tree	domain-string
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis	DHCP option specified as time
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) duration <i>number</i>
Tree	duration
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis	Empty DHCP option
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) empty
Tree	empty
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) hex-string <i>string</i>
Tree	hex-string
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i>
Tree	ipv6-address
Max. Instances	4
Notes	The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime *number*

Synopsis	Time this lease remains preferred
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> preferred-lifetime <i>number</i>
Tree	preferred-lifetime
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime. Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Default	3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [[prefix-length](#)] *number*

Synopsis	Enter the prefix-length-threshold list instance
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Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i> <i>pool</i> <i>string</i> <i>prefix</i> <i>string</i> <i>prefix-length-threshold</i> <i>number</i>
Tree	<i>prefix-length-threshold</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i> <i>pool</i> <i>string</i> <i>prefix</i> <i>string</i> <i>prefix-length-threshold</i> <i>number</i>
Tree	<i>prefix-length-threshold</i>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i> <i>pool</i> <i>string</i> <i>prefix</i> <i>string</i> <i>prefix-length-threshold</i> <i>number</i> absolute <i>number</i>
Tree	absolute
Range	1 to 4294967295
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv6</i> <i>string</i> <i>pool</i> <i>string</i> <i>prefix</i> <i>string</i> <i>prefix-length-threshold</i> <i>number</i> event-when-depleted <i>boolean</i>
Tree	event-when-depleted

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

percent *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i> percent <i>number</i>
Tree	percent
Range	1 to 100
Notes	The following elements are part of a choice: absolute or percent .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-type

Synopsis	Enter the prefix-type context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-type
Tree	prefix-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-type pd <i>boolean</i>
Tree	pd
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-host *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-type wan-host boolean</i>
Tree	wan-host
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-time *number*

Synopsis	Rebind time for the lease
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string rebind-time number</i>
Tree	rebind-time
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Default	2880
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

renew-time *number*

Synopsis	Renew time for the lease
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string renew-time number</i>
Tree	<i>renew-time</i>
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis	Time for the lease to remain valid
Context	configure <i>router string dhcp-server dhcpv6 string pool string prefix string valid-lifetime number</i>
Tree	<i>valid-lifetime</i>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the</p>

addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Default	86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length-threshold [[prefix-length](#)] *number*

Synopsis	Enter the prefix-length-threshold list instance
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[prefix-length] *number*

Synopsis	Delegated prefix length for pool thresholds
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i>
Tree	prefix-length-threshold
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

event-when-depleted *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i>
Tree	event-when-depleted
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free-percent *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> minimum-free-percent <i>number</i>
Tree	minimum-free-percent
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-selection

Synopsis	Enter the pool-selection context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection
Tree	pool-selection
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-link-address

Synopsis	Enable the use-link-address context
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection use-link-address
Tree	use-link-address
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis	Scope of the IP address selection
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Context	configure <i>router string dhcp-server dhcpv6 string pool-selection use-link-address scope keyword</i>
Tree	scope
Default	subnet
Options	subnet, pool
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-pool-from-client

Synopsis	Enable the use-pool-from-client context
Context	configure <i>router string dhcp-server dhcpv6 string pool-selection use-pool-from-client</i>
Tree	use-pool-from-client
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	configure <i>router string dhcp-server dhcpv6 string pool-selection use-pool-from-client delimiter string</i>
Tree	delimiter
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server-id

Synopsis	Enter the server-id context
Context	configure <i>router string dhcp-server dhcpv6 string server-id</i>
Tree	server-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-enterprise

Synopsis	Enter the duid-enterprise context
Context	configure <i>router string dhcp-server dhcpv6 string server-id</i> duid-enterprise
Tree	duid-enterprise
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	configure <i>router string dhcp-server dhcpv6 string server-id</i> duid-enterprise <i>ascii-string string</i>
Tree	ascii-string
String Length	1 to 58
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis	DUID enterprise server ID specified as a hex string
Context	configure <i>router string dhcp-server dhcpv6 string server-id</i> duid-enterprise <i>hex-string string</i>
Tree	hex-string
String Length	1 to 118
Notes	The following elements are part of a choice: ascii-string or hex-string .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duid-link-local

Synopsis	Derive DUID server ID from a system link-layer address
Context	configure <i>router string dhcp-server dhcpv6 string server-id</i> duid-link-local

Tree	duid-link-local
Notes	The following elements are part of a choice: duid-enterprise or duid-link-local .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-identification *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> user-identification <i>keyword</i>
Tree	user-identification
Options	mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis	Enter the dns context
Context	configure router <i>string</i> dns
Tree	dns
Introduced	20.2.R1
Platforms	All

redirect-vprn

Synopsis	Enter the redirect-vprn context
Context	configure router <i>string</i> dns redirect-vprn
Tree	redirect-vprn
Description	<p>Commands in this context configure DNS resolution of all packets through the VPRN DNS server.</p> <p>The VPRN DNS server must be configured before using the commands in this context. If the VPRN DNS server is not configured, all packet resolution fails.</p>
Introduced	20.2.R1

Platforms All

service [[service-name](#)] *reference*

Synopsis Enter the **service** list instance

Context **configure** [router](#) *string* [dns](#) [redirect-vprn](#) [service](#) *reference*

Tree [service](#)

Max. Instances 1

Introduced 20.2.R1

Platforms All

[service-name] *reference*

Synopsis Administrative service name

Context **configure** [router](#) *string* [dns](#) [redirect-vprn](#) [service](#) *reference*

Tree [service](#)

Reference **configure** [service](#) [vprn](#) *string*

Notes This element is part of a list key.

Introduced 20.2.R1

Platforms All

preference *number*

Synopsis Service preference

Context **configure** [router](#) *string* [dns](#) [redirect-vprn](#) [service](#) *reference* [preference](#) *number*

Tree [preference](#)

Range 0 to 255

Introduced 20.2.R1

Platforms All

ecmp *number*

Synopsis Maximum equal-cost routes for routing table instance

Context **configure** [router](#) *string* [ecmp](#) *number*

Tree	ecmp
Description	<p>This command configures ECMP and defines the number of routes for path sharing. For example, the value 2 means that two equal-cost routes are used for cost sharing.</p> <p>ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>When more ECMP routes are available at the best preference than the number specified with this command, the lowest next-hop IP-address algorithm is used to select the routes.</p> <p>If this command is configured to 1, ECMP path sharing is disabled.</p>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

entropy-label *boolean*

Synopsis	Use entropy label
Context	configure router <i>string</i> entropy-label <i>boolean</i>
Tree	entropy-label
Description	<p>When configured to true, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the configure router mpls or configure router mpls lsp context.</p> <p>This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.</p> <p>The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.</p> <p>When configured to false, this command disables the use of entropy labels.</p>
Default	false
Introduced	16.0.R1
Platforms	All

fib-priority *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	configure router <i>string</i> fib-priority <i>keyword</i>
Tree	fib-priority
Default	standard
Options	standard, high
Introduced	16.0.R1
Platforms	All

fib-telemetry *boolean*

Synopsis	Collect extra state information
Context	configure router <i>string</i> fib-telemetry <i>boolean</i>
Tree	fib-telemetry
Default	false
Introduced	16.0.R4
Platforms	All

firewall

Synopsis	Enter the firewall context
Context	configure router <i>string</i> firewall
Tree	firewall
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

domain [*name*] *string*

Synopsis	Enter the domain list instance
Context	configure router <i>string</i> firewall domain <i>string</i>
Tree	domain
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Firewall domain name
Context	configure <i>router string firewall domain string</i>
Tree	domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the firewall domain
Context	configure <i>router string firewall domain string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv6-server

Synopsis	Enter the dhcpv6-server context
Context	configure <i>router string firewall domain string dhcpv6-server</i>
Tree	dhcpv6-server
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server name
Context	configure <i>router string firewall domain string dhcpv6-server name string</i>

Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name
Context	configure router <i>string</i> firewall domain <i>string</i> dhcpv6-server router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	configure router <i>string</i> firewall domain <i>string</i> nat-group <i>reference</i>
Tree	nat-group
Reference	configure isa nat-group <i>number</i>
Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[ip-prefix](#)] *string*

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> firewall domain <i>string</i> prefix <i>string</i>
Tree	prefix

Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix] string

Synopsis	IP prefix and prefix length for the domain firewall
Context	configure router string firewall domain string prefix string
Tree	prefix
Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis	Text description
Context	configure router string firewall domain string prefix string description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group reference**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	configure router string firewall domain string wlan-gw-group reference
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group number

Notes	The following elements are part of a mandatory choice: nat-group or wlan-gw-group .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

flowspec

Synopsis	Enter the flowspec context
Context	configure <i>router string</i> flowspec
Tree	flowspec
Description	<p>This command configures the maximum number of flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries are placed in an ingress IP filter policy in this router from the filter range between the configured offset plus 1 (embedding offset plus 1) and the value of this command (embedding offset plus ip-filter-max-size or ipv6-filter-max-size).</p> <p>The sum of the maximum-size value and the highest offset in any IP filter that embeds flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are embedded only as they are received in new BGP updates.</p>
Introduced	16.0.R1
Platforms	All

filter-cam-type *keyword*

Synopsis	Filter policy type for FlowSpec embedding
Context	configure <i>router string</i> flowspec filter-cam-type <i>keyword</i>
Tree	filter-cam-type
Description	This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.
Default	normal
Options	normal, packet-length
Introduced	20.7.R1
Platforms	All

ip-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv4 filter
Context	configure router <i>string</i> flowspec ip-filter-max-size <i>number</i>
Tree	ip-filter-max-size
Description	<p>This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

ipv6-filter-max-size *number*

Synopsis	Maximum number of flowspec rule entries in IPv6 filter
Context	configure router <i>string</i> flowspec ipv6-filter-max-size <i>number</i>
Tree	ipv6-filter-max-size
Description	<p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1

Platforms All

gtm

Synopsis Enter the **gtm** context
Context **configure** *router string gtm*
Tree *gtm*
Introduced 19.5.R1
Platforms All

mvpn *boolean*

Synopsis Enable the configuration of MVPN-related parameters
Context **configure** *router string gtm mvpn boolean*
Tree *mvpn*
Default false
Introduced 19.5.R1
Platforms All

provider-tunnel

Synopsis Enter the **provider-tunnel** context
Context **configure** *router string gtm provider-tunnel*
Tree *provider-tunnel*
Introduced 19.5.R1
Platforms All

inclusive

Synopsis Enter the **inclusive** context
Context **configure** *router string gtm provider-tunnel inclusive*
Tree *inclusive*
Introduced 19.5.R1
Platforms All

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>string</i> gtm provider-tunnel inclusive rsvp
Tree	rsvp
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	configure router <i>string</i> gtm provider-tunnel inclusive rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	LSP template name
Context	configure router <i>string</i> gtm provider-tunnel inclusive rsvp lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Introduced	19.5.R1
Platforms	All

selective

Synopsis	Enter the selective context
Context	configure router <i>string</i> gtm provider-tunnel selective
Tree	selective
Introduced	19.5.R1
Platforms	All

data-delay-interval *number*

Synopsis	Delay before a PBR switches traffic to selective tunnel
Context	configure router <i>string</i> gtm provider-tunnel selective data-delay-interval <i>number</i>
Tree	data-delay-interval
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

data-threshold

Synopsis	Enter the data-threshold context
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold
Tree	data-threshold
Introduced	19.5.R1
Platforms	All

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the group-prefix list instance
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Introduced	19.5.R1
Platforms	All

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Multicast group-prefix
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

pe-threshold-add *number*

Synopsis	Number of receiver PBRs to create S-PMSI
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix ipv6-prefix</i>) pe-threshold-add <i>number</i>
Tree	pe-threshold-add
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

pe-threshold-delete *number*

Synopsis	Number of receiver PBRs to delete S-PMSI
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix ipv6-prefix</i>) pe-threshold-delete <i>number</i>
Tree	pe-threshold-delete
Range	2 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

threshold *number*

Synopsis	Threshold for a group prefix
Context	configure router <i>string</i> gtm provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix ipv6-prefix</i>) threshold <i>number</i>
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

maximum-p2mp-spmsi *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	configure router <i>string</i> gtm provider-tunnel selective maximum-p2mp-spmsi <i>number</i>
Tree	maximum-p2mp-spmsi
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>string</i> gtm provider-tunnel selective rsvp
Tree	rsvp
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	configure router <i>string</i> gtm provider-tunnel selective rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

lsp-template *reference*

Synopsis	LSP template name
Context	configure router <i>string</i> gtm provider-tunnel selective rsvp lsp-template <i>reference</i>
Tree	lsp-template
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Introduced	19.5.R1
Platforms	All

gtp

Synopsis	Enter the gtp context
Context	configure router string gtp
Tree	gtp
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

s11

Synopsis	Enter the s11 context
Context	configure router string gtp s11
Tree	s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router string gtp s11 interface reference
Tree	interface
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[\[interface-name\]](#) *reference*

Synopsis	Name for the S11 interface
Context	configure router string gtp s11 interface reference
Tree	interface
Reference	configure router string interface string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy *reference*

Synopsis	Access point name policy for the S11 interface
Context	configure router <i>string</i> gtp s11 interface <i>reference</i> apn-policy <i>reference</i>
Tree	apn-policy
Reference	configure subscriber-mgmt gtp apn-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the peer-profile-map context
Context	configure router <i>string</i> gtp s11 peer-profile-map
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [**peer-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>string</i> gtp s11 peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[peer-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	configure router <i>string</i> gtp s11 peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	configure router <i>string</i> gtp s11 peer-profile-map prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) peer-profile <i>reference</i>
Tree	peer-profile
Reference	configure subscriber-mgmt gtp peer-profile <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

upf-data-endpoint

Synopsis	Enable the upf-data-endpoint context
Context	configure router <i>string</i> gtp upf-data-endpoint
Tree	upf-data-endpoint
Description	Commands in this context configure a GTP - User Plane (GTP-U) endpoint used by BNG CUPS FWA sessions.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

Synopsis	FPE used to encapsulate and decapsulate GTP-U traffic
Context	configure router <i>string</i> gtp upf-data-endpoint fpe <i>reference</i>
Tree	fpe
Reference	configure fwd-path-ext fpe <i>number</i>
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	configure router <i>string</i> gtp upf-data-endpoint interface <i>reference</i>
Tree	interface

Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

uplink

Synopsis	Enable the uplink context
Context	configure router <i>string</i> gtp uplink
Tree	uplink
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn string

Synopsis	Network identifier part of the APN for the uplink
Context	configure router <i>string</i> gtp uplink apn <i>string</i>
Tree	apn
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

pdn-type keyword

Synopsis	Default PDN to be signaled in GTP
Context	configure router <i>string</i> gtp uplink pdn-type <i>keyword</i>
Tree	pdn-type
Default	ipv4
Options	ipv4, ipv6, ipv4v6
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis	Enter the peer-profile-map context
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Context	configure <i>router string gtp uplink peer-profile-map</i>
Tree	peer-profile-map
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[peer-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure <i>router string gtp uplink peer-profile-map prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

[peer-prefix] (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	configure <i>router string gtp uplink peer-profile-map prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	configure <i>router string gtp uplink peer-profile-map prefix (ipv4-prefix ipv6-prefix) peer-profile reference</i>
Tree	peer-profile
Reference	configure <i>subscriber-mgmt gtp peer-profile string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-tunneling *boolean*

Synopsis	Allow tunneling of ICMP reply packets over MPLS LSPs
Context	configure router <i>string</i> icmp-tunneling <i>boolean</i>
Tree	icmp-tunneling
Default	false
Introduced	16.0.R1
Platforms	All

igmp

Synopsis	Enable the igmp context
Context	configure router <i>string</i> igmp
Tree	igmp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface **forwarding-service** *string* **group-interface-name** *reference*

Synopsis	Enter the forwarding-group-interface list instance
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i>
Tree	forwarding-group-interface
Reference	configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
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Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>import-policy</i> <i>reference</i>
Tree	import-policy
Description	This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option. When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).
Reference	configure policy-options policy-statement <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>maximum-number-sources</i> <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i>
Tree	mcac
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i>
Tree	bandwidth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i> <i>mandatory</i> (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited

Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p>

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
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Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-response-interval</i> <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-source-address</i> <i>string</i>
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>router-alert-check</i> <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>sub-hosts-only</i> <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis Allow subnet checking

Context **configure** **router** *string* **igmp** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **subnet-check** *boolean*

Tree [subnet-check](#)

Default true

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis IGMP protocol version

Context **configure** **router** *string* **igmp** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **version** *keyword*

Tree [version](#)

Default 3

Options 1, 2, 3

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis Default query-source address for all group interfaces

Context **configure** **router** *string* **igmp** **group-if-query-source-address** *string*

Tree [group-if-query-source-address](#)

Introduced 16.0.R1

Platforms All

group-interface [[group-interface-name](#)] *reference*

Synopsis Enter the **group-interface** list instance

Context **configure** **router** *string* **igmp** **group-interface** *reference*

Tree [group-interface](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] reference

Synopsis	Group interface name
Context	configure router <i>string</i> igmp group-interface <i>reference</i>
Tree	group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp group-interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy reference

Synopsis	Import policy that filters IGMP packets
Context	configure router <i>string</i> igmp group-interface <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis Maximum number of group sources for this interface

Context **configure** *router string igmp group-interface reference maximum-number-group-sources number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis Maximum number of groups for this interface

Context **configure** *router string igmp group-interface reference maximum-number-groups number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group

Context **configure** *router string igmp group-interface reference maximum-number-sources number*

Tree [maximum-number-sources](#)

Range 1 to 1000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited

Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> igmp group-interface <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp group-interface <i>reference</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp group-interface <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> igmp group-interface <i>reference</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for IGMP queries
Context	configure router <i>string</i> igmp group-interface <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages
Context **configure** **router** *string* **igmp** **group-interface** *reference* **router-alert-check** *boolean*
Tree [router-alert-check](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis Allow IGMP traffic from known hosts only
Context **configure** **router** *string* **igmp** **group-interface** *reference* **sub-hosts-only** *boolean*
Tree [sub-hosts-only](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis Allow subnet checking
Context **configure** **router** *string* **igmp** **group-interface** *reference* **subnet-check** *boolean*
Tree [subnet-check](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis IGMP protocol version
Context **configure** **router** *string* **igmp** **group-interface** *reference* **version** *keyword*
Tree [version](#)
Default 3

Options	1, 2, 3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [ip-interface-name] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> igmp interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-interface-name] *string*

Synopsis	IP interface name
Context	configure router <i>string</i> igmp interface <i>string</i>
Tree	interface
Description	This command configures the interface name, which must be unique within the group of defined IP interfaces for the context. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area, it is moved to this area. An interface name cannot be in the form of an IP address.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> <i>import-policy</i> <i>reference</i>
Tree	import-policy
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> <i>maximum-number-group-sources</i> <i>number</i>
Tree	maximum-number-group-sources
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> <i>maximum-number-groups</i> <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure <i>router</i> <i>string</i> <i>igmp</i> <i>interface</i> <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1

Platforms All

total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth
 Context **configure** *router* *string* *igmp* *interface* *string* *mcac* *bandwidth* **total** (*number* | *keyword*)
 Tree [total](#)
 Range 0 to 2147483647
 Default unlimited
 Options unlimited
 Introduced 16.0.R1
 Platforms All

interface-policy *reference*

Synopsis Name of multicast CAC interface policy
 Context **configure** *router* *string* *igmp* *interface* *string* *mcac* *interface-policy* *reference*
 Tree [interface-policy](#)
 Reference **configure** *mcac* *interface-policy* *string*
 Introduced 16.0.R1
 Platforms All

mc-constraints

Synopsis Enter the **mc-constraints** context
 Context **configure** *router* *string* *igmp* *interface* *string* *mcac* *mc-constraints*
 Tree [mc-constraints](#)
 Introduced 16.0.R1
 Platforms All

level [[level-id](#)] *number*

Synopsis Enter the **level** list instance
 Context **configure** *router* *string* *igmp* *interface* *string* *mcac* *mc-constraints* *level* *number*
 Tree [level](#)

Description	Commands in this context configure the amount of bandwidth available within a given bundle for MC traffic for a specified level.
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [**number-lag-port-down**] *number*

Synopsis	Enter the number-down list instance
Context	configure router <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Description	Commands in this context configure the number of ports down along with level for the MCAC policy on the interface.
Introduced	16.0.R1

Platforms All

[number-lag-port-down] number

Synopsis Number of ports that are down in this LAG link

Context **configure router string igmp interface string mcac mc-constraints number-down number**

Tree [number-down](#)

Range 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

level number

Synopsis Level ID to associate with number of down LAG ports

Context **configure router string igmp interface string mcac mc-constraints number-down number level number**

Tree [level](#)

Description This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.

Range 1 to 8

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

use-lag-port-weight boolean

Synopsis Use LAG port weight in calculating MCAC constraints

Context **configure router string igmp interface string mcac mc-constraints use-lag-port-weight boolean**

Tree [use-lag-port-weight](#)

Description When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default false

Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> igmp interface <i>string</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp interface <i>string</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp interface <i>string</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> igmp interface <i>string</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

redundant-mcast *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	configure router <i>string</i> igmp interface <i>string</i> redundant-mcast <i>boolean</i>
Tree	redundant-mcast
Default	false
Introduced	16.0.R1
Platforms	All

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure router <i>string</i> igmp interface <i>string</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure <i>router string igmp interface string ssm-translate</i>
Tree	<i>ssm-translate</i>
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

group-range *start string end string*

Synopsis	Enter the group-range list instance
Context	configure <i>router string igmp interface string ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the IP address group range
Context	configure <i>router string igmp interface string ssm-translate group-range start string end string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the IP address group range
Context	configure <i>router string igmp interface string ssm-translate group-range start string end string</i>

Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> igmp interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>string</i> igmp interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> igmp interface <i>string</i> static
Tree	static
Description	Commands in this context configure the testing of multicast forwarding on an interface without a receiver host.
Introduced	16.0.R1
Platforms	All

group [*group-address*] *string*

Synopsis	Enter the group list instance
Context	configure <i>router string igmp interface string static group string</i>
Tree	<i>group</i>
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. IGMP static group memberships are used to test multicast forwarding without a receiver host.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p> <p>When the group entries are configured on point-to-point links that connect routers to a rendezvous point (RP), the static IGMP group entries do not generate join messages toward the RP.</p>
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure <i>router string igmp interface string static group string</i>
Tree	<i>group</i>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [*source-address*] *string*

Synopsis	Add a list entry for source
Context	configure <i>router string igmp interface string static group string source string</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] string

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>string</i> igmp interface <i>string</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router <i>string</i> igmp interface <i>string</i> static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

group-range start string end string step string

Synopsis	Enter the group-range list instance
Context	configure router <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Description	Commands in this context configure the ranges of IP addresses for the static groups.
Introduced	16.0.R1
Platforms	All

start string

Synopsis	IP address for the start of the static group range
Context	configure router <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

end string

Synopsis IP address for the end of the static group range

Context **configure** *router string igmp interface string static group-range start string end string step string*

Tree *group-range*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

step string

Synopsis Step interval in the group-range address

Context **configure** *router string igmp interface string static group-range start string end string step string*

Tree *group-range*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

source [source-address] string

Synopsis Add a list entry for **source**

Context **configure** *router string igmp interface string static group-range start string end string step string source string*

Tree *source*

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R1

Platforms All

[source-address] string

Synopsis Source IP address of multicast channel sending data

Context	configure <i>router string igmp interface string static group-range start string end string step string source string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure <i>router string igmp interface string static group-range start string end string step string starg</i>
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

subnet-check *boolean*

Synopsis	Allow subnet checking
Context	configure <i>router string igmp interface string subnet-check boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	All

version *keyword*

Synopsis	IGMP protocol version
Context	configure <i>router string igmp interface string version keyword</i>
Tree	version
Default	3
Options	1, 2, 3
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> igmp query-interval <i>number</i>
Tree	query-interval
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> igmp query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> igmp query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds

Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure router <i>string</i> igmp robust-count <i>number</i>
Tree	robust-count
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, the robust-count can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>string</i> igmp ssm-translate
Tree	ssm-translate
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

group-range [start](#) *string* [end](#) *string*

Synopsis	Enter the group-range list instance
Context	configure router <i>string</i> igmp ssm-translate group-range start <i>string</i> end <i>string</i>
Tree	group-range
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.
Introduced	16.0.R1
Platforms	All

start string

Synopsis	Lower bound of the IP address group range
Context	configure router string igmp ssm-translate group-range start string end string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end string

Synopsis	Upper bound of the IP address group range
Context	configure router string igmp ssm-translate group-range start string end string
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [source-address] string

Synopsis	Add a list entry for source
Context	configure router string igmp ssm-translate group-range start string end string source string
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] string

Synopsis	Source IP address of multicast channel sending data
Context	configure router string igmp ssm-translate group-range start string end string source string
Tree	source
Notes	This element is part of a list key.

Introduced	16.0.R2
Platforms	All

tunnel-interface

Synopsis	Enter the tunnel-interface context
Context	configure router <i>string</i> igmp tunnel-interface
Tree	tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp-root [[p2mp-id](#)] *reference* [sender-address](#) *reference*

Synopsis	Enter the ldp-p2mp-root list instance
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Description	Commands in this context configure the LDP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

[\[p2mp-id\]](#) *reference*

Synopsis	RSVP P2MP LSP ID
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Reference	configure router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

[sender-address](#) *reference*

Synopsis	System address of the ingress LER for the P2MP RSVP LSP
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Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Reference	configure router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static
Tree	static
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>
Introduced	16.0.R1
Platforms	All

group [[group-address](#)] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i>

Tree	group
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records.</p> <p>Static multicast group joins can be assigned to a tunnel interface associated with an RSVP P2MP LSP.</p> <p>A given <*,G> or <S,G> can only be associated with a single tunnel interface.</p> <p>A multicast packet which is received on an interface and which succeeds the RPF check for the source address will be replicated and forwarded to all OIFs which correspond to the branches of the P2MP LSP. The packet is sent on each OIF with the label stack indicated in the NHLFE of this OIF. The packets will also be replicated and forwarded natively on all OIFs which have received IGMP or PIM joins for this <S,G>.</p> <p>The multicast packet can be received over a PIM or IGMP interface which can be an IES interface, a spoke SDP terminated IES interface, or a network interface.</p>
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i> static group <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

rsvp-p2mp-root [[lsp-name](#)] *reference*

Synopsis	Enter the rsvp-p2mp-root list instance
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i>
Tree	rsvp-p2mp-root
Description	Commands in this context configure the RSVP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

[lsp-name] *reference*

Synopsis	LSP name for the RSVP P2MP LSP
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i>
Tree	rsvp-p2mp-root
Reference	configure router <i>string</i> tunnel-interface rsvp-p2mp-root <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IGMP
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> static
Tree	static
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>
Introduced	16.0.R1
Platforms	All

group [*group-address*] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> static group <i>string</i>
Tree	group
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> static group <i>string</i>
Tree	group
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address of multicast channel sending data
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> static group <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	Add a starg (*,G) address entry for the group range
Context	configure router <i>string</i> igmp tunnel-interface rsvp-p2mp-root <i>reference</i> static group <i>string</i> starg

Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> interface <i>string</i>
Tree	interface
Description	<p>This command specifies the name of the router interface. When a user enters a new name, the system creates a new logical interface and the context changes to that interface for more command processing.</p> <p>When an existing interface name is entered, the user enters the router interface context for editing and configuration.</p> <p>Nokia recommends using names that are meaningful and unique to remove ambiguity when displaying the state associated with IP interfaces either via show commands or model-driven interfaces.</p> <p>See "Router configuration overview" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about the interface name.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface
Context	configure router <i>string</i> interface <i>string</i> admin-state <i>keyword</i>

Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

cflowd-parameters

Synopsis	Enter the cflowd-parameters context
Context	configure router <i>string</i> interface <i>string</i> cflowd-parameters
Tree	cflowd-parameters
Description	Commands in this context configure cflowd parameters for the associated IP interfaces.
Introduced	16.0.R1
Platforms	All

sampling [[sampling-type](#)] *keyword*

Synopsis	Enter the sampling list instance
Context	configure router <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Description	Commands in this context configure cflowd sampling behavior, which configures the collection of traffic flow samples for analysis for this IP interface.
Introduced	16.0.R1
Platforms	All

[sampling-type] *keyword*

Synopsis	Traffic sampling type
Context	configure router <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i>
Tree	sampling
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

direction *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	configure router <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i>
Tree	direction
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Default	ingress-only
Options	ingress-only, egress-only, both
Introduced	16.0.R1
Platforms	All

sample-profile (*keyword* | *number*)

Synopsis	Sample profile ID
Context	configure router <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>)
Tree	sample-profile
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

type *keyword*

Synopsis	Type of cflowd analysis
Context	configure router <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> type <i>keyword</i>
Tree	type
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

cpu-protection *reference*

Synopsis CPU protection policy ID for the interface

Context **configure** *router* *string* *interface* *string* **cpu-protection** *reference*

Tree **cpu-protection**

Description This command assigns an existing CPU protection policy to the associated interface. For these interface types, the per-source rate limit is not applicable.

If no CPU-protection policy is assigned to an interface, the default policy is used to limit the overall rate.

Reference **configure** *system* *security* **cpu-protection** *policy* *number*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description

Context **configure** *router* *string* *interface* *string* **description** *string*

Tree **description**

String Length 1 to 255

Introduced 16.0.R1

Platforms All

dist-cpu-protection *reference*

Synopsis DCP policy name for interface

Context **configure** *router* *string* *interface* *string* **dist-cpu-protection** *reference*

Tree **dist-cpu-protection**

Description This command configures a Distributed CPU Protection (DCP) policy for the associated IP interface or SAP. The user can only assign a valid created DCP policy to a SAP or network interface (this rule does not apply to templates such as an MSAP policy).

If the operator does not assign a DCP policy to a router interface, the system uses the default network DCP policy.

See "Distributed CPU protection" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide* for more information.

Reference **configure** *system* *security* **dist-cpu-protection** *policy* *string*

Introduced	16.0.R1
Platforms	All

egress

Synopsis	Enter the egress context
Context	configure <i>router string interface string egress</i>
Tree	<i>egress</i>
Description	Commands in this context configure egress network filter policies for the IP interface. The system does not filter unless an operator defines a filter.
Introduced	16.0.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure <i>router string interface string egress filter</i>
Tree	<i>filter</i>
Description	Commands in this context configure the names of the egress IPv4 and IPv6 network filter policies for the interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

ip reference

Synopsis	IPv4 filter policy name
Context	configure <i>router string interface string egress filter ip reference</i>
Tree	<i>ip</i>
Reference	configure <i>filter ip-filter string</i>
Introduced	16.0.R1
Platforms	All

ipv6 reference

Synopsis	IPv6 filter policy name
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Context	configure <i>router string interface string egress filter ipv6 reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

eth-cfm

Synopsis	Enter the eth-cfm context
Context	configure <i>router string interface string eth-cfm</i>
Tree	eth-cfm
Description	Commands in this context configure the Ethernet CFM parameters for the associated IP interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the mep list instance
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	mep
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	mep
Reference	configure eth-cfm domain <i>string</i>
Notes	This element is part of a list key.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ma-admin-name *reference*

Synopsis Maintenance Association (MA) name
 Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*
 Tree [mep](#)
 Reference **configure** *eth-cfm domain string association string*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mep-id *number*

Synopsis Maintenance Endpoint (MEP) ID
 Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*
 Tree [mep](#)
 Range 1 to 8191
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the MEP
 Context **configure** *router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alarm-notification

Synopsis	Enter the alarm-notification context
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i>
Tree	<i>alarm-notification</i>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</i>
Tree	<i>fng-alarm-time</i>
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</i>
Tree	<i>fng-reset-time</i>
Range	250 500 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm boolean

Synopsis	Generate CCM messages
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i>
Tree	ccm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority number

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i>
Tree	ccm-ltm-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size number

Synopsis	Number of octets of padding to insert in CCM packets
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i>
Tree	ccm-padding-size
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-tlv-ignore *keyword*

Synopsis	TLV to ignore on reception
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-tlv-ignore <i>keyword</i>
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine. When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-lmm-fc-stats

Synopsis	Enter the collect-lmm-fc-stats context
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> collect-lmm-fc-stats
Tree	collect-lmm-fc-stats
Description	Commands in this context configure per forwarding class (FC) LMM information collection. The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively. This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis	Forwarding class name for profile-unaware counter
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> collect-lmm-fc-stats fc <i>keyword</i>
Tree	fc

Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-imm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc-in-profile *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-imm-fc-stats fc-in-profile keyword</i>
Tree	fc-in-profile
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-imm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

collect-imm-stats *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-imm-stats boolean</i>

Tree	collect-lmm-stats
Description	<p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis	Enable the eth-test context
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test
Tree	eth-test
Description	<p>Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</i>
Tree	bit-error-threshold
Range	0 to 11840
Default	1
Units	bit errors
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis	Enter the test-pattern context
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</i>
Tree	test-pattern
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</i>
Tree	crc-tlv
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	configure <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</i>
Tree	pattern

Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Default	all-zeros
Options	all-zeros, all-ones
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

facility-fault *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> facility-fault <i>boolean</i>
Tree	facility-fault
Description	When configured to true , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition. When configured to false , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

grace

Synopsis	Enter the grace context
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ed

Synopsis	Enter the eth-ed context
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed

Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i>
Tree	max-rx-defect-window
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i>
Tree	priority
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i>
Tree	rx-eth-ed
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-ed *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [router](#) *string* [interface](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-ed tx-eth-ed](#) *boolean*

Tree [tx-eth-ed](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** [router](#) *string* [interface](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-vsm-grace](#)

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** [router](#) *string* [interface](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-vsm-grace rx-eth-vsm-grace](#) *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i>
Tree	tx-eth-vsm-grace
Description	<p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> lbm-svc-act-responder <i>boolean</i>
Tree	lbm-svc-act-responder
Description	<p>When configured to true, the router enables the MEP to process service activation streams encapsulated in ETH-CFM LBM frames that are directed to it.</p> <p>When configured to false, this command reverts to MEP LBM standard processing.</p> <p>There is interaction between this command and the tools perform service id loopback eth command. Nokia recommends that either the lbm-svc act-responder or the tools perform service id loopback eth command be used within a service. If both commands must be configured, and the target reflection point is the MAC Swap Loopback function, the inbound stream of data must not include ETH-CFM traffic that is equal to or lower than the domain level of any configured MEP that would otherwise extract and process the ETH-CFM message.</p> <p>See "Promiscuous ETH-LBM mode of operation" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Services Overview Guide</i> for more information.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis	Lowest priority defect for fault alarm generation
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i>
Tree	low-priority-defect
Description	This command specifies the lowest priority defect that generates a fault alarm and also configures the fault state of the MEP that causes a network reaction.
Default	mac-rem-err-xcon
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address of the MEP
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>string</i>
Tree	mac-address
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis	Threshold time limit for the one-way delay test
Context	configure router <i>string</i> interface <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i>
Tree	one-way-delay-threshold
Range	0 to 600
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

flavor *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network interface flavor
Context	configure <i>router string interface string flavor keyword</i>
Tree	<i>flavor</i>
Default	regular
Options	regular, pdn, unnumbered-mpls-tp
Introduced	16.0.R1
Platforms	All

gre-termination *boolean*

Synopsis	Terminate GRE packets on primary subnet of interface
Context	configure <i>router string interface string gre-termination boolean</i>
Tree	<i>gre-termination</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

hold-time

Synopsis	Enter the hold-time context
Context	configure <i>router string interface string hold-time</i>
Tree	<i>hold-time</i>
Description	Commands in this context configure the interface-level up and down hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
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Context	configure <i>router string interface string hold-time ipv4</i>
Tree	<i>ipv4</i>
Description	Commands in this context configure the interface-level IPv4 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure <i>router string interface string hold-time ipv4 down</i>
Tree	<i>down</i>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure <i>router string interface string hold-time ipv4 down init-only boolean</i>
Tree	<i>init-only</i>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure <i>router string interface string hold-time ipv4 down seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200

Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure <i>router string interface string hold-time ipv4 up</i>
Tree	<i>up</i>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure <i>router string interface string hold-time ipv4 up seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router string interface string hold-time ipv6</i>
Tree	<i>ipv6</i>
Description	Commands in this context configure the interface-level IPv6 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

down

Synopsis	Enter the down context
Context	configure <i>router string interface string hold-time ipv6 down</i>
Tree	<i>down</i>
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command.
Introduced	16.0.R1
Platforms	All

init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	configure <i>router string interface string hold-time ipv6 down init-only boolean</i>
Tree	<i>init-only</i>
Description	This command applies the delay only when when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Down hold time for the IP interface
Context	configure <i>router string interface string hold-time ipv6 down seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

up

Synopsis	Enter the up context
Context	configure <i>router string interface string hold-time ipv6 up</i>

Tree	up
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Up hold time for the IP interface
Context	configure router <i>string</i> interface <i>string</i> hold-time ipv6 up seconds <i>number</i>
Tree	seconds
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

if-attribute

Synopsis	Enter the if-attribute context
Context	configure router <i>string</i> interface <i>string</i> if-attribute
Tree	if-attribute
Description	Commands in this context configure attributes of the IP interface.
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative group name for the interface
Context	configure router <i>string</i> interface <i>string</i> if-attribute admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1

Platforms All

delay

Synopsis Enter the **delay** context

Context **configure** *router string interface string if-attribute* **delay**

Tree [delay](#)

Introduced 20.7.R1

Platforms All

delay-selection *keyword*

Synopsis Delay source advertised by IGP for the interface

Context **configure** *router string interface string if-attribute* **delay** *delay-selection keyword*

Tree [delay-selection](#)

Default static-preferred

Options static, dynamic, static-preferred, dynamic-preferred

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dynamic

Synopsis Enter the **dynamic** context

Context **configure** *router string interface string if-attribute* **delay** **dynamic**

Tree [dynamic](#)

Description Commands in this context configure dynamic link delay measurement options for the interface.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

measurement-template *reference*

Synopsis Link delay measurement template for the interface

Context **configure** *router string interface string if-attribute* **delay** **dynamic** **measurement-template** *reference*

Tree [measurement-template](#)

Reference	configure test-oam link-measurement measurement-template <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

twamp-light

Synopsis	Enter the twamp-light context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light
Tree	twamp-light
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv4
Tree	ipv4
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of IPv4 TWAMP Light packets
Context	configure router <i>string</i> interface <i>string</i> if-attribute delay dynamic twamp-light ipv4 admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the IPv4 encapsulated TWAMP Light measurement packets.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination *string*

Synopsis	TWAMP Light measurement packet destination IPv4 address
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Context	configure <i>router string interface string if-attribute delay dynamic twamp-light ipv4 destination string</i>
Tree	<i>destination</i>
Description	This command specifies the unicast destination address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source string

Synopsis	TWAMP Light measurement packets source IPv4 address
Context	configure <i>router string interface string if-attribute delay dynamic twamp-light ipv4 source string</i>
Tree	<i>source</i>
Description	This command specifies the unicast source address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6

Synopsis	Enter the ipv6 context
Context	configure <i>router string interface string if-attribute delay dynamic twamp-light ipv6</i>
Tree	<i>ipv6</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis	Administrative state of IPv6 TWAMP Light packets
Context	configure <i>router string interface string if-attribute delay dynamic twamp-light ipv6 admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

destination string

Synopsis TWAMP Light measurement packet destination IPv6 address

Context **configure router string interface string if-attribute delay dynamic twamp-light ipv6 destination string**

Tree **destination**

Description This command specifies the unicast destination address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source string

Synopsis TWAMP Light measurement packets source IPv6 address

Context **configure router string interface string if-attribute delay dynamic twamp-light ipv6 source string**

Tree **source**

Description This command specifies the unicast source address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

static number

Synopsis Unidirectional link delay static information

Context **configure router string interface string if-attribute delay static number**

Tree **static**

Description This command configures the unidirectional link delay. By default there is no configured delay, and the link delay metric TLV is pruned in the IGP.

Range 1 to 16777214

Units microseconds

Introduced 20.7.R1

Platforms All

srlg-group [*name*] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure router <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Description	<p>Commands in this context add a list entry for a Shared Risk Link Group (SRLG) that can be associated with an IP or MPLS interface to tag IP or MPLS interfaces that share a specific outcome with the same identifier. For example, an SRLG group identifier could represent all links that use separate fibers but are carried in the same fiber conduit.</p> <p>The name and identifier of each SRLG group must be configured locally on each router before the user configures the SRLG membership of an interface. A maximum of 1024 SRLGs can be configured per system. The user can apply SRLGs to an IES, VPRN, network IP, or MPLS interface. A maximum of 64 SRLGs can be applied to an interface.</p> <p>See "Shared Risk Link Groups" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> for more information about SRLGs.</p>
Introduced	16.0.R1
Platforms	All

[name] *reference*

Synopsis	SRLG name
Context	configure router <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ingress

Synopsis	Enter the ingress context
Context	configure router <i>string</i> interface <i>string</i> ingress
Tree	ingress
Description	Commands in this context configure ingress network filter policies for the IP interface. If an ingress filter is not defined, the system performs no filtering.
Introduced	16.0.R1
Platforms	All

destination-class-lookup *boolean*

Synopsis	Enable BGP destination class lookup
Context	configure <i>router string interface string ingress destination-class-lookup boolean</i>
Tree	destination-class-lookup
Description	When configured to true , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the destination-class match criterion for an IP filter policy to filter egress traffic based on BGP destination classes. When configured to false , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

filter

Synopsis	Enter the filter context
Context	configure <i>router string interface string ingress filter</i>
Tree	filter
Description	Commands in this context associate an IP filter policy with an IP interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

ip *reference*

Synopsis	IPv4 filter policy name
Context	configure <i>router string interface string ingress filter ip reference</i>
Tree	ip
Reference	configure filter ip-filter string
Introduced	16.0.R1
Platforms	All

ipv6 *reference*

Synopsis	IPv6 filter policy name
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Context	configure <i>router string interface string ingress filter ipv6 reference</i>
Tree	ipv6
Reference	configure filter ipv6-filter <i>string</i>
Introduced	16.0.R1
Platforms	All

policy-accounting *reference*

Synopsis	Policy accounting template applied to the interface
Context	configure <i>router string interface string ingress policy-accounting reference</i>
Tree	policy-accounting
Reference	configure routing-options policy-accounting policy-acct-template <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ingress-stats *boolean*

Synopsis	Collect ingress statistics
Context	configure <i>router string interface string ingress-stats boolean</i>
Tree	ingress-stats
Description	<p>When configured to true, the router configures the collection of IPv4 and IPv6 offered packets and octets. This only applies to IP statistics, not to uRPF statistics.</p> <p>Octet statistics for IPv4 and IPv6 bytes at IP interfaces include the Layer 2 frame overhead.</p> <p>When configured to false, the router does not collect the statistics.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ip-mtu *number*

Synopsis	Interface IP MTU
Context	configure <i>router string interface string ip-mtu number</i>
Tree	ip-mtu
Description	This command configures the IP maximum transmit unit (packet) for the associated router IP interface.

The operational IP MTU used for the interface is based on the configured IP MTU and the port MTU of the port bound to this interface; that is, the operational MTU is set to the lesser of the values configured by this command and the port MTU value less the Ethernet header size.

If the interface supports IPv6 packets, this command must be set to at least 1280, in accordance with RFC 2460 *Internet Protocol, Version 6 (IPv6) Specification*.

Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enable the ipsec context
Context	configure router <i>string</i> interface <i>string</i> ipsec
Tree	ipsec
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	configure router <i>string</i> interface <i>string</i> ipsec admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

ip-exception *reference*

Synopsis	IP exception filter
Context	configure router <i>string</i> interface <i>string</i> ipsec ip-exception <i>reference</i>
Tree	ip-exception

Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	configure filter ip-exception string
Introduced	22.7.R1
Platforms	VSR

ipsec-tunnel [name] string

Synopsis	Enter the ipsec-tunnel list instance
Context	configure router string interface string ipsec ipsec-tunnel string
Tree	ipsec-tunnel
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

[name] string

Synopsis	IPsec tunnel name
Context	configure router string interface string ipsec ipsec-tunnel string
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state keyword

Synopsis	Administrative state of the IPsec tunnel
Context	configure router string interface string ipsec ipsec-tunnel string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

bfd

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> bfd
Tree	bfd
Introduced	22.7.R1
Platforms	VSR

bfd-designate *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> bfd bfd-designate <i>boolean</i>
Tree	bfd-designate
Default	false
Introduced	22.7.R1
Platforms	VSR

bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the bfd-liveness context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> bfd bfd-liveness
Tree	bfd-liveness
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.

BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1
 Platforms VSR

dest-ip string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session
 Context **configure** router string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string
 Tree dest-ip
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

interface string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session
 Context **configure** router string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string
 Tree interface
 String Length 1 to 32
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

service-name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i>
Tree	<i>service-name</i>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	configure <i>router string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Description	When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

copy-traffic-class-upon-decapsulation *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
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Context	configure <i>router string interface string ipsec ipsec-tunnel string copy-traffic-class-upon-decapsulation boolean</i>
Tree	copy-traffic-class-upon-decapsulation
Description	When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

description *string*

Synopsis	Text description
Context	configure <i>router string interface string ipsec ipsec-tunnel string description string</i>
Tree	description
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	configure <i>router string interface string ipsec ipsec-tunnel string encapsulated-ip-mtu number</i>
Tree	encapsulated-ip-mtu
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp-generation context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation
Tree	icmp-generation
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the frag-required context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required
Tree	frag-required
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i>

Tree	admin-state
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i>
Tree	interval
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i>
Tree	message-count

Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the icmp6-generation context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation
Tree	icmp6-generation
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the packet-too-big context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big
Tree	packet-too-big
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side. The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel. The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.
Introduced	22.7.R1

Platforms VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.7.R1
Platforms	VSR

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i>
Tree	interval
Range	1 to 60
Default	10
Units	seconds
Introduced	22.7.R1
Platforms	VSR

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	configure <i>router string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big message-count number</i>
Tree	message-count
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	configure <i>router string interface string ipsec ipsec-tunnel string ip-mtu number</i>
Tree	ip-mtu
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the key-exchange context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> key-exchange
Tree	key-exchange
Introduced	22.7.R1
Platforms	VSR

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the dynamic context
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> key-exchange dynamic
Tree	dynamic
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	configure <i>router string interface string ipsec ipsec-tunnel string</i> key-exchange dynamic auto-establish <i>boolean</i>
Tree	auto-establish
Default	false
Introduced	22.7.R1
Platforms	VSR

cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the cert context
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert</i>
Tree	<i>cert</i>
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

cert-profile *reference*

Synopsis	Certificate profile name
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert cert-profile reference</i>
Tree	<i>cert-profile</i>
Reference	configure <i>ipsec cert-profile string</i>
Introduced	22.7.R1
Platforms	VSR

status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the status-verify context
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert status-verify</i>
Tree	<i>status-verify</i>
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

default-result *keyword*

Synopsis	Default result for Certificate Status Verification
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i>
Tree	default-result
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Default	revoked
Options	revoked, good
Introduced	22.7.R1
Platforms	VSR

primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i>
Tree	primary
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Default	crl
Options	crl, ocsp
Introduced	22.7.R1
Platforms	VSR

secondary *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i>
Tree	secondary
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Default	none
Options	none, crl, ocsp

Introduced 22.7.R1
 Platforms VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
 Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference*
 Tree [trust-anchor-profile](#)
 Reference **configure** *ipsec trust-anchor-profile string*
 Introduced 22.7.R1
 Platforms VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
 Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic id*
 Tree [id](#)
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1
 Platforms VSR

fqdn *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context	configure router string interface string ipsec ipsec-tunnel string key-exchange dynamic id fqdn string
Tree	fqdn
String Length	1 to 255
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv4 string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	configure router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv4 string
Tree	ipv4
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	configure router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone ipv6-address-no-zone)
Tree	ipv6
Notes	The following elements are part of a choice: fqdn , ipv4 , or ipv6 .
Introduced	22.7.R1
Platforms	VSR

ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ike-policy <i>reference</i>
Tree	ike-policy
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The ipsec-transport-mode-profile configuration only supports IKEv2.
Reference	configure ipsec ike-policy <i>number</i>
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i>
Tree	ipsec-transform
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	configure ipsec ipsec-transform <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic pre-shared-key string</i>
Tree	pre-shared-key
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the manual context
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange manual</i>
Tree	manual
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: dynamic or manual .
Introduced	22.7.R1
Platforms	VSR

keys [[security-association](#)] *number direction keyword*

Synopsis	Enter the keys list instance
Context	configure <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	keys
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

[[security-association](#)] *number*

Synopsis	SA entry ID
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Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

direction *keyword*

Synopsis	Direction of the IPsec tunnel
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i>
Tree	keys
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 130
Introduced	22.7.R1
Platforms	VSR

encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>string</i>
Tree	encryption-key
String Length	1 to 66
Introduced	22.7.R1
Platforms	VSR

ipsec-transform *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> ipsec-transform <i>reference</i>
Tree	ipsec-transform
Reference	configure ipsec ipsec-transform <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

spi *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i>
Tree	spi

Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	configure <i>router string interface string ipsec ipsec-tunnel string local-gateway-address-override (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	local-gateway-address-override
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-history-key-records context
Context	configure <i>router string interface string ipsec ipsec-tunnel string max-history-key-records</i>
Tree	max-history-key-records
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

esp number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	configure router string interface string ipsec ipsec-tunnel string max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

ike number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	configure router string interface string ipsec ipsec-tunnel string max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

pmtu-discovery-aging number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	configure router string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number
Tree	pmtu-discovery-aging

Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Default	900
Units	seconds
Introduced	22.7.R1
Platforms	VSR

private-sap *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	configure <i>router string interface string ipsec ipsec-tunnel string private-sap number</i>
Tree	<i>private-sap</i>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

private-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	configure <i>router string interface string ipsec ipsec-tunnel string private-service string</i>

Tree	private-service
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i>
Tree	private-tcp-mss-adjust
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i>
Tree	propagate-pmtu-v4
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true

Introduced	22.7.R1
Platforms	VSR

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	configure <i>router string interface string ipsec ipsec-tunnel string propagate-pmtu-v6 boolean</i>
Tree	propagate-pmtu-v6
Description	When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

public-tcp-mss-adjust (*number | keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	configure <i>router string interface string ipsec ipsec-tunnel string public-tcp-mss-adjust (number keyword)</i>
Tree	public-tcp-mss-adjust
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

remote-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> remote-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	remote-gateway-address
Introduced	22.7.R1
Platforms	VSR

replay-window number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> replay-window <i>number</i>
Tree	replay-window
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32 64 128 256 512
Units	packets
Introduced	22.7.R1
Platforms	VSR

security-policy**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the security-policy context
Context	configure router <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy
Tree	security-policy

Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	configure <i>router string interface string ipsec ipsec-tunnel string security-policy id number</i>
Tree	<i>id</i>
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

strict-match boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	configure <i>router string interface string ipsec ipsec-tunnel string security-policy strict-match boolean</i>
Tree	<i>strict-match</i>
Description	<p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false

Introduced 22.7.R1
 Platforms VSR

ipv6-exception *reference*

Synopsis IPv6 filter exception used to bypass encryption
 Context **configure** *router string interface string ipsec ipv6-exception reference*
 Tree [ipv6-exception](#)
 Description This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.
 Reference **configure** *filter ipv6-exception string*
 Introduced 22.7.R1
 Platforms VSR

public-sap *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Public SAP ID
 Context **configure** *router string interface string ipsec public-sap number*
 Tree [public-sap](#)
 Range 0 to 4094
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

tunnel-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tunnel group ID

Context	configure <i>router string interface string ipsec tunnel-group reference</i>
Tree	tunnel-group
Reference	configure <i>isa tunnel-group number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router string interface string ipv4</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	All

allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	configure <i>router string interface string ipv4 allow-directed-broadcasts boolean</i>
Tree	allow-directed-broadcasts
Description	<p>When configured to true, the router forwards packets received on a local router interface to the subnet broadcast address of another IP interface.</p> <p>When configured to false, this router does not allow directed broadcasts and the packets are discarded.</p> <p>Allowing directed broadcasts is a well-known mechanism used for denial-of-service attacks.</p>
Default	false
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure <i>router string interface string ipv4 bfd</i>
Tree	bfd

Description	Commands in this context configure the Bidirectional Forwarding Detection (BFD) settings for the associated IP interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure router <i>string</i> interface <i>string</i> ipv4 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1

Platforms All

receive number

Synopsis BFD receive interval over this interface

Context **configure router string interface string ipv4 bfd receive number**

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

transmit-interval number

Synopsis BFD transmit interval over this interface

Context **configure router string interface string ipv4 bfd transmit-interval number**

Tree [transmit-interval](#)

Description This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

type keyword

Synopsis Local termination point for the BFD session

Context **configure router string interface string ipv4 bfd type keyword**

Tree [type](#)

Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dhcp

Synopsis	Enter the dhcp context
Context	configure <i>router string interface string ipv4 dhcp</i>
Tree	<i>dhcp</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	configure <i>router string interface string ipv4 dhcp admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router string interface string ipv4 dhcp description string</i>
Tree	<i>description</i>

String Length	1 to 80
Introduced	16.0.R1
Platforms	All

gi-address *string*

Synopsis	GI address for the DHCP relay
Context	configure <i>router string interface string ipv4 dhcp gi-address string</i>
Tree	gi-address
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

option-82

Synopsis	Enter the option-82 context
Context	configure <i>router string interface string ipv4 dhcp option-82</i>
Tree	option-82
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	configure <i>router string interface string ipv4 dhcp option-82 action keyword</i>
Tree	action
Default	keep
Options	replace, drop, keep

Introduced	16.0.R1
Platforms	All

circuit-id

Synopsis	Enter the circuit-id context
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id
Tree	circuit-id
Introduced	16.0.R1
Platforms	All

ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id ascii-tuple
Tree	ascii-tuple
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

if-name

Synopsis	Use the interface name for the circuit ID
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id if-name
Tree	if-name
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

ifindex

Synopsis	Use the interface index for the circuit ID
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id ifindex
Tree	ifindex

Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the circuit ID
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id none
Tree	none
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

port-id

Synopsis	Use the port ID for the circuit ID
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id port-id
Tree	port-id
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .
Introduced	16.0.R1
Platforms	All

vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple
Tree	vlan-ascii-tuple
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: ascii-tuple , if-name , ifindex , none , port-id , or vlan-ascii-tuple .

Introduced	16.0.R1
Platforms	All

remote-id

Synopsis	Enter the remote-id context
Context	configure router string interface string ipv4 dhcp option-82 remote-id
Tree	remote-id
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	configure router string interface string ipv4 dhcp option-82 remote-id ascii-string string
Tree	ascii-string
String Length	1 to 32
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

mac

Synopsis	Use the MAC address for the remote ID
Context	configure router string interface string ipv4 dhcp option-82 remote-id mac
Tree	mac
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

none

Synopsis	Do not include the remote ID
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Context	configure <i>router string interface string ipv4 dhcp option-82 remote-id none</i>
Tree	none
Notes	The following elements are part of a choice: ascii-string , mac , or none .
Introduced	16.0.R1
Platforms	All

vendor-specific-option

Synopsis	Enter the vendor-specific-option context
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option</i>
Tree	vendor-specific-option
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option client-mac-address boolean</i>
Tree	client-mac-address
Default	false
Introduced	16.0.R1
Platforms	All

pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option pool-name boolean</i>
Tree	pool-name
Default	false
Introduced	16.0.R1
Platforms	All

port-id *boolean*

Synopsis	Send the port ID in the VSO
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option port-id boolean</i>
Tree	port-id
Default	false
Introduced	16.0.R1
Platforms	All

service-id *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option service-id boolean</i>
Tree	service-id
Default	false
Introduced	16.0.R1
Platforms	All

string *string*

Synopsis	User-defined ASCII string for the VSO
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option string string</i>
Tree	string
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

system-id *boolean*

Synopsis	Send the system ID in the VSO
Context	configure <i>router string interface string ipv4 dhcp option-82 vendor-specific-option system-id boolean</i>
Tree	system-id

Default	false
Introduced	16.0.R1
Platforms	All

python-policy *reference*

Synopsis	Python policy name
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp python-policy <i>reference</i>
Tree	python-policy
Description	This command associates a Python policy name with the interface.
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

relay-plain-bootp *boolean*

Synopsis	Relay plain BOOTP messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp relay-plain-bootp <i>boolean</i>
Tree	relay-plain-bootp
Description	When configured to true , the system relays plain BOOTP messages. When configured to false , the system considers the plain BOOTP packets as malformed DHCP packets; therefore, the system does not relay the messages.
Default	false
Introduced	16.0.R1
Platforms	All

release-include-gi-address *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i>
Tree	release-include-gi-address
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server string

Synopsis	IP addresses for DHCP server requests
Context	configure router string interface string ipv4 dhcp server string
Tree	server
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

src-ip-addr keyword

Synopsis	Type of source address to use for DHCP relay
Context	configure router string interface string ipv4 dhcp src-ip-addr keyword
Tree	src-ip-addr
Default	auto
Options	auto, gi-address
Introduced	16.0.R1
Platforms	All

trusted boolean

Synopsis	Relay untrusted packets
Context	configure router string interface string ipv4 dhcp trusted boolean
Tree	trusted
Description	When configured to true , the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request. A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.

This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

Default	false
Introduced	16.0.R1
Platforms	All

icmp

Synopsis	Enter the icmp context
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp
Tree	icmp
Description	Commands in this context configure Internet Control Message Protocol (ICMP) parameters on a network IP interface.
Introduced	16.0.R1
Platforms	All

mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i>
Tree	mask-reply
Default	true
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp param-problem
Tree	param-problem
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

redirects

Synopsis	Enter the redirects context
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp redirects
Tree	redirects

Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface. The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	configure <i>router string interface string ipv4 icmp redirects admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	configure <i>router string interface string ipv4 icmp redirects number number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	configure <i>router string interface string ipv4 icmp redirects seconds number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1

Platforms All

ttl-expired

Synopsis Enter the **ttl-expired** context

Context **configure router string interface string ipv4 icmp ttl-expired**

Tree **ttl-expired**

Description Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.

Introduced 16.0.R1

Platforms All

admin-state keyword

Synopsis Administrative state of sending TTL expired messages

Context **configure router string interface string ipv4 icmp ttl-expired admin-state keyword**

Tree **admin-state**

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

number number

Synopsis Maximum number of TTL expired messages to send

Context **configure router string interface string ipv4 icmp ttl-expired number number**

Tree **number**

Range 10 to 2000

Default 100

Introduced 16.0.R1

Platforms All

seconds number

Synopsis Time used to limit the number of TTL expired messages

Context	configure <i>router string interface string ipv4 icmp ttl-expired seconds number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure <i>router string interface string ipv4 icmp unreachables</i>
Tree	unreachables
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	configure <i>router string interface string ipv4 icmp unreachables admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum number of unreachable messages to send
Context	configure <i>router string interface string ipv4 icmp unreachables number number</i>
Tree	number
Range	10 to 2000
Default	100

Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	configure router <i>string</i> interface <i>string</i> ipv4 icmp unreachables seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

ip-helper-address *string*

Synopsis	IP address of the target UDP broadcast gateway
Context	configure router <i>string</i> interface <i>string</i> ipv4 ip-helper-address <i>string</i>
Tree	ip-helper-address
Description	This command configures the redirection of broadcast UDP packets received on the associated interface to the specified helper gateway address, and then to the gateway.
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Reference	configure router <i>string</i> dhcp-server dhcpv4 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure <i>router string interface string ipv4 neighbor-discovery</i>
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	configure <i>router string interface string ipv4 neighbor-discovery learn-unsolicited boolean</i>
Tree	learn-unsolicited
Description	<p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.
Default	false
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
Context	configure <i>router string interface string ipv4 neighbor-discovery limit</i>
Tree	limit
Description	<p>Commands in this context configure the maximum number of dynamic neighbor entries that can be learned on the interface</p> <p>When the number of entries reaches the threshold (the configured percentage) of this limit, the system sends an SNMP trap.</p>

When the limit is exceeded, the system learns no new entries until an entry expires and traffic to these destinations is dropped. Already learned entries are refreshed.

Introduced 16.0.R1
 Platforms All

log-only *boolean*

Synopsis Generate log entries only if limit is reached
 Context **configure** *router string interface string ipv4 neighbor-discovery limit log-only boolean*
 Tree [log-only](#)
 Default false
 Introduced 16.0.R1
 Platforms All

max-entries *number*

Synopsis Maximum number of entries learned on an IP interface
 Context **configure** *router string interface string ipv4 neighbor-discovery limit max-entries number*
 Tree [max-entries](#)
 Range 0 to 524288
 Introduced 16.0.R1
 Platforms All

threshold *number*

Synopsis Threshold value that triggers a warning message
 Context **configure** *router string interface string ipv4 neighbor-discovery limit threshold number*
 Tree [threshold](#)
 Range 1 to 100
 Default 90
 Units percent
 Introduced 16.0.R1
 Platforms All

local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i>
Tree	local-proxy-arp
Description	When configured to true , the router enables local proxy ARP on the interface. When configured to false , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

proactive-refresh *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i>
Tree	proactive-refresh
Description	When configured to true , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to false , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	16.0.R1
Platforms	All

proxy-arp-policy *reference*

Synopsis	Proxy ARP policy name
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i>
Tree	proxy-arp-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

remote-proxy-arp *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i>
Tree	remote-proxy-arp
Default	false
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	ARP retry interval
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 300
Default	50
Units	deciseconds
Introduced	16.0.R1
Platforms	All

static-neighbor [[ipv4-address](#)] *string*

Synopsis	Enter the static-neighbor list instance
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Description	Commands in this context configure a static ARP entry that associates an IP address with a MAC address for the core router instance.
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i>
Tree	static-neighbor
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mac-address *string*

Synopsis	MAC address for the static neighbor
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

static-neighbor-unnumbered

Synopsis	Enable the static-neighbor-unnumbered context
Context	configure router <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered
Tree	static-neighbor-unnumbered
Description	Commands in this context configure the static ARP MAC for an unnumbered interface. This entry overrides the dynamic ARP entry on the unnumbered interface.
Introduced	16.0.R1
Platforms	All

mac-address *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address for the static neighbor
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Context	configure <i>router string interface string ipv4 neighbor-discovery static-neighbor-unnumbered mac-address string</i>
Tree	mac-address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	configure <i>router string interface string ipv4 neighbor-discovery timeout number</i>
Tree	timeout
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Default	14400
Units	seconds
Introduced	16.0.R1
Platforms	All

primary

Synopsis	Enable the primary context
Context	configure <i>router string interface string ipv4 primary</i>
Tree	primary
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	configure <i>router string interface string ipv4 primary address string</i>
Tree	address
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure router <i>string</i> interface <i>string</i> ipv4 primary broadcast <i>keyword</i>
Tree	broadcast
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts. This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

gre-termination *boolean*

Synopsis	Enable GRE termination
Context	configure router <i>string</i> interface <i>string</i> ipv4 primary gre-termination <i>boolean</i>
Tree	gre-termination
Description	When configured to true , the router terminates MPLS-over-GRE and IP-over-GRE packets for destination IP addresses from a user-defined subnet. The user defines a subnet for the termination of GRE packets by executing this command on a numbered network IP interface or a loopback interface.
Default	false
Introduced	19.10.R1
Platforms	VSR

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure router <i>string</i> interface <i>string</i> ipv4 primary prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure router <i>string</i> interface <i>string</i> ipv4 primary track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

qos-route-lookup *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	configure router <i>string</i> interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary [[address](#)] *string*

Synopsis	Enter the secondary list instance
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary
Introduced	16.0.R1
Platforms	All

[[address](#)] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i>
Tree	secondary

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

broadcast *keyword*

Synopsis	Broadcast address format
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i>
Tree	broadcast
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts. This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Default	host-ones
Options	all-ones, host-ones
Introduced	16.0.R1
Platforms	All

igp-inhibit *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> igp-inhibit <i>boolean</i>
Tree	igp-inhibit
Description	When configured to true , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv4 address prefix length
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	0 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	configure router <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tcp-mss *number*

Synopsis	TCP maximum segment size for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv4 tcp-mss <i>number</i>
Tree	tcp-mss
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

unnumbered

Synopsis	Enter the unnumbered context
Context	configure router <i>string</i> interface <i>string</i> ipv4 unnumbered
Tree	unnumbered
Description	Commands in this context configure an IP interface as an unnumbered interface and specify the IP address to use for the interface. An operator can configure unnumbered interfaces to conserve IP addresses.
Introduced	16.0.R1
Platforms	All

ip-address *string*

Synopsis	IP address to associate with unnumbered IP interface
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Context	configure <i>router string interface string ipv4 unnumbered ip-address string</i>
Tree	ip-address
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

ip-int-name *string*

Synopsis	Unnumbered IP interface name
Context	configure <i>router string interface string ipv4 unnumbered ip-int-name string</i>
Tree	ip-int-name
String Length	1 to 32
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

system

Synopsis	Use system IP address for the unnumbered IP interface
Context	configure <i>router string interface string ipv4 unnumbered system</i>
Tree	system
Notes	The following elements are part of a choice: ip-address , ip-int-name , or system .
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure <i>router string interface string ipv4 urpf-check</i>
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default routes when performing a uRPF check
Context	configure <i>router string interface string ipv4 urpf-check ignore-default boolean</i>
Tree	<i>ignore-default</i>
Description	When configured to true , the router ignores default routes while performing a uRPF check to determine the validity of incoming packets. When configured to false , default routes are considered eligible.
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure <i>router string interface string ipv4 urpf-check mode keyword</i>
Tree	<i>mode</i>
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	All

vrrp [*virtual-router-id*] *number*

Synopsis	Enter the vrrp list instance
Context	configure <i>router string interface string ipv4 vrrp number</i>
Tree	<i>vrrp</i>
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its Virtual Router Identifier (VRID) and a set of IP addresses.
Introduced	16.0.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure <i>router string interface string ipv4 vrrp number</i>

Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Password for simple text authentication
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> authentication-key <i>string</i>
Tree	authentication-key
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.

If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.

String Length	1 to 38
Introduced	16.0.R1
Platforms	All

backup string

Synopsis Virtual router IP addresses for the interface

Context **configure** router string interface string ipv4 vrrp number backup string

Tree backup

Description This command associates virtual router IP addresses with those of the parental IP interface.

This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.

Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup).

This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified *unicast-ipv4-address* must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	16
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis Enable the **bfd-liveness** context

Context **configure** router string interface string ipv4 vrrp number bfd-liveness

Tree bfd-liveness

Description Commands in this context assign a Bidirectional Forwarding Detection (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat

mechanism that speeds up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP advertisement message. In addition, the standby VRRP routers transition to a master state to speed up convergence.

The VRRP election process takes place based on the advertisement messages sent by all VRRP routers.

Only one BFD session can be assigned to any VRRP or SRRP instance, but multiple SRRP or VRRP sessions can use the same BFD session.

Introduced 16.0.R1
Platforms All

dest-ip string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Destination IP address to use for BFD session
Context **configure** *router string interface string ipv4 vrrp number bfd-liveness dest-ip string*
Tree *dest-ip*
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

interface-name string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the interface running BFD
Context **configure** *router string interface string ipv4 vrrp number bfd-liveness interface-name string*
Tree *interface-name*
String Length 1 to 32
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure <i>router string interface string ipv4 vrrp number bfd-liveness service-name string</i>
Tree	<i>service-name</i>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure <i>router string interface string ipv4 vrrp number init-delay number</i>
Tree	<i>init-delay</i>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

mac *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	configure <i>router string interface string ipv4 vrrp number mac string</i>
Tree	<i>mac</i>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts</p>

results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced	16.0.R1
Platforms	All

master-int-inherit *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	configure <i>router string interface string ipv4 vrrp number master-int-inherit boolean</i>
Tree	master-int-inherit
Description	<p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure <i>router string interface string ipv4 vrrp number message-interval number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none"> • When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as master. • When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming

advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.

- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Default	10
Units	deciseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure <i>router string interface string ipv4 vrrp number</i> monitor-oper-group <i>reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	configure <i>service oper-group string</i>
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure <i>router string interface string ipv4 vrrp number</i> ntp-reply <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.

Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> oper-group <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> owner <i>boolean</i>
Tree	owner
Description	When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to false , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure <i>router string interface string ipv4 vrrp number</i> passive <i>boolean</i>
Tree	passive
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure <i>router string interface string ipv4 vrrp number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	VRRP priority control policy
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Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> preempt <i>boolean</i>
Tree	preempt
Description	<p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> priority <i>number</i>
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

ssh-reply *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	configure <i>router string interface string ipv4 vrrp number ssh-reply boolean</i>
Tree	<i>ssh-reply</i>
Description	<p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure <i>router string interface string ipv4 vrrp number standby-forwarding boolean</i>
Tree	<i>standby-forwarding</i>
Description	<p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp number telnet-reply <i>boolean</i>
Tree	telnet-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	16.0.R1
Platforms	All

traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	configure router <i>string</i> interface <i>string</i> ipv4 vrrp number traceroute-reply <i>boolean</i>
Tree	traceroute-reply
Description	<p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>string</i> interface <i>string</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

address [ipv6-address] *string*

Synopsis	Enter the address list instance
Context	configure <i>router string interface string ipv6 address string</i>
Tree	<i>address</i>
Description	<p>Commands in this context assign an IPv6 address to the interface.</p> <p>A global IPv6 address and <i>prefix-length</i> combined create a locally configured interface IPv6 prefix and subnet. The defined global IP prefix must be unique within the context of a routing instance. It cannot overlap with any other existing global IP prefix defined on another IP interface within the same routing context.</p> <p>This overlap restriction is not applicable for IPv6 host addresses configured on loopback interfaces. For example, an IPv6 loopback host address configured on a loopback interface may overlap with another prefix subnet configured on another IP interface within the same routing context.</p>
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	IPv6 address assigned to the interface
Context	configure <i>router string interface string ipv6 address string</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	configure <i>router string interface string ipv6 address string duplicate-address-detection boolean</i>
Tree	<i>duplicate-address-detection</i>
Description	When configured to true , the router enables Duplicate Address Detection (DAD).

When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.

Default	true
Introduced	16.0.R1
Platforms	All

eui-64 *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv6</i> <i>address</i> <i>string</i> eui-64 <i>boolean</i>
Tree	eui-64
Description	When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

prefix-length *number*

Synopsis	IPv6 address prefix length
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv6</i> <i>address</i> <i>string</i> prefix-length <i>number</i>
Tree	prefix-length
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

primary-preference *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	configure <i>router</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv6</i> <i>address</i> <i>string</i> primary-preference <i>number</i>

Tree	primary-preference
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

track-srrp *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	configure router <i>string</i> interface <i>string</i> ipv6 <i>address</i> <i>string</i> track-srrp <i>number</i>
Tree	track-srrp
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> interface <i>string</i> ipv6 <i>bfd</i>
Tree	bfd
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BFD sessions
Context	configure router <i>string</i> interface <i>string</i> ipv6 <i>bfd</i> <i>admin-state</i> <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

echo-receive *number*

Synopsis	Minimum echo interval over this interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 bfd echo-receive <i>number</i>
Tree	echo-receive
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	configure router <i>string</i> interface <i>string</i> ipv6 bfd multiplier <i>number</i>
Tree	multiplier
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

receive *number*

Synopsis	BFD receive interval over this interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 bfd receive <i>number</i>
Tree	receive
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000

Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

transmit-interval *number*

Synopsis	BFD transmit interval over this interface
Context	configure <i>router string interface string ipv6 bfd transmit-interval number</i>
Tree	transmit-interval
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np .
Range	10 to 100000
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

type *keyword*

Synopsis	Local termination point for the BFD session
Context	configure <i>router string interface string ipv6 bfd type keyword</i>
Tree	type
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.
Default	auto
Options	cpm-np, auto, fp
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

duplicate-address-detection *boolean*

Synopsis Enable Duplicate Address Detection

Context **configure** *router string interface string ipv6 duplicate-address-detection boolean*

Tree [duplicate-address-detection](#)

Description When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface.

When configured to **false**, the router disables DAD on a per-interface basis. This prevents the router from performing a DAD check on the interface. All IPv6 addresses on an interface with DAD disabled, immediately enter a preferred state, without checking for uniqueness on the interface. This is useful for interfaces that enter a looped state during troubleshooting and are operationally disabled when the loop is detected, requiring manual intervention to clear the DAD violation.

Default true

Introduced 16.0.R1

Platforms All

forward-ipv4-packets *boolean*

Synopsis Forward unencapsulated IPv4 packets

Context **configure** *router string interface string ipv6 forward-ipv4-packets boolean*

Tree [forward-ipv4-packets](#)

Description When configured to **true**, the router can use an IPv6-only interface, with no configured IPv4 addresses, to forward IPv4 packets that originate or terminate locally.

The interface reports that its IPv4 operational state is up if its IPv6 operational state is up. Not all protocols observe the interface as up from an IPv4 perspective. This command mostly supports BGP routing use cases; see RFC 5549 for details.

When configured to **false**, the router prevents IPv4 packets from being forwarded if there are no configured IPv4 subnets.

Default false

Introduced 19.5.R1

Platforms All

icmp6

Synopsis Enter the **icmp6** context

Context	configure <i>router string interface string ipv6 icmp6</i>
Tree	icmp6
Introduced	16.0.R1
Platforms	All

packet-too-big

Synopsis	Enter the packet-too-big context
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big</i>
Tree	packet-too-big
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	configure <i>router string interface string ipv6 icmp6 packet-too-big number number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit Packet Too Big messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

param-problem

Synopsis	Enter the param-problem context
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem
Tree	param-problem
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem number <i>number</i>
Tree	number
Range	10 to 1000
Default	100
Introduced	16.0.R1

Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Parameter Problem messages

Context **configure** *router string interface string ipv6 icmp6 param-problem seconds number*

Tree [seconds](#)

Range 1 to 60

Default 10

Introduced 16.0.R1

Platforms All

redirects

Synopsis Enter the **redirects** context

Context **configure** *router string interface string ipv6 icmp6 redirects*

Tree [redirects](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of Redirect message sends

Context **configure** *router string interface string ipv6 icmp6 redirects admin-state keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

number *number*

Synopsis Number to limit ICMPv6 Redirect messages per time frame

Context **configure** *router string interface string ipv6 icmp6 redirects number number*

Tree [number](#)

Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 redirects seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

time-exceeded

Synopsis	Enter the time-exceeded context
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded
Tree	time-exceeded
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded number <i>number</i>
Tree	number
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded seconds <i>number</i>
Tree	seconds
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

unreachables

Synopsis	Enter the unreachables context
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables
Tree	unreachables
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	configure router <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

number *number*

Synopsis Number to limit Unreachable messages per time frame

Context **configure** *router string interface string ipv6 icmp6 unreachablees number number*

Tree [number](#)

Range 10 to 2000

Default 100

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Unreachable messages

Context **configure** *router string interface string ipv6 icmp6 unreachablees seconds number*

Tree [seconds](#)

Range 1 to 60

Default 10

Introduced 16.0.R1

Platforms All

link-local-address

Synopsis Enter the **link-local-address** context

Context **configure** *router string interface string ipv6 link-local-address*

Tree [link-local-address](#)

Description Commands in this context configure the IPv6 link-local address that is used as a virtual SRRP IPv6 address by the master SRRP node. This address is sent in the Router Advertisements initiated by the master SRRP node. Clients use this address as IPv6 default-gateway. Both SRRP nodes, master and backup, must be configured with the same link-local address.

Only one link-local address is allowed per interface.

Caution: Removing a manually configured link-local address may impact routing protocols or static routes that have a dependency on that address. Nokia does not recommend removing a link-local address when there are active IPv6 subscriber hosts on an IES or VPRN interface.

Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	IPv6 link-local address
Context	configure router <i>string</i> interface <i>string</i> ipv6 link-local-address address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	configure router <i>string</i> interface <i>string</i> ipv6 link-local-address duplicate-address-detection <i>boolean</i>
Tree	duplicate-address-detection
Description	When configured to true , the router enables Duplicate Address Detection (DAD) on the interface. When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

local-dhcp-server *reference*

Synopsis	DHCP server for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 local-dhcp-server <i>reference</i>
Tree	local-dhcp-server
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	configure router <i>string</i> dhcp-server dhcpv6 <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure <i>router string interface string ipv6 neighbor-discovery</i>
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	configure <i>router string interface string ipv6 neighbor-discovery learn-unsolicited keyword</i>
Tree	learn-unsolicited
Description	<p>This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.</p> <p>When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.</p>
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

limit

Synopsis	Enter the limit context
Context	configure <i>router string interface string ipv6 neighbor-discovery limit</i>
Tree	limit
Description	<p>Commands in this context configure the maximum amount of dynamic IPv6 neighbor entries that can be learned on an IP interface.</p> <p>When the number of dynamic neighbor entries reaches the configured percentage of this limit the system sends an SNMP trap. When the limit is exceeded, no new entries are learned until an entry expires and traffic to these destinations is dropped. Entries that have already been learned are refreshed.</p>
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery limit log-only <i>boolean</i>
Tree	log-only
Description	When configured to true , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned. When configured to false , the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery limit max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of entries that can be learned on an IP interface. When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Threshold percentage that triggers a warning message
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery limit threshold <i>number</i>
Tree	threshold
Range	1 to 100
Default	90
Units	percent
Introduced	16.0.R1
Platforms	All

local-proxy-nd *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i>
Tree	local-proxy-nd
Description	When configured to true , the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled. When configured to false , the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1
Platforms	All

proactive-refresh *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i>
Tree	proactive-refresh
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

proxy-nd-policy *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i>
Tree	proxy-nd-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 16.0.R1
 Platforms All

reachable-time *number*

Synopsis Neighbor reachability detection timer
 Context **configure** *router string interface string ipv6 neighbor-discovery reachable-time number*
 Tree [reachable-time](#)
 Range 30 to 3600
 Introduced 16.0.R1
 Platforms All

secure-nd

Synopsis Enter the **secure-nd** context
 Context **configure** *router string interface string ipv6 neighbor-discovery secure-nd*
 Tree [secure-nd](#)
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of Secure Neighbor Discovery
 Context **configure** *router string interface string ipv6 neighbor-discovery secure-nd admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

allow-unsecured-msgs *boolean*

Synopsis Accept unsecured messages
 Context **configure** *router string interface string ipv6 neighbor-discovery secure-nd allow-unsecured-msgs boolean*

Tree	allow-unsecured-msgs
Description	When configured to true , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to false , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

public-key-min-bits *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd public-key-min-bits <i>number</i>
Tree	public-key-min-bits
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

security-parameter *number*

Synopsis	Security parameter used in the generation of a CGA
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd security-parameter <i>number</i>
Tree	security-parameter
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	configure router <i>string</i> interface <i>string</i> ipv6 neighbor-discovery stale-time <i>number</i>
Tree	stale-time
Range	60 to 65535

Introduced 16.0.R1
 Platforms All

static-neighbor [[ipv6-address](#)] *string*

Synopsis Enter the **static-neighbor** list instance

Context **configure** [router](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) *string*

Tree [static-neighbor](#)

Description Commands in this context configure an IPv6-to-MAC address mapping on the interface. Use this command if a directly attached IPv6 node does not support ICMPv6 neighbor discovery, or for some reason, a static address must be used. This command can only be used on Ethernet media.

The IPv6 address must be on the subnet that was configured from the IPv6 **address** or a **link-local-address** commands.

Introduced 16.0.R1
 Platforms All

[\[ipv6-address\]](#) *string*

Synopsis IPv6 address corresponding to the physical address

Context **configure** [router](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) *string*

Tree [static-neighbor](#)

Notes This element is part of a list key.

Introduced 16.0.R1
 Platforms All

mac-address *string*

Synopsis MAC address for the static neighbor

Context **configure** [router](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) *string* [mac-address](#) *string*

Tree [mac-address](#)

Notes This element is mandatory.

Introduced 16.0.R1
 Platforms All

qos-route-lookup *keyword*

Synopsis	QoS route lookup of ingress IP packets
Context	configure router <i>string</i> interface <i>string</i> ipv6 qos-route-lookup <i>keyword</i>
Tree	qos-route-lookup
Description	This command enables QoS classification of the ingress IP packets on an interface based on the QoS information associated with routes in the forwarding table.
Options	destination, source
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis	TCP maximum segment size for the IPv6 interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 tcp-mss <i>number</i>
Tree	tcp-mss
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

urpf-check

Synopsis	Enable the urpf-check context
Context	configure router <i>string</i> interface <i>string</i> ipv6 urpf-check
Tree	urpf-check
Introduced	16.0.R1
Platforms	All

ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	configure router <i>string</i> interface <i>string</i> ipv6 urpf-check ignore-default <i>boolean</i>
Tree	ignore-default
Default	false
Introduced	16.0.R1
Platforms	All

mode *keyword*

Synopsis	Unicast RPF check mode
Context	configure <i>router string interface string ipv6 urpf-check mode keyword</i>
Tree	mode
Default	strict
Options	strict, loose, strict-no-ecmp
Introduced	16.0.R1
Platforms	All

vrrp [*virtual-router-id*] *number*

Synopsis	Enter the vrrp list instance
Context	configure <i>router string interface string ipv6 vrrp number</i>
Tree	vrrp
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its virtual router identifier (VRID) and a set of IP addresses.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[virtual-router-id] *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	configure <i>router string interface string ipv6 vrrp number</i>
Tree	vrrp
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of VRRP
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Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup *string*

Synopsis	Virtual router IP addresses for the interface
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> backup <i>string</i>
Tree	backup
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p>

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	4
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp number bfd-liveness
Tree	bfd-liveness
Description	<p>Commands in this context assign a bidirectional forwarding detect (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism for use in speeding up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP Advertisement message. In addition, the standby VRRP routers transition to a Master state to speed convergence.</p> <p>The normal VRRP election process takes place based on the Advertisement messages sent by all VRRP routers.</p> <p>There can be only one BFD session assigned to any specific VRRP or SRRP instance, but there can be multiple SRRP or VRRP sessions using the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp number bfd-liveness dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	dest-ip
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

interface-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp number bfd-liveness interface-name <i>string</i>
Tree	interface-name
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp number bfd-liveness service-name <i>string</i>
Tree	service-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

init-delay *number*

Synopsis	VRRP initialization delay timer
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp number init-delay <i>number</i>
Tree	init-delay
Range	1 to 65535
Units	seconds
Introduced	16.0.R1

Platforms All

mac string

Synopsis Virtual MAC address to use in ARP responses

Context **configure** *router string interface string ipv6 vrrp number mac string*

Tree *mac*

Description This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.

Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit boolean

Synopsis Allow master instance to dictate the master down timer

Context **configure** *router string interface string ipv6 vrrp number master-int-inherit boolean*

Tree *master-int-inherit*

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	configure <i>router string interface string ipv6 vrrp number message-interval number</i>
Tree	message-interval
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none"> • When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as the master. • When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement. • When a non-owner is in the backup state with master-int-inherit enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.
Range	10 to 4095
Default	100
Units	centiseconds
Introduced	16.0.R1
Platforms	All

monitor-oper-group *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	configure <i>router string interface string ipv6 vrrp number monitor-oper-group reference</i>
Tree	monitor-oper-group
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other

protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.

Reference	configure service oper-group <i>string</i>
Introduced	22.2.R1
Platforms	All

ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	configure router <i>string interface string ipv6 vrrp number ntp-reply</i> <i>boolean</i>
Tree	ntp-reply
Description	When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to false , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	configure router <i>string interface string ipv6 vrrp number oper-group</i> <i>reference</i>
Tree	oper-group
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	configure service oper-group <i>string</i>
Introduced	16.0.R1
Platforms	All

owner *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	configure <i>router string interface string ipv6 vrrp number owner boolean</i>
Tree	<i>owner</i>
Description	<p>When configured to true, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to false, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	16.0.R1
Platforms	All

passive *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	configure <i>router string interface string ipv6 vrrp number passive boolean</i>
Tree	<i>passive</i>
Description	<p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> ping-reply <i>boolean</i>
Tree	ping-reply
Description	<p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	VRRP priority control policy
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> policy <i>reference</i>
Tree	policy
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	configure vrrp policy <i>number</i>
Introduced	16.0.R1
Platforms	All

preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
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Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> preempt <i>boolean</i>
Tree	preempt
Description	When configured to true , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router. When configured to false , this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Base priority for the VRRP
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> priority <i>number</i>
Tree	priority
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

standby-forwarding *boolean*

Synopsis	Allow standby router to forward traffic
Context	configure router <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> standby-forwarding <i>boolean</i>
Tree	standby-forwarding
Description	When configured to true , the standby router forwards all traffic. When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1

Platforms All

telnet-reply *boolean*

Synopsis Allow non-owner master to reply to Telnet requests

Context **configure** *router string interface string ipv6 vrrp number telnet-reply boolean*

Tree [telnet-reply](#)

Description When configured to **true**, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).

When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.

Default false

Introduced 16.0.R1

Platforms All

traceroute-reply *boolean*

Synopsis Allow non-owner master to reply to traceroute requests

Context **configure** *router string interface string ipv6 vrrp number traceroute-reply boolean*

Tree [traceroute-reply](#)

Description When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default false

Introduced 16.0.R1

Platforms All

lag

Synopsis Enter the **lag** context

Context **configure** *router string interface string lag*

Tree [lag](#)

Introduced	16.0.R1
Platforms	All

link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	configure <i>router string interface string lag link-map-profile number</i>
Tree	link-map-profile
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

per-link-hash

Synopsis	Enter the per-link-hash context
Context	configure <i>router string interface string lag per-link-hash</i>
Tree	per-link-hash
Introduced	16.0.R1
Platforms	All

class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	configure <i>router string interface string lag per-link-hash class number</i>
Tree	class
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	configure router <i>string</i> interface <i>string</i> lag per-link-hash weight <i>number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

ldp-sync-timer

Synopsis	Enter the ldp-sync-timer context
Context	configure router <i>string</i> interface <i>string</i> ldp-sync-timer
Tree	ldp-sync-timer
Description	Commands in this context set associated parameters for the synchronization of an IGP and LDP.
Introduced	16.0.R1
Platforms	All

end-of-lib *boolean*

Synopsis	Terminate LDP synchronization timer
Context	configure router <i>string</i> interface <i>string</i> ldp-sync-timer end-of-lib <i>boolean</i>
Tree	end-of-lib
Description	This command configures the system to terminate the LDP synchronization timer early for a specific session to an LDP peer, if the IGP interface receives LDP End-of-LIB Typed Wildcard FEC messages for every FEC type negotiated.
Default	false
Introduced	16.0.R1
Platforms	All

seconds *number*

Synopsis	Time interval for the LDP synchronization timer
Context	configure router <i>string</i> interface <i>string</i> ldp-sync-timer seconds <i>number</i>
Tree	seconds

Range	1 to 1800
Introduced	16.0.R1
Platforms	All

load-balancing

Synopsis	Enter the load-balancing context
Context	configure router <i>string</i> interface <i>string</i> load-balancing
Tree	load-balancing
Description	Commands in this context configure interface per-flow load-balancing options that apply to traffic that enters this interface and that egresses over a LAG or ECMP. This is a per-interface setting. Load-balancing options enabled on the interface level overwrite options that can also be enabled on the system level.
Introduced	16.0.R1
Platforms	All

flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	configure router <i>string</i> interface <i>string</i> load-balancing flow-label-load-balancing <i>boolean</i>
Tree	flow-label-load-balancing
Description	When configured to true , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to false , the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	configure router <i>string</i> interface <i>string</i> load-balancing ip-load-balancing <i>keyword</i>
Tree	ip-load-balancing
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the I4-load-balancing

command is enabled, this command also includes the source or destination port in the hash inputs.

Default	both
Options	both, destination, source, inner-ip
Introduced	16.0.R3
Platforms	All

lsr-load-balancing *keyword*

Synopsis	LSR load-balancing algorithm
Context	configure <i>router string interface string load-balancing lsr-load-balancing keyword</i>
Tree	lsr-load-balancing
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

spi-load-balancing *boolean*

Synopsis	Enable SPI use in hashing
Context	configure <i>router string interface string load-balancing spi-load-balancing boolean</i>
Tree	spi-load-balancing
Description	When configured to true , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

teid-load-balancing *boolean*

Synopsis	Enable use of TEID in hashing
Context	configure <i>router string interface string load-balancing teid-load-balancing boolean</i>
Tree	teid-load-balancing
Default	false
Introduced	16.0.R1

Platforms All

loopback

Synopsis Use interface as a loopback interface

Context **configure** *router string interface string loopback*

Tree [loopback](#)

Description When configured, this interface is used as a loopback interface. This command and the **vas-if-type** command are mutually exclusive.

Notes The following elements are part of a choice: **loopback** or **port**.

Introduced 16.0.R1

Platforms All

mac string

Synopsis MAC address of the interface

Context **configure** *router string interface string mac string*

Tree [mac](#)

Description This command assigns a specific MAC address to an IP interface. Only one MAC address can be assigned to an IP interface. When multiple **mac** commands are entered, the last command overwrites the previous command.

Introduced 16.0.R1

Platforms All

mac-accounting boolean

Synopsis Enable MAC accounting functionality

Context **configure** *router string interface string mac-accounting boolean*

Tree [mac-accounting](#)

Description When configured to **true**, the router enables MAC accounting functionality.

Default false

Introduced 16.0.R1

Platforms All

network-domains

Synopsis	Enter the network-domains context
Context	configure <i>router string interface string network-domains</i>
Tree	<i>network-domains</i>
Introduced	16.0.R4
Platforms	All

network-domain [*domain-name*] *reference*

Synopsis	Add a list entry for network-domain
Context	configure <i>router string interface string network-domains network-domain reference</i>
Tree	<i>network-domain</i>
Description	<p>Commands in this context assign an interface to a network domain. The router then takes the network domain into account during SAP ingress queue allocation for VPLS SAP.</p> <p>The network domain association can only be done in the base routing context. An operator can associate a network domain with an interface without a physical port being specified, but the configuration has no effect until a corresponding port, or LAG, is defined.</p> <p>Single interfaces can be associated with multiple network domains.</p>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[*domain-name*] *reference*

Synopsis	Network domain name
Context	configure <i>router string interface string network-domains network-domain reference</i>
Tree	<i>network-domain</i>
Reference	configure <i>router string network-domains network-domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

port (*port-and-encap* | *keyword*)

Synopsis	Port to bind to this interface
Context	configure router <i>string</i> interface <i>string</i> port (<i>port-and-encap</i> <i>keyword</i>)
Tree	port
Description	This command creates an association between a logical IP interface and a physical port. An operator can also associate an interface with the system (loopback address).
String Length	1 to 45
Options	system
Notes	The following elements are part of a choice: loopback or port .
Introduced	16.0.R1
Platforms	All

ptp-hw-assist

Synopsis	Enter the ptp-hw-assist context
Context	configure router <i>string</i> interface <i>string</i> ptp-hw-assist
Tree	ptp-hw-assist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the PTP time stamping assist
Context	configure router <i>string</i> interface <i>string</i> ptp-hw-assist admin-state <i>keyword</i>
Tree	admin-state
Description	This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support. Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis	Enter the qos context
Context	configure <i>router string interface string qos</i>
Tree	<i>qos</i>
Description	Commands in this context associate a network QoS policy with a network IP interface. Only one network QoS policy can be associated with an IP interface at one time. Attempts to associate a second QoS policy return an error.
Introduced	16.0.R1
Platforms	All

egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	configure <i>router string interface string qos egress-instance number</i>
Tree	<i>egress-instance</i>
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

egress-port-redirect-group *reference*

Synopsis	QoS queue group name
Context	configure <i>router string interface string qos egress-port-redirect-group reference</i>
Tree	<i>egress-port-redirect-group</i>
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	configure <i>qos queue-group-templates egress queue-group string</i>
Introduced	16.0.R1
Platforms	All

ingress-fp-redirect-group *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	configure router <i>string</i> interface <i>string</i> qos ingress-fp-redirect-group <i>reference</i>
Tree	ingress-fp-redirect-group
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	configure qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

ingress-instance *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	configure router <i>string</i> interface <i>string</i> qos ingress-instance <i>number</i>
Tree	ingress-instance
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

network-policy *reference*

Synopsis	Network policy name associated with a network interface
Context	configure router <i>string</i> interface <i>string</i> qos network-policy <i>reference</i>
Tree	network-policy
Description	This command associates an existing network policy name with the IP interface.
Reference	configure qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

strip-label *boolean*

Synopsis	Strip all MPLS labels before PBR processing
Context	configure router <i>string</i> interface <i>string</i> strip-label <i>boolean</i>
Tree	strip-label
Description	<p>When configured to true, the router forces packets to be stripped of all (maximum 5) MPLS labels before the packets are handed over for possible filter (PBR) processing.</p> <p>This command is supported on:</p> <ul style="list-style-type: none"> • optical ports for the 7750 SR and 7450 ESS • IOM3 XP cards for the 7750 SR and 7450 ESS • null/dot1q encaps • network ports • IPv4 • IPv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tos-marking-state *keyword*

Synopsis	TOS marking state
Context	configure router <i>string</i> interface <i>string</i> tos-marking-state <i>keyword</i>
Tree	tos-marking-state
Description	<p>This command configures the ToS marking state.</p> <p>This command is used to alter the default trusted state to a non-trusted state. When configured to trusted or default, the ToS field is not remarked by egress network IP interfaces unless the egress network IP interface has the remark-trusted state set, in which case the egress network interface treats all VPRN and network IP interfaces as untrusted.</p> <p>When configured to untrusted, all egress network IP interfaces remark IP packets received on the network interface according to the egress marking definitions on each network interface.</p>
Default	trusted
Options	trusted, untrusted
Introduced	16.0.R1
Platforms	All

untrusted

Synopsis	Enable the untrusted context
Context	configure <i>router string interface string untrusted</i>
Tree	<i>untrusted</i>
Description	<p>Commands in this context configure the untrusted state for a network IP interface.</p> <p>The untrusted state identifies the participating interfaces in the label security feature for prefixes of a VPN family at an inter-AS boundary. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>The user normally applies this command to an inter-AS interface. PIP keeps track of the untrusted status of each interface.</p>
Introduced	16.0.R4
Platforms	All

default-forwarding *keyword*

Synopsis	Default action for selective ILM
Context	configure <i>router string interface string untrusted default-forwarding keyword</i>
Tree	<i>default-forwarding</i>
Description	<p>This command specifies the default forwarding behavior of labeled packets received on this interface.</p> <p>This command sets the default behavior for an untrusted interface in the datapath and for all ILMs. When enabling the label security for VPN IPv4 or VPN IPv6 prefixes, BGP programs the data path to provide an exception to the normal way of forwarding away from the default for those VPRN ILMs.</p> <p>When the default behavior is to forward packets, the router checks labeled packets in the normal way against the table of programmed ILMs to decide if packets are dropped or forwarded in a GRT, a VRF, or a L2 service context.</p> <p>When the specified behavior is to drop packets, all labeled packets received on the interface are automatically dropped.</p>
Default	forward
Options	forward, drop
Introduced	16.0.R4
Platforms	All

urpf-selected-vprns *boolean*

Synopsis	Enable uRPF checking of incoming traffic on interface
Context	configure <i>router string interface string urpf-selected-vprns boolean</i>

Tree	urpf-selected-vprns
Description	<p>When configured to true, the router performs uRPF checks of incoming traffic on the network interface for the following:</p> <ul style="list-style-type: none"> • Packets associated with the global routing table (base router) context • Packets associated with VPRNs that have enabled the uRPF check using the configure service vprn network ingress urpf-check command <p>When configured to false, the router performs uRPF checks for all ingress traffic on the network interface (associated with the base router and all VPRNs) based on the IPv4 and IPv6 urpf-check command configuration options of the network interface.</p>
Default	false
Introduced	16.0.R1
Platforms	All

vas-if-type keyword

Synopsis	VAS interface type
Context	configure router <i>string</i> interface <i>string</i> vas-if-type <i>keyword</i>
Tree	vas-if-type
Description	This command configures the type of a Value Added Service (VAS) facing interface. This command and loopback command
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

ipsec

Synopsis	Enter the ipsec context
Context	configure router <i>string</i> ipsec
Tree	ipsec
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface [*name*] *string*

Synopsis	Enter the multi-chassis-shunt-interface list instance
Context	configure router <i>string</i> ipsec multi-chassis-shunt-interface <i>string</i>
Tree	multi-chassis-shunt-interface

Description	This command configures the multi-chassis shunting interface name for the peer.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Multi-chassis shunt interface name
Context	configure router <i>string</i> ipsec multi-chassis-shunt-interface <i>string</i>
Tree	multi-chassis-shunt-interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop

Synopsis	Enter the next-hop context
Context	configure router <i>string</i> ipsec multi-chassis-shunt-interface <i>string</i> next-hop
Tree	next-hop
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address
Context	configure router <i>string</i> ipsec multi-chassis-shunt-interface <i>string</i> next-hop address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Description	This command configures the next-hop address for the shunting interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunting-profile [[name](#)] *string*

Synopsis	Enter the multi-chassis-shunting-profile list instance
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i>
Tree	multi-chassis-shunting-profile
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Multi-chassis shunting profile name
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i>
Tree	multi-chassis-shunting-profile
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer [[ip-address](#)] *reference*

Synopsis	Enter the peer list instance
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i>
Tree	peer
Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-address] *reference*

Synopsis	Peer address
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i>
Tree	peer
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunt-interface *reference*

Synopsis	Multi-chassis shunt interface
Context	configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i> multi-chassis-shunt-interface <i>reference</i>
Tree	multi-chassis-shunt-interface
Description	This command configures the shunting interface name for the peer.
Reference	configure router <i>string</i> ipsec multi-chassis-shunt-interface <i>string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-policy [*id*] *number*

Synopsis	Enter the security-policy list instance
Context	configure router <i>string</i> ipsec security-policy <i>number</i>
Tree	security-policy
Introduced	22.7.R1
Platforms	VSR

[id] *number*

Synopsis	IPsec security policy ID
Context	configure router <i>string</i> ipsec security-policy <i>number</i>
Tree	security-policy
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

entry [**entry-id**] *number*

Synopsis	Enter the entry list instance
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i>
Tree	entry
Introduced	22.7.R1
Platforms	VSR

[entry-id] *number*

Synopsis	IPsec security policy entry ID
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i>
Tree	entry
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

local-ip

Synopsis	Enter the local-ip context
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ip
Tree	local-ip
Description	<p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ip address <i>string</i>
Tree	address

Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ip <i>any</i> <i>boolean</i>
Tree	any
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

local-ipv6

Synopsis	Enter the local-ipv6 context
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6
Tree	local-ipv6
Description	Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry. The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	configure router <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 address <i>string</i>
Tree	address
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	configure <i>router string ipsec security-policy number entry number local-ipv6 any boolean</i>
Tree	<i>any</i>
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

remote-ip

Synopsis	Enter the remote-ip context
Context	configure <i>router string ipsec security-policy number entry number remote-ip</i>
Tree	<i>remote-ip</i>
Description	Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	configure <i>router string ipsec security-policy number entry number remote-ip address string</i>
Tree	<i>address</i>
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
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Context	configure <i>router string ipsec security-policy number entry number remote-ip any boolean</i>
Tree	<i>any</i>
Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

remote-ipv6

Synopsis	Enter the remote-ipv6 context
Context	configure <i>router string ipsec security-policy number entry number remote-ipv6</i>
Tree	<i>remote-ipv6</i>
Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	22.7.R1
Platforms	VSR

address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	configure <i>router string ipsec security-policy number entry number remote-ipv6 address string</i>
Tree	<i>address</i>
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

any *boolean*

Synopsis	Use any IP address
Context	configure <i>router string ipsec security-policy number entry number remote-ipv6 any boolean</i>
Tree	<i>any</i>

Default	false
Notes	The following elements are part of a choice: address or any .
Introduced	22.7.R1
Platforms	VSR

ipv6

Synopsis	Enter the ipv6 context
Context	configure router string ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

neighbor-discovery

Synopsis	Enter the neighbor-discovery context
Context	configure router string ipv6 neighbor-discovery
Tree	neighbor-discovery
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	configure router string ipv6 neighbor-discovery reachable-time <i>number</i>
Tree	reachable-time
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

stale-time *number*

Synopsis	Neighbor discovery cache entry stale time
Context	configure router string ipv6 neighbor-discovery stale-time <i>number</i>

Tree	stale-time
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

router-advertisement

Synopsis	Enter the router-advertisement context
Context	configure router <i>string</i> ipv6 router-advertisement
Tree	router-advertisement
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the dns-options context
Context	configure router <i>string</i> ipv6 router-advertisement dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

rdnss-lifetime (*keyword* | *number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	configure router <i>string</i> ipv6 router-advertisement dns-options rdnss-lifetime (<i>keyword</i> <i>number</i>)
Tree	rdnss-lifetime
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0 4 to 3600
Default	infinite
Units	seconds
Options	infinite
Introduced	16.0.R1

Platforms All

server *string*

Synopsis RAs that are forwarded to IPv6 DNS servers

Context **configure** *router string ipv6 router-advertisement dns-options server string*

Tree *server*

Max. Instances 4

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

interface [*ip-int-name*] *string*

Synopsis Enter the **interface** list instance

Context **configure** *router string ipv6 router-advertisement interface string*

Tree *interface*

Introduced 16.0.R1

Platforms All

[ip-int-name] *string*

Synopsis Router interface name

Context **configure** *router string ipv6 router-advertisement interface string*

Tree *interface*

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of router advertisement

Context **configure** *router string ipv6 router-advertisement interface string admin-state keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

current-hop-limit *number*

Synopsis	Hop limit advertised in RA messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> current-hop-limit <i>number</i>
Tree	current-hop-limit
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	All

dns-options

Synopsis	Enable the dns-options context
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> dns-options
Tree	dns-options
Introduced	16.0.R1
Platforms	All

include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> dns-options include-rdnss <i>boolean</i>
Tree	include-rdnss
Default	true
Introduced	16.0.R1
Platforms	All

rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> dns-options rdnss-lifetime (<i>number</i> <i>keyword</i>)
Tree	rdnss-lifetime
Range	0 4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> dns-options server <i>string</i>
Tree	server
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

managed-configuration *boolean*

Synopsis	Set the managed address configuration flag
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> managed-configuration <i>boolean</i>
Tree	managed-configuration
Default	false
Introduced	16.0.R1
Platforms	All

max-advertisement-interval *number*

Synopsis	Maximum time between sending advertisement messages
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Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> max-advertisement-interval <i>number</i>
Tree	max-advertisement-interval
Range	4 to 1800
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

min-advertisement-interval *number*

Synopsis	Minimum interval between router advertisement messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> min-advertisement-interval <i>number</i>
Tree	min-advertisement-interval
Range	3 to 1350
Default	200
Units	seconds
Introduced	16.0.R1
Platforms	All

mtu *number*

Synopsis	MTU for sending packets to the router
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> mtu <i>number</i>
Tree	mtu
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

other-stateful-configuration *boolean*

Synopsis	Set the other configuration flag
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> other-stateful-configuration <i>boolean</i>
Tree	other-stateful-configuration

Default	false
Introduced	16.0.R1
Platforms	All

prefix [*ipv6-prefix*] *string*

Synopsis	Enter the prefix list instance
Context	configure <i>router string ipv6 router-advertisement interface string prefix string</i>
Tree	<i>prefix</i>
Max. Instances	254
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address prefix
Context	configure <i>router string ipv6 router-advertisement interface string prefix string</i>
Tree	<i>prefix</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

autonomous *boolean*

Synopsis	Set the autonomous flag value
Context	configure <i>router string ipv6 router-advertisement interface string prefix string autonomous boolean</i>
Tree	<i>autonomous</i>
Default	true
Introduced	16.0.R1
Platforms	All

on-link *boolean*

Synopsis	Use prefix for on-link determination
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Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> prefix <i>string</i> on-link <i>boolean</i>
Tree	on-link
Default	true
Introduced	16.0.R1
Platforms	All

preferred-lifetime (*keyword* | *number*)

Synopsis	Remaining time that the prefix remains preferred
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> prefix <i>string</i> preferred-lifetime (<i>keyword</i> <i>number</i>)
Tree	preferred-lifetime
Range	0 to 4294967294
Default	604800
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

valid-lifetime (*keyword* | *number*)

Synopsis	Remaining time in which the prefix is still valid
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> prefix <i>string</i> valid-lifetime (<i>keyword</i> <i>number</i>)
Tree	valid-lifetime
Range	0 to 4294967294
Default	2592000
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

reachable-time *number*

Synopsis	Time the router is reachable by other hosts or nodes
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Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> reachable-time <i>number</i>
Tree	reachable-time
Range	0 to 3600000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	All

retransmit-time *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> retransmit-time <i>number</i>
Tree	retransmit-time
Range	0 to 1800000
Default	0
Units	milliseconds
Introduced	16.0.R1
Platforms	All

router-lifetime *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> router-lifetime <i>number</i>
Tree	router-lifetime
Range	0 4 to 9000
Default	1800
Units	seconds
Introduced	16.0.R1
Platforms	All

use-virtual-mac *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
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Context	configure router <i>string</i> ipv6 router-advertisement interface <i>string</i> use-virtual-mac <i>boolean</i>
Tree	use-virtual-mac
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-te-router-id

Synopsis	Enter the ipv6-te-router-id context
Context	configure router <i>string</i> ipv6-te-router-id
Tree	ipv6-te-router-id
Introduced	19.10.R1
Platforms	All

interface *reference*

Synopsis	Network IP interface name to obtain IP address
Context	configure router <i>string</i> ipv6-te-router-id interface <i>reference</i>
Tree	interface
Description	This command specifies the interface name from which to obtain the IP address to use as the IPv6 TE Router ID. This router ID uniquely identifies the router to other routers as IPv6 TE capable in an IGP TE domain. IS-IS advertises this information using the IPv6 TE Router ID TLV.
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	19.10.R1
Platforms	All

isa-service-chaining

Synopsis	Enable the isa-service-chaining context
Context	configure router <i>string</i> isa-service-chaining
Tree	isa-service-chaining
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group [*id*] *number*

Synopsis	Add a list entry for nat-group
Context	configure router <i>string isa-service-chaining nat-group number</i>
Tree	nat-group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis	ISA NAT group/ISA WLAN GW group ID for the EVPN pools
Context	configure router <i>string isa-service-chaining nat-group number</i>
Tree	nat-group
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-vtep-range

Synopsis	Enable the vxlan-vtep-range context
Context	configure router <i>string isa-service-chaining vxlan-vtep-range</i>
Tree	vxlan-vtep-range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	End address of the VXLAN VTEP range
Context	configure router <i>string isa-service-chaining vxlan-vtep-range end (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	end
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Start address of the VXLAN VTEP range
Context	configure router <i>string isa-service-chaining vxlan-vtep-range start</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	start
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

isis [[isis-instance](#)] *number*

Synopsis	Enter the isis list instance
Context	configure router <i>string isis number</i>
Tree	isis
Introduced	16.0.R1
Platforms	All

[isis-instance] *number*

Synopsis	Instance ID for the IS-IS instance
Context	configure router <i>string isis number</i>
Tree	isis
Range	0 to 127
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS instance
Context	configure router <i>string isis number admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 16.0.R1
Platforms All

advertise-passive-only *boolean*

Synopsis Advertise prefixes that belong to passive interfaces
Context **configure** *router string isis number advertise-passive-only boolean*
Tree [advertise-passive-only](#)
Default false
Introduced 16.0.R1
Platforms All

advertise-router-capability *keyword*

Synopsis Router capabilities advertisement to neighbors
Context **configure** *router string isis number advertise-router-capability keyword*
Tree [advertise-router-capability](#)
Options area, as
Introduced 16.0.R1
Platforms All

advertise-tunnel-link *boolean*

Synopsis Allow use of forwarding adjacency
Context **configure** *router string isis number advertise-tunnel-link boolean*
Tree [advertise-tunnel-link](#)
Default false
Introduced 16.0.R1
Platforms All

all-l1isis *string*

Synopsis Destination MAC address for all L1 IS-IS routers
Context **configure** *router string isis number all-l1isis string*
Tree [all-l1isis](#)

Default	01:80:C2:00:00:14
Introduced	16.0.R1
Platforms	All

all-l2isis *string*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	configure router <i>string</i> isis <i>number</i> all-l2isis <i>string</i>
Tree	all-l2isis
Default	01:80:C2:00:00:15
Introduced	16.0.R1
Platforms	All

area-address *string*

Synopsis	Area address portion of the NSAP address
Context	configure router <i>string</i> isis <i>number</i> area-address <i>string</i>
Tree	area-address
String Length	2 to 38
Max. Instances	3
Introduced	16.0.R1
Platforms	All

authentication-check *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	configure router <i>string</i> isis <i>number</i> authentication-check <i>boolean</i>
Tree	authentication-check
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
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Context	configure <i>router string isis number authentication-key string</i>
Tree	authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure <i>router string isis number authentication-keychain reference</i>
Tree	authentication-keychain
Reference	configure <i>system security keychains keychain string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure <i>router string isis number authentication-type keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

csnp-authentication *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	configure <i>router string isis number csnp-authentication boolean</i>
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the database-export context
Context	configure <i>router string isis number database-export</i>
Tree	<i>database-export</i>
Introduced	16.0.R1
Platforms	All

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure <i>router string isis number database-export bgp-ls-identifier</i>
Tree	<i>bgp-ls-identifier</i>
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	configure <i>router string isis number database-export bgp-ls-identifier value number</i>
Tree	<i>value</i>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

igp-identifier *number*

Synopsis	Unique ID of the IGP instance in the BGP-LS NLRI
Context	configure <i>router string isis number database-export igp-identifier number</i>
Tree	<i>igp-identifier</i>
Max. Range	0 to 18446744073709551615
Introduced	16.0.R1
Platforms	All

default-route-tag *number*

Synopsis	Route tag for the default route
Context	configure router <i>string</i> <i>isis</i> <i>number</i> default-route-tag <i>number</i>
Tree	default-route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enter the entropy-label context
Context	configure router <i>string</i> <i>isis</i> <i>number</i> entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

override-tunnel-elc *boolean*

Synopsis	Enable override of received ELC advertisements
Context	configure router <i>string</i> <i>isis</i> <i>number</i> entropy-label override-tunnel-elc <i>boolean</i>
Tree	override-tunnel-elc
Default	false
Introduced	16.0.R1
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure router <i>string</i> <i>isis</i> <i>number</i> export-limit
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure router <i>string</i> <i>isis</i> <i>number</i> export-limit log-percent <i>number</i>
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>string</i> <i>isis</i> <i>number</i> export-limit number <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>string</i> <i>isis</i> <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

flexible-algorithms

Synopsis	Enter the flexible-algorithms context
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure IS-IS parameters for flexible algorithm participation.
Introduced	20.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Default	disable
Options	enable, disable
Introduced	20.7.R1
Platforms	All

advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms advertise-admin-group <i>keyword</i>
Tree	advertise-admin-group
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Default	prefer-ag
Options	prefer-ag, eag-only, ag-eag
Introduced	23.3.R1
Platforms	All

flex-algo [**flex-algo-id**] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Description	Commands in this context configure an IS-IS flexible algorithm. When flexible algorithm is configured in an IS-IS instance, the IS-IS instance is configured for all levels (Level 1 and Level 2).
Max. Instances	7
Introduced	20.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

advertise *reference*

Synopsis	Flexible Algorithm Definition advertisement
Context	configure router <i>string</i> isis <i>number</i> flexible-algorithms flex-algo <i>number</i> advertise <i>reference</i>
Tree	advertise
Description	This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD). The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.
Reference	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i>
Introduced	20.7.R1

Platforms All

loopfree-alternate

Synopsis Enable the **loopfree-alternate** context

Context **configure** *router string isis number flexible-algorithms flex-algo number loopfree-alternate*

Tree [loopfree-alternate](#)

Introduced 20.7.R1

Platforms All

micro-loop-avoidance

Synopsis Enable the **micro-loop-avoidance** context

Context **configure** *router string isis number flexible-algorithms flex-algo number micro-loop-avoidance*

Tree [micro-loop-avoidance](#)

Introduced 21.7.R1

Platforms All

participate *boolean*

Synopsis Allow participation in the Flexible Algorithm

Context **configure** *router string isis number flexible-algorithms flex-algo number participate boolean*

Tree [participate](#)

Description When configured to **true**, the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.
When configured to **false**, flexible algorithm participation is not enabled.

Default false

Introduced 20.7.R1

Platforms All

graceful-restart

Synopsis Enable the **graceful-restart** context

Context	configure <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>graceful-restart</i>
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	configure <i>router</i> <i>string</i> <i>isis</i> <i>number</i> graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	true
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure <i>router</i> <i>string</i> <i>isis</i> <i>number</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	IS-IS Hello message padding
Context	configure <i>router</i> <i>string</i> <i>isis</i> <i>number</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ignore-attached-bit *boolean*

Synopsis	Ignore attached bit on received Layer 1 LSPs
----------	--

Context	configure <i>router string isis number ignore-attached-bit boolean</i>
Tree	ignore-attached-bit
Default	false
Introduced	16.0.R1
Platforms	All

ignore-lsp-errors *boolean*

Synopsis	Ignore LSP packets with errors
Context	configure <i>router string isis number ignore-lsp-errors boolean</i>
Tree	ignore-lsp-errors
Default	false
Introduced	16.0.R1
Platforms	All

ignore-narrow-metric *boolean*

Synopsis	Ignore links with narrow metrics
Context	configure <i>router string isis number ignore-narrow-metric boolean</i>
Tree	ignore-narrow-metric
Default	false
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure <i>router string isis number igp-shortcut</i>
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP-TE or SR-TE shortcut
----------	---

Context	configure router <i>string</i> isis <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable SR over SR-TE LSPs
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	<p>When configured to true, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with allow-sr-over-srte explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit allow-sr-over-srte configuration.</p> <p>Under ECMP, when this command is configured to true, preference is given to the SR-TE LSPs with allow-sr-over-srte explicitly configured over the LSPs that do not have allow-sr-over-srte configured.</p>
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-next-hop



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1

Platforms All

family [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance

Context **configure** [router](#) *string* [isis](#) *number* [igp-shortcut](#) [tunnel-next-hop](#) [family](#) *keyword*

Tree [family](#)

Introduced 16.0.R1

Platforms All

[family-type] *keyword*

Synopsis Address family type for tunnel next hop

Context **configure** [router](#) *string* [isis](#) *number* [igp-shortcut](#) [tunnel-next-hop](#) [family](#) *keyword*

Tree [family](#)

Options ipv4, ipv6, srv4, srv6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

resolution *keyword*

Synopsis Resolution mode for IGP shortcut tunnels

Context **configure** [router](#) *string* [isis](#) *number* [igp-shortcut](#) [tunnel-next-hop](#) [family](#) *keyword* [resolution](#) *keyword*

Tree [resolution](#)

Default none

Options none, filter, any, match-family-ip

Introduced 16.0.R1

Platforms All

resolution-filter

Synopsis Enter the **resolution-filter** context

Context **configure** [router](#) *string* [isis](#) *number* [igp-shortcut](#) [tunnel-next-hop](#) [family](#) *keyword* [resolution-filter](#)

Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut tunnel-next-hop <i>family</i> <i>keyword</i> resolution-filter rsvp <i>boolean</i>
Tree	rsvp
Default	false
Introduced	16.0.R1
Platforms	All

sr-te boolean

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>string</i> isis <i>number</i> igp-shortcut tunnel-next-hop <i>family</i> <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

iid-tlv boolean

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	configure router <i>string</i> isis <i>number</i> iid-tlv <i>boolean</i>
Tree	iid-tlv
Default	false
Introduced	16.0.R1
Platforms	All

import-policy reference

Synopsis	Import policy names for routes from IGP to route table
----------	--

Context	configure router <i>string</i> isis <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-set [[id](#)] *reference*

Synopsis	Add a list entry for adjacency-set
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Introduced	16.0.R1
Platforms	All

[id] reference

Synopsis	Adjacency set ID
Context	configure router <i>string</i> <i>isis number</i> <i>interface string</i> <i>adjacency-set reference</i>
Tree	<i>adjacency-set</i>
Reference	configure router <i>string</i> <i>isis number</i> <i>segment-routing adjacency-set number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the IS-IS interface
Context	configure router <i>string</i> <i>isis number</i> <i>interface string</i> <i>admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>string</i> <i>isis number</i> <i>interface string</i> <i>bfd-liveness</i>
Tree	<i>bfd-liveness</i>
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the ipv4 context
Context	configure router <i>string</i> <i>isis number</i> <i>interface string</i> <i>bfd-liveness ipv4</i>

Tree	ipv4
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv4 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> bfd-liveness ipv6 include-bfd-tlv <i>boolean</i>
Tree	include-bfd-tlv
Default	false
Introduced	16.0.R1
Platforms	All

csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> csnp-interval <i>number</i>

Tree	csnp-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

default-instance *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> default-instance <i>boolean</i>
Tree	default-instance
Default	false
Introduced	16.0.R1
Platforms	All

flex-algo [[flex-algo-id](#)] *number*

Synopsis	Enter the flex-algo list instance
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i>
Tree	flex-algo
Max. Instances	7
Introduced	20.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

ipv4-node-sid

Synopsis	Enable the ipv4-node-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv4-node-sid
Tree	ipv4-node-sid
Introduced	20.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv4-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	20.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv4-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	20.7.R1
Platforms	All

ipv6-node-sid

Synopsis	Enable the ipv6-node-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> flex-algo <i>number</i> ipv6-node-sid
Tree	ipv6-node-sid

Introduced 20.7.R1
Platforms All

index *number*

Synopsis Node SID index for this interface
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [flex-algo](#) *number* [ipv6-node-sid](#) [index](#) *number*
Tree [index](#)
Range 0 to 4294967295
Notes The following elements are part of a choice: **index** or **label**.
Introduced 20.7.R1
Platforms All

label *number*

Synopsis Label value for the node SID
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [flex-algo](#) *number* [ipv6-node-sid](#) [label](#) *number*
Tree [label](#)
Range 1 to 4294967295
Notes The following elements are part of a choice: **index** or **label**.
Introduced 20.7.R1
Platforms All

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets
Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [hello-authentication](#) *boolean*
Tree [hello-authentication](#)
Default true
Introduced 16.0.R1
Platforms All

hello-authentication-key *string*

Synopsis	Authentication key or hash string for Hello PDUs
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-key <i>string</i>
Tree	hello-authentication-key
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

hello-authentication-keychain *reference*

Synopsis	Authentication keychain to use for the session
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-keychain <i>reference</i>
Tree	hello-authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

hello-authentication-type *keyword*

Synopsis	Hello authentication type
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-type <i>keyword</i>
Tree	hello-authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> interface-type <i>keyword</i>
Tree	interface-type
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

ipv4-adjacency-sid

Synopsis	Enable the ipv4-adjacency-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-adjacency-sid
Tree	ipv4-adjacency-sid
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-adjacency-sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-multicast <i>boolean</i>
Tree	ipv4-multicast
Default	true
Introduced	16.0.R1
Platforms	All

ipv4-node-sid

Synopsis	Enable the ipv4-node-sid context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid
Tree	ipv4-node-sid
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Default	false
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1

Platforms All

ipv6-adjacency-sid

Synopsis Enable the **ipv6-adjacency-sid** context
Context **configure** *router string isis number interface string* **ipv6-adjacency-sid**
Tree [ipv6-adjacency-sid](#)
Introduced 16.0.R1
Platforms All

label *number*

Synopsis
Context **configure** *router string isis number interface string* **ipv6-adjacency-sid** **label** *number*
Tree [label](#)
Range 1 to 1048575
Introduced 16.0.R1
Platforms All

ipv6-multicast *boolean*

Synopsis Enable IPv6 multicast routing for the interface
Context **configure** *router string isis number interface string* **ipv6-multicast** *boolean*
Tree [ipv6-multicast](#)
Default true
Introduced 16.0.R1
Platforms All

ipv6-node-sid

Synopsis Enable the **ipv6-node-sid** context
Context **configure** *router string isis number interface string* **ipv6-node-sid**
Tree [ipv6-node-sid](#)
Introduced 16.0.R1
Platforms All

clear-n-flag *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Default	false
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-unicast <i>boolean</i>
Tree	ipv6-unicast
Default	true

Introduced	16.0.R1
Platforms	All

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[level-number] *keyword*

Synopsis	ISIS protocol level number
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

hello-authentication-key *string*

Synopsis	Authentication key for Hello PDUs
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-authentication-key <i>string</i>
Tree	hello-authentication-key
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match. If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1

Platforms All

hello-authentication-keychain *reference*

Synopsis Authentication keychain to use for the session

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [hello-authentication-keychain](#) *reference*

Tree [hello-authentication-keychain](#)

Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*

Introduced 16.0.R3

Platforms All

hello-authentication-type *keyword*

Synopsis Hello authentication enabled on the context

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [hello-authentication-type](#) *keyword*

Tree [hello-authentication-type](#)

Description This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello **authentication-key** statement must also be included.

Options password, message-digest

Introduced 16.0.R1

Platforms All

hello-interval *number*

Synopsis Interval between Hello messages sent on this level

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [hello-interval](#) *number*

Tree [hello-interval](#)

Range 1 to 20000

Default 9

Units seconds

Introduced 16.0.R1

Platforms All

hello-multiplier *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv4-multicast-metric <i>number</i>
Tree	ipv4-multicast-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

ipv6-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 multicast
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv6-multicast-metric <i>number</i>
Tree	ipv6-multicast-metric
Range	1 to 16777215

Introduced 16.0.R1
 Platforms All

ipv6-unicast-metric *number*

Synopsis IS-IS interface metric applied for IPv6 unicast
 Context **configure** *router string isis number interface string level keyword ipv6-unicast-metric number*
 Tree [ipv6-unicast-metric](#)
 Range 1 to 16777215
 Introduced 16.0.R1
 Platforms All

metric *number*

Synopsis IS-IS interface metric applied for IPv4 unicast
 Context **configure** *router string isis number interface string level keyword metric number*
 Tree [metric](#)
 Range 1 to 16777215
 Introduced 16.0.R1
 Platforms All

passive *boolean*

Synopsis Passive interface
 Context **configure** *router string isis number interface string level keyword passive boolean*
 Tree [passive](#)
 Default false
 Introduced 16.0.R1
 Platforms All

priority *number*

Synopsis Router to become the designated router on a multi-access network
 Context **configure** *router string isis number interface string level keyword priority number*
 Tree [priority](#)

Range	0 to 127
Default	64
Introduced	16.0.R1
Platforms	All

sd-offset *number*

Synopsis	Value of the signal degrade offset
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> sd-offset <i>number</i>
Tree	sd-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

sf-offset *number*

Synopsis	Value of the signal fail offset
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> sf-offset <i>number</i>
Tree	sf-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	IS-IS levels for this interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> level-capability <i>keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsp-pacing-interval *number*

Synopsis	Interval for sending LSPs from interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> lsp-pacing-interval <i>number</i>
Tree	lsp-pacing-interval
Range	0 to 65535
Default	100
Units	milliseconds
Introduced	16.0.R1
Platforms	All

mesh-group

Synopsis	Enable the mesh-group context
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group
Tree	mesh-group
Introduced	16.0.R1
Platforms	All

blocked

Synopsis	Prevent the interface from flooding LSPs
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group blocked
Tree	blocked
Notes	The following elements are part of a choice: blocked or value .

Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Mesh group for the interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group value <i>number</i>
Tree	value
Range	1 to 2000000000
Notes	The following elements are part of a choice: blocked or value .
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Passive interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> passive <i>boolean</i>
Tree	passive
Default	false
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 65535
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> sid-protection <i>boolean</i>
Tree	sid-protection
Default	true
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Route tag for IP address of interface
Context	configure router <i>string</i> isis <i>number</i> interface <i>string</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipv4-multicast-routing *keyword*

Synopsis	IS-IS topology for IPv4 multicast routing
Context	configure router <i>string</i> isis <i>number</i> ipv4-multicast-routing <i>keyword</i>
Tree	ipv4-multicast-routing
Default	native
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ipv4-routing *boolean*

Synopsis	Support IPv4 routing for IS-IS instance
Context	configure router <i>string</i> isis <i>number</i> ipv4-routing <i>boolean</i>
Tree	ipv4-routing
Default	true
Introduced	16.0.R1
Platforms	All

ipv6-multicast-routing *keyword*

Synopsis	Topology to populate the IPv6 multicast RTM
Context	configure router <i>string</i> isis <i>number</i> ipv6-multicast-routing <i>keyword</i>
Tree	ipv6-multicast-routing
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ipv6-routing *keyword*

Synopsis	Routing topology for IPv6
Context	configure router <i>string</i> isis <i>number</i> ipv6-routing <i>keyword</i>
Tree	ipv6-routing
Default	false
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Allow LDP over RSVP processing
Context	configure router <i>string</i> isis <i>number</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	false
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Use IGP-LDP synchronization feature on all interfaces participating in IS-IS routing protocol
Context	configure router <i>string</i> isis <i>number</i> ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	true

Introduced 16.0.R1
 Platforms All

level [[level-number](#)] *keyword*

Synopsis Enter the **level** list instance
 Context **configure** [router](#) *string* [isis](#) *number* [level](#) *keyword*
 Tree [level](#)
 Max. Instances 2
 Introduced 16.0.R1
 Platforms All

[level-number] *keyword*

Synopsis ISIS protocol level number
 Context **configure** [router](#) *string* [isis](#) *number* [level](#) *keyword*
 Tree [level](#)
 Options 1, 2
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities
 Context **configure** [router](#) *string* [isis](#) *number* [level](#) *keyword* [advertise-router-capability](#) *boolean*
 Tree [advertise-router-capability](#)
 Default true
 Introduced 16.0.R1
 Platforms All

authentication-key *string*

Synopsis Authentication key to verify PDUs sent on the interface

Context	configure router <i>string isis number level keyword authentication-key string</i>
Tree	authentication-key
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface. Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The authentication-type command must also be included.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Keychain used to sign and authenticate
Context	configure router <i>string isis number level keyword authentication-keychain reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type to be used
Context	configure router <i>string isis number level keyword authentication-type keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enter the bier context
Context	configure router <i>string isis number level keyword bier</i>
Tree	bier
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> bier admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

template *reference*

Synopsis	BIER template name
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> bier template <i>reference</i>
Tree	template
Reference	configure router <i>string</i> bier template <i>string</i>
Introduced	16.0.R4
Platforms	All

csnp-authentication *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> csnp-authentication <i>boolean</i>
Tree	csnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

database-export-exclude *boolean*

Synopsis	Exclude IGP link-state information of a specific IS-IS level from being exported into extended TE-DB
Context	configure router <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> database-export-exclude <i>boolean</i>
Tree	database-export-exclude
Default	false

Introduced 16.0.R1
Platforms All

default-ipv4-multicast-metric *number*

Synopsis Default metric for IPv4 unicast
Context **configure** *router string isis number level keyword default-ipv4-multicast-metric number*
Tree [default-ipv4-multicast-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

default-ipv6-multicast-metric *number*

Synopsis Default metric for IPv6 unicast
Context **configure** *router string isis number level keyword default-ipv6-multicast-metric number*
Tree [default-ipv6-multicast-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

default-ipv6-unicast-metric *number*

Synopsis Default metric for IPv6 unicast
Context **configure** *router string isis number level keyword default-ipv6-unicast-metric number*
Tree [default-ipv6-unicast-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

default-metric *number*

Synopsis	Default metric
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	External route preference for IS-IS level
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> external-preference <i>number</i>
Tree	external-preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

hello-authentication *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> hello-authentication <i>boolean</i>
Tree	hello-authentication
Default	true
Introduced	16.0.R1
Platforms	All

hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	configure router <i>string</i> isis <i>number</i> level <i>keyword</i> hello-padding <i>keyword</i>
Tree	hello-padding
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	configure <i>router string isis number level keyword loopfree-alternate-exclude boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

lsp-mtu-size *number***WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	configure <i>router string isis number level keyword lsp-mtu-size number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Default	1492
Units	bytes
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	External route preference at level
Context	configure <i>router string isis number level keyword preference number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R1
Platforms	All

psnp-authentication *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
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Context	configure <i>router string isis number level keyword psnp-authentication boolean</i>
Tree	psnp-authentication
Default	true
Introduced	16.0.R1
Platforms	All

wide-metrics-only *boolean*

Synopsis	Use wide metrics advertisements in the LSPs
Context	configure <i>router string isis number level keyword wide-metrics-only boolean</i>
Tree	wide-metrics-only
Default	false
Introduced	16.0.R1
Platforms	All

level-capability *keyword*

Synopsis	Routing level for instance
Context	configure <i>router string isis number level-capability keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

link-group [*link-group-name*] *string*

Synopsis	Enter the link-group list instance
Context	configure <i>router string isis number link-group string</i>
Tree	link-group
Introduced	16.0.R1
Platforms	All

[link-group-name] string

Synopsis	Link group name for the IS-IS protocol
Context	configure router string isis number link-group string
Tree	link-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure router string isis number link-group string description string
Tree	description
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

level [level-number] keyword

Synopsis	Enter the level list instance
Context	configure router string isis number link-group string level keyword
Tree	level
Max. Instances	2
Introduced	16.0.R1
Platforms	All

[level-number] keyword

Synopsis	ISIS protocol level number
Context	configure router string isis number link-group string level keyword
Tree	level
Options	1, 2
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

ipv4-multicast-metric-offset *number*

Synopsis Offset value for the IPv4 multicast address family
Context **configure** **router** *string isis number link-group string level keyword ipv4-multicast-metric-offset number*
Tree [ipv4-multicast-metric-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

ipv4-unicast-metric-offset *number*

Synopsis Offset value for the IPv4 unicast address family
Context **configure** **router** *string isis number link-group string level keyword ipv4-unicast-metric-offset number*
Tree [ipv4-unicast-metric-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

ipv6-multicast-metric-offset *number*

Synopsis Offset value for the IPv6 multicast address family
Context **configure** **router** *string isis number link-group string level keyword ipv6-multicast-metric-offset number*
Tree [ipv6-multicast-metric-offset](#)
Range 1 to 16777215
Introduced 16.0.R1
Platforms All

ipv6-unicast-metric-offset *number*

Synopsis Offset value for the IPv6 unicast address family

Context	configure <i>router string isis number link-group string level keyword ipv6-unicast-metric-offset number</i>
Tree	ipv6-unicast-metric-offset
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

member [[interface-name](#)] *reference*

Synopsis	Add a list entry for member
Context	configure <i>router string isis number link-group string level keyword member reference</i>
Tree	member
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[interface-name] *reference*

Synopsis	Router interface name for this link group
Context	configure <i>router string isis number link-group string level keyword member reference</i>
Tree	member
Reference	configure <i>router string isis number interface string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

oper-members *number*

Synopsis	Minimum number of operational links
Context	configure <i>router string isis number link-group string level keyword oper-members number</i>
Tree	oper-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

revert-members *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	configure router <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> revert-members <i>number</i>
Tree	revert-members
Range	1 to 8
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate augment-route-table <i>boolean</i>
Tree	augment-route-table
Description	When configured to true , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to false , rLFA-specific information is not added to RTM entries.
Default	false
Introduced	19.10.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate exclude
Tree	exclude

Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multi-homed-prefix

Synopsis	Enable the multi-homed-prefix context
Context	configure router <i>string</i> isis <i>number</i> loopfree-alternate multi-homed-prefix
Tree	multi-homed-prefix
Description	Commands in this context enable multihomed prefix LFA for IS-IS routes (IP FRR), SR-ISIS tunnels, and SRv6-ISIS tunnels. This feature uses the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes. This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of intra-area anycast prefixes. The computed IP next hop-based backup path is added to IS-IS routes of external /32 prefixes or /128 prefixes and intra-area /32 or /128 anycast prefixes in the RTM if the prefix is not protected by the base LFA or if the user set leaf preference command option is configured to all. The user must enable the configure routing-options ip-fast-reroute command to have these backup paths programmed into the FIB in the datapath. The computed IP next hop or repair tunnel-based backup path is also programmed for:

- SR-ISIS node SID tunnels of external /32 IPv4 prefixes and /128 IPv6 prefixes, and node SID tunnels of intra-area /32 IPv4 anycast prefixes and /128 anycast IPv6 prefixes, in both algorithm 0 and flexible-algorithms
- SRv6-ISIS locator routes and tunnels of external prefixes and of intra-area anycast prefixes of any size, in both algorithm 0 and flexible algorithm numbers.

As a result, an SR-TE LSP, an SR-MPLS policy, or an SRv6 policy which uses an SR-ISIS SID or an SRv6-ISIS SID of those same prefixes in its configured or computed SID list benefits from the multihomed prefix LFA protection.

Once the IP next-hop based multihomed prefix LFA is enabled, the extensions to compute an SR-TE repair tunnel for the multihomed prefix LFA in the case of SR-ISIS and SRv6-ISIS are automatically enabled if the user also enabled TI-LFA or Remote LFA. The computation reuses the SID list of the primary path or of the TI-LFA or Remote LFA backup path of the alternate ABR or ASBR or alternate owner router.

Introduced 22.7.R1

Platforms All

preference *keyword*

Synopsis Multihomed prefix LFA backup path preference

Context **configure** *router string isis number loopfree-alternate multi-homed-prefix preference keyword*

Tree [preference](#)

Default none

Options none, all

Introduced 22.7.R1

Platforms All

remote-lfa

Synopsis Enable the **remote-lfa** context

Context **configure** *router string isis number loopfree-alternate remote-lfa*

Tree [remote-lfa](#)

Introduced 16.0.R1

Platforms All

max-pq-cost *number*

Synopsis Maximum cost of destination node during reverse SPF calculation

Context	configure <i>router string isis number loopfree-alternate remote-lfa max-pq-cost number</i>
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	4261412864
Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure <i>router string isis number loopfree-alternate remote-lfa node-protect</i>
Tree	node-protect
Introduced	16.0.R4
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF
Context	configure <i>router string isis number loopfree-alternate remote-lfa node-protect max-pq-nodes number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure <i>router string isis number loopfree-alternate ti-lfa</i>
Tree	ti-lfa
Description	Commands in this context configure the Topology-Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this IS-IS instance.
Introduced	16.0.R1
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure <i>router string isis number loopfree-alternate ti-lfa max-sr-frr-labels number</i>
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R1
Platforms	All

max-srv6-frr-sids *number*

Synopsis	Maximum number of SIDs the TI-LFA backup path can use
Context	configure <i>router string isis number loopfree-alternate ti-lfa max-srv6-frr-sids number</i>
Tree	max-srv6-frr-sids
Description	This command configures the maximum number of SRv6 SIDs allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path
Range	0 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

node-protect

Synopsis	Enable the node-protect context
Context	configure <i>router string isis number loopfree-alternate ti-lfa node-protect</i>
Tree	node-protect
Introduced	16.0.R5
Platforms	All

lsp-lifetime number

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	configure <i>router string isis number lsp-lifetime number</i>
Tree	lsp-lifetime
Range	350 to 65535
Default	1200
Units	seconds
Introduced	16.0.R1
Platforms	All

lsp-minimum-remaining-lifetime number

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	configure <i>router string isis number lsp-minimum-remaining-lifetime number</i>
Tree	lsp-minimum-remaining-lifetime
Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

lsp-mtu-size number

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	configure <i>router string isis number lsp-mtu-size number</i>
Tree	lsp-mtu-size
Range	490 to 9778
Default	1492
Units	bytes

Introduced	16.0.R1
Platforms	All

lsp-refresh

Synopsis	Enter the lsp-refresh context
Context	configure router <i>string</i> isis <i>number</i> lsp-refresh
Tree	lsp-refresh
Introduced	16.0.R1
Platforms	All

half-lifetime *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	configure router <i>string</i> isis <i>number</i> lsp-refresh half-lifetime <i>boolean</i>
Tree	half-lifetime
Default	true
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Refresh timer interval
Context	configure router <i>string</i> isis <i>number</i> lsp-refresh interval <i>number</i>
Tree	interval
Range	150 to 65535
Default	600
Units	seconds
Introduced	16.0.R1
Platforms	All

mru-mismatch-detection *boolean*

Synopsis	Enable detection of MRU mismatch
Context	configure router <i>string</i> isis <i>number</i> mru-mismatch-detection <i>boolean</i>

Tree	mru-mismatch-detection
Description	<p>When configured to true, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to false, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multi-topology

Synopsis	Enable the multi-topology context
Context	configure router <i>string</i> isis <i>number</i> multi-topology
Tree	multi-topology
Introduced	16.0.R1
Platforms	All

ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	configure router <i>string</i> isis <i>number</i> multi-topology ipv4-multicast <i>boolean</i>
Tree	ipv4-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-multicast *boolean*

Synopsis	Support IPv6 topology (MT4)
Context	configure router <i>string</i> isis <i>number</i> multi-topology ipv6-multicast <i>boolean</i>
Tree	ipv6-multicast
Default	false
Introduced	16.0.R1
Platforms	All

ipv6-unicast *boolean*

Synopsis	Support multi-topology TLVs
Context	configure <i>router string isis number multi-topology ipv6-unicast boolean</i>
Tree	ipv6-unicast
Default	false
Introduced	16.0.R1
Platforms	All

multicast-import

Synopsis	Enter the multicast-import context
Context	configure <i>router string isis number multicast-import</i>
Tree	multicast-import
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	configure <i>router string isis number multicast-import ipv4 boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Submit IPv6 routes into the multicast RPF of the RTM
Context	configure <i>router string isis number multicast-import ipv6 boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

overload

Synopsis	Enable the overload context
Context	configure router string isis number overload
Tree	overload
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure router string isis number overload max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	configure router string isis number overload-export-external <i>boolean</i>
Tree	overload-export-external
Default	false
Introduced	16.0.R1
Platforms	All

overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	configure router string isis number overload-export-interlevel <i>boolean</i>
Tree	overload-export-interlevel
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>string</i> isis <i>number</i> overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	configure router <i>string</i> isis <i>number</i> overload-on-boot max-metric <i>boolean</i>
Tree	max-metric
Default	false
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	configure router <i>string</i> isis <i>number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

poi-tlv *boolean*

Synopsis	Purge Originator Identification TLV
Context	configure router <i>string</i> isis <i>number</i> poi-tlv <i>boolean</i>
Tree	poi-tlv
Default	false
Introduced	16.0.R1
Platforms	All

prefix-attributes-tlv *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	configure <i>router string isis number prefix-attributes-tlv boolean</i>
Tree	prefix-attributes-tlv
Default	false
Introduced	16.0.R1
Platforms	All

prefix-limit

Synopsis	Enable the prefix-limit context
Context	configure <i>router string isis number prefix-limit</i>
Tree	prefix-limit
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Maximum number of prefixes for IS-IS instance
Context	configure <i>router string isis number prefix-limit limit number</i>
Tree	limit
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	configure <i>router string isis number prefix-limit log-only boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1

Platforms All

overload-timeout (*number* | *keyword*)

Synopsis Time router remains in overload after prefix limit is exceeded before restarting

Context **configure** *router string isis number prefix-limit overload-timeout* (*number* | *keyword*)

Tree [overload-timeout](#)

Range 1 to 1800

Default forever

Units seconds

Options forever

Introduced 16.0.R1

Platforms All

warning-threshold *number*

Synopsis Threshold value to trigger a warning message to be sent

Context **configure** *router string isis number prefix-limit warning-threshold number*

Tree [warning-threshold](#)

Range 0 to 100

Default 0

Units percent

Introduced 16.0.R1

Platforms All

psnp-authentication *boolean*

Synopsis Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type

Context **configure** *router string isis number psnp-authentication boolean*

Tree [psnp-authentication](#)

Default true

Introduced 16.0.R1

Platforms All

reference-bandwidth *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	configure router <i>string</i> isis <i>number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router <i>string</i> isis <i>number</i> rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure router <i>string</i> isis <i>number</i> rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	configure router <i>string</i> isis <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>string</i>
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	16.0.R1
Platforms	All

tag number

Synopsis	Tag value that is used to match IS-IS routes
Context	configure router string isis number rib-priority high tag number
Tree	tag
Range	1 to 4294967295
Notes	The following elements are part of a choice: prefix-list or tag .
Introduced	16.0.R1
Platforms	All

router-id string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	configure router string isis number router-id string
Tree	router-id
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router string isis number segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

adj-sid-hold (*number | keyword*)

Synopsis	Adjacency SID hold time
Context	configure router string isis number segment-routing adj-sid-hold (<i>number keyword</i>)
Tree	adj-sid-hold

Description	<p>This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.</p> <p>When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.</p> <ul style="list-style-type: none"> • IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV. • The adjacency SID hold timer starts. • The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges. • If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value. • If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value. • A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.
Range	1 to 1800
Default	15
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

adjacency-set [*id*] *number*

Synopsis	Enter the adjacency-set list instance
Context	configure <i>router string isis number segment-routing adjacency-set number</i>
Tree	<i>adjacency-set</i>
Introduced	16.0.R1

Platforms All

[id] *number*

Synopsis Identifier for specified adjacency set

Context **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number*

Tree **adjacency-set**

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

advertise *boolean*

Synopsis Advertise the adjacency set when all links terminate on the same neighboring node

Context **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number* **advertise** *boolean*

Tree **advertise**

Default true

Introduced 16.0.R1

Platforms All

family *keyword*

Synopsis Address family for the adjacency set

Context **configure** **router** *string* **isis** *number* **segment-routing** **adjacency-set** *number* **family** *keyword*

Tree **family**

Default ipv4

Options ipv4, ipv6

Introduced 16.0.R1

Platforms All

parallel *boolean*

Synopsis Require all members of the adjacency set to terminate on the same neighboring node

Context	configure <i>router string isis number segment-routing adjacency-set number parallel boolean</i>
Tree	parallel
Default	true
Introduced	16.0.R1
Platforms	All

sid

Synopsis	Enable the sid context
Context	configure <i>router string isis number segment-routing adjacency-set number sid</i>
Tree	sid
Introduced	16.0.R1
Platforms	All

label number

Synopsis	
Context	configure <i>router string isis number segment-routing adjacency-set number sid label number</i>
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure <i>router string isis number segment-routing adjacency-sid</i>
Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
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Context	configure router string isis number segment-routing adjacency-sid allocate-dual-sids boolean
Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of segment routing
Context	configure router string isis number segment-routing admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

class-forwarding boolean

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context	configure router string isis number segment-routing class-forwarding boolean
Tree	class-forwarding
Description	<p>When configured to true, this command enables Class-Based Forwarding (CBF) with ECMP for SR-ISIS resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to false, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.2.R1
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
Context	configure router string isis number segment-routing egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure router string isis number segment-routing egress-statistics adj-set <i>boolean</i>
Tree	adj-set
Description	When configured to true , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router string isis number segment-routing egress-statistics adj-sid <i>boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string</i> isis <i>number</i> segment-routing egress-statistics node-sid <i>boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	configure router <i>string</i> isis <i>number</i> segment-routing entropy-label <i>boolean</i>
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

export-tunnel-table *keyword*

Synopsis	Tunnel table export policies to export tunneled routes
Context	configure router <i>string</i> isis <i>number</i> segment-routing export-tunnel-table <i>keyword</i>
Tree	export-tunnel-table
Options	ldp
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure router <i>string</i> isis <i>number</i> segment-routing ingress-statistics
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure router <i>string</i> <i>isis</i> <i>number</i> segment-routing ingress-statistics adj-set <i>boolean</i>
Tree	adj-set
Description	When configured to true , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router <i>string</i> <i>isis</i> <i>number</i> segment-routing ingress-statistics adj-sid <i>boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string</i> <i>isis</i> <i>number</i> segment-routing ingress-statistics node-sid <i>boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

mapping-server

Synopsis	Enter the mapping-server context
Context	configure router <i>string</i> isis <i>number</i> segment-routing mapping-server
Tree	mapping-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IS-IS mapping server
Context	configure router <i>string</i> isis <i>number</i> segment-routing mapping-server admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

node-sid-map [[sid-index](#)] *number*

Synopsis	Enter the node-sid-map list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Introduced	16.0.R1
Platforms	All

[[sid-index](#)] *number*

Synopsis	SID index of a mapping server Prefix-SID
Context	configure router <i>string</i> isis <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

clear-n-flag *boolean*

Synopsis Clear the node-sid flag (N-flag)

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) [number](#) **clear-n-flag** *boolean*

Tree [clear-n-flag](#)

Default false

Introduced 16.0.R1

Platforms All

ip-prefix *string*

Synopsis Prefix of a mapping server Prefix-SID

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) [number](#) **ip-prefix** *string*

Tree [ip-prefix](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

level-capability *keyword*

Synopsis Flags to assign in SID Label Binding TLV advertised by Segment Routing Mapping Server

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [mapping-server](#) [node-sid-map](#) [number](#) **level-capability** *keyword*

Tree [level-capability](#)

Default 1/2

Options 1, 2, 1/2

Introduced 16.0.R1

Platforms All

range *number*

Synopsis	Range of addresses and their associated prefix SIDs
Context	configure router string isis number segment-routing mapping-server node-sid-map number range number
Tree	range
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

set-flags

Synopsis	Enter the set-flags context
Context	configure router string isis number segment-routing mapping-server node-sid-map number set-flags
Tree	set-flags
Introduced	16.0.R1
Platforms	All

bit-s *boolean*

Synopsis	SID Label Binding TLV to be flooded across the entire routing domain
Context	configure router string isis number segment-routing mapping-server node-sid-map number set-flags bit-s boolean
Tree	bit-s
Default	false
Introduced	16.0.R1
Platforms	All

maximum-sid-depth

Synopsis	Enter the maximum-sid-depth context
Context	configure router string isis number segment-routing maximum-sid-depth
Tree	maximum-sid-depth
Introduced	20.2.R1
Platforms	All

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	configure <i>router string isis number segment-routing maximum-sid-depth override-bmi number</i>
Tree	override-bmi
Description	<p>This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.</p> <p>When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.</p>
Range	0 to 12
Introduced	20.2.R1
Platforms	All

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
Context	configure <i>router string isis number segment-routing maximum-sid-depth override-erld number</i>
Tree	override-erld
Description	<p>This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.</p> <p>When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.</p>
Range	0 to 15
Introduced	20.2.R1
Platforms	All

micro-loop-avoidance

Synopsis	Enable the micro-loop-avoidance context
Context	configure <i>router string isis number segment-routing micro-loop-avoidance</i>
Tree	micro-loop-avoidance
Introduced	19.10.R1

Platforms All

fib-delay *number*

Synopsis FIB delay before programming new primary next-hops

Context **configure** *router string isis number segment-routing micro-loop-avoidance fib-delay number*

Tree [fib-delay](#)

Description This command specifies the delay time before programming the new next-hops for the SR tunnel.

Range 1 to 300

Default 15

Units deciseconds

Introduced 19.10.R1

Platforms All

prefix-sid-range

Synopsis Enable the **prefix-sid-range** context

Context **configure** *router string isis number segment-routing prefix-sid-range*

Tree [prefix-sid-range](#)

Introduced 16.0.R1

Platforms All

global

Synopsis BGP global SR range allocation

Context **configure** *router string isis number segment-routing prefix-sid-range global*

Tree [global](#)

Description When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the **configure router mpls-labels sr-labels** context.

Notes The following elements are part of a choice: **global** or (**max-index** and **start-label**).

Introduced 16.0.R1

Platforms All

max-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	configure router string isis number segment-routing prefix-sid-range max-index <i>number</i>
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

start-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	configure router string isis number segment-routing prefix-sid-range start-label <i>number</i>
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

srlb *reference*

Synopsis	Segment routing local block
Context	configure router string isis number segment-routing srlb <i>reference</i>
Tree	srlb
Reference	configure router string mpls-labels reserved-label-block <i>string</i>
Introduced	16.0.R1

Platforms All

tunnel-mtu *number*

Synopsis Tunnel MTU size

Context **configure** *router string isis number segment-routing tunnel-mtu number*

Tree [tunnel-mtu](#)

Range 512 to 9786

Introduced 16.0.R1

Platforms All

tunnel-table-pref *number*

Synopsis Preference of SR tunnels created by the IGP instance

Context **configure** *router string isis number segment-routing tunnel-table-pref number*

Tree [tunnel-table-pref](#)

Description This command configures the TTM preference of SR tunnels created by the IGP instance. This is used in the case of BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the new tunnel binding commands are configured to the **any** value which parses the TTM for tunnels in the protocol preference order. The user can choose to either go with the global TTM preference or list explicitly the tunnel types they want to use. When they list the tunnel types explicitly, the TTM preference will still be used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected one fails. Also, a reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to TTM a SR tunnel entry for each resolved remote node SID prefix and programs the data path with the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the setting of the default preference of the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as **SR-ISIS** and **SR-OSPF**).

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9
- ROUTE_PREF_OSPF_TTM 10
- ROUTE_PREF_ISIS_TTM 11
- ROUTE_PREF_BGP_TTM 12

- `ROUTE_PREF_GRE 255`

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on lowest IGP instance-id.

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	11
Introduced	16.0.R1
Platforms	All

segment-routing-v6

Synopsis	Enter the segment-routing-v6 context
Context	configure <i>router string isis number</i> segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	configure <i>router string isis number</i> segment-routing-v6 adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold

Description This command specifies the length of time the system holds the SRv6 adjacency route and tunnel entries programmed in datapath while the adjacency is down.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its SRv6 End.X SID sub-TLV
- The adjacency SID hold timer starts.
- The route table, FIB, and tunnel table entries are kept for as long as the adjacency SID hold timer is running. This allows packets to flow over the LFA backup path, if the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of a SRv6 policy after IGP converges.

- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change when a new LFA SPF is run while the adjacency SID hold timer is running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the SID value returned into the locator subnet where it was drawn from. Users of the adjacency (for example, SRv6 policy) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static SID value or a new dynamic SID value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by tunnel of the local adjacency SID and of all remote locator routes that resolve to a next hop over this adjacency.

Each IS-IS instance runs a single timer per adjacency that IPv4 SR-MPLS, IPv6 SR-MPLS, and SRv6 adjacency SIDs share. When you enable both SR-MPLS (**configure router isis segment-routing**) and SRv6 (**configure router isis segment-routing-v6**) in the IS-IS instance, the system programs the higher of the two timer values for all SIDs on the adjacency.

Range	1 to 1800
Default	15
Units	seconds
Options	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of segment routing SRv6
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [**locator-name**] *reference*

Synopsis	Enter the locator list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i>

Tree	locator
Description	This command adds a reference to a locator for each algorithm in this IS-IS instance. The same algorithm locator can be shared with other IGP instances and BGP instances in IP-VPN or EVPN.
Max. Instances	8
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] reference

Synopsis	Locator name
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i>
Tree	locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level [level-number] keyword

Synopsis	Enter the level list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[level-number] keyword

Synopsis	ISIS protocol level number
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> level <i>keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

metric number

Synopsis	IS-IS metric to advertise in the locator level list
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> level <i>keyword</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability keyword

Synopsis	IS-IS routing level capability
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> level-capability <i>keyword</i>
Tree	level-capability
Description	This command configures the routing level capability for an instance of the IS-IS routing process. The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Default	1/2
Options	1, 2, 1/2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

multi-topology

Synopsis	Enter the multi-topology context
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 locator <i>reference</i> multi-topology
Tree	multi-topology
Description	Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.

Use the **configure router isis segment-routing-v6 admin-state** command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the **configure router isis ipv6-routing** command to **native**, the **configure router isis multi-topology ipv6-unicast** command to **true**, or both.

Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt0 *boolean*

Synopsis Support standard topology (MT0)
 Context **configure router string isis number segment-routing-v6 locator reference multi-topology mt0 boolean**
 Tree [mt0](#)
 Default true
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt2 *boolean*

Synopsis Support IPv6 routing topology (MT2)
 Context **configure router string isis number segment-routing-v6 locator reference multi-topology mt2 boolean**
 Tree [mt2](#)
 Default false
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

tag *number*

Synopsis Route tag to advertise in the locator
 Context **configure router string isis number segment-routing-v6 locator reference tag number**
 Tree [tag](#)
 Range 1 to 4294967295
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *reference*

Synopsis	Enter the micro-segment-locator list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level [[level-number](#)] *keyword*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator <i>reference</i> level <i>keyword</i>
Tree	level
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[level-number] *keyword*

Synopsis	ISIS protocol level number
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Context	configure <i>router string isis number segment-routing-v6 micro-segment-locator reference level keyword</i>
Tree	level
Options	1, 2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

metric number

Synopsis	IS-IS metric to advertise in the locator level list
Context	configure <i>router string isis number segment-routing-v6 micro-segment-locator reference level keyword metric number</i>
Tree	metric
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability keyword

Synopsis	IS-IS routing level capability
Context	configure <i>router string isis number segment-routing-v6 micro-segment-locator reference level-capability keyword</i>
Tree	level-capability
Description	This command configures the routing level capability for an instance of the IS-IS routing process. The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Default	1/2
Options	1, 2, 1/2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

multi-topology

Synopsis	Enter the multi-topology context
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Context	configure router string isis number segment-routing-v6 micro-segment-locator reference multi-topology
Tree	multi-topology
Description	<p>Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.</p> <p>Use the configure router isis segment-routing-v6 admin-state command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the configure router isis ipv6-routing command to native, the configure router isis multi-topology ipv6-unicast command to true, or both.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt0 boolean

Synopsis	Support standard topology (MT0)
Context	configure router string isis number segment-routing-v6 micro-segment-locator reference multi-topology mt0 boolean
Tree	mt0
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

mt2 boolean

Synopsis	Support IPv6 routing topology (MT2)
Context	configure router string isis number segment-routing-v6 micro-segment-locator reference multi-topology mt2 boolean
Tree	mt2
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

tag number

Synopsis	Route tag to advertise in the locator
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Context	configure router <i>string</i> isis <i>number</i> segment-routing-v6 micro-segment-locator reference tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

standard-multi-instance *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	configure router <i>string</i> isis <i>number</i> standard-multi-instance <i>boolean</i>
Tree	standard-multi-instance
Default	false
Introduced	16.0.R1
Platforms	All

strict-adjacency-check *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	configure router <i>string</i> isis <i>number</i> strict-adjacency-check <i>boolean</i>
Tree	strict-adjacency-check
Default	false
Introduced	16.0.R1
Platforms	All

summary-address [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the summary-address list instance
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the summary address
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Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	summary-address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

algorithm *number*

Synopsis	Algorithm topology for the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) algorithm <i>number</i>
Tree	algorithm
Range	0 128 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

level-capability *keyword*

Synopsis	IS-IS level for the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) level-capability <i>keyword</i>
Tree	level-capability
Default	1/2
Options	1, 2, 1/2
Introduced	16.0.R1
Platforms	All

route-tag *number*

Synopsis	Route tag assigned to the summary address
Context	configure router <i>string</i> isis <i>number</i> summary-address (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-tag <i>number</i>
Tree	route-tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

suppress-attached-bit *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	configure <i>router string isis number suppress-attached-bit boolean</i>
Tree	suppress-attached-bit
Default	false
Introduced	16.0.R1
Platforms	All

system-id *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	System ID
Context	configure <i>router string isis number system-id string</i>
Tree	system-id
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure <i>router string isis number timers</i>
Tree	timers
Introduced	16.0.R1
Platforms	All

Isp-wait

Synopsis	Enter the Isp-wait context
Context	configure router <i>string</i> isis <i>number</i> timers Isp-wait
Tree	Isp-wait
Introduced	16.0.R1
Platforms	All

Isp-initial-wait *number*

Synopsis	Initial LSP generation delay
Context	configure router <i>string</i> isis <i>number</i> timers Isp-wait Isp-initial-wait <i>number</i>
Tree	Isp-initial-wait
Range	10 to 100000
Default	10
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isp-max-wait *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	configure router <i>string</i> isis <i>number</i> timers Isp-wait Isp-max-wait <i>number</i>
Tree	Isp-max-wait
Range	10 to 120000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isp-second-wait *number*

Synopsis	Delay between first and second LSP generation
Context	configure router <i>string</i> isis <i>number</i> timers Isp-wait Isp-second-wait <i>number</i>
Tree	Isp-second-wait
Range	10 to 100000

Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	configure router <i>string</i> isis <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

traffic-engineering *boolean*

Synopsis	Enable traffic engineering for the router
Context	configure router <i>string</i> isis <i>number</i> traffic-engineering <i>boolean</i>
Tree	traffic-engineering
Default	false
Introduced	16.0.R1
Platforms	All

traffic-engineering-options

Synopsis	Enter the traffic-engineering-options context
Context	configure router <i>string</i> isis <i>number</i> traffic-engineering-options
Tree	traffic-engineering-options
Introduced	19.10.R1
Platforms	All

advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	configure router <i>string</i> isis <i>number</i> traffic-engineering-options advertise-delay <i>boolean</i>
Tree	advertise-delay
Description	When configured to true , the router advertises link delay in the IGP LSDB within legacy Traffic Engineering (TE) attributes in IS-IS or within the Application-Specific Link Attribute (ASLA) when ASLA is enabled for SR-TE or RSVP-TE applications.

When the **application-link-attributes legacy** command is configured for SR-TE or RSVP-TE, link delay is advertised as a legacy TE TLV with the ASLA legacy bit set.

When configured to **false**, the router disables link delay advertisement.

Default	false
Introduced	22.10.R1
Platforms	All

application-link-attributes

Synopsis	Enable the application-link-attributes context
Context	configure router string isis number traffic-engineering-options application-link-attributes
Tree	application-link-attributes
Introduced	19.10.R1
Platforms	All

legacy *boolean*

Synopsis	Advertise legacy TE attributes
Context	configure router string isis number traffic-engineering-options application-link-attributes legacy <i>boolean</i>
Tree	legacy
Description	When configured to true , the router supports the legacy mode of advertising TE attributes. When configured to false , legacy mode is disabled.
Default	false
Introduced	19.10.R1
Platforms	All

ipv6 *boolean*

Synopsis	Advertise IS-IS IPv6 Traffic Engineering
Context	configure router string isis number traffic-engineering-options ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.10.R1
Platforms	All

unicast-import

Synopsis	Enter the unicast-import context
Context	configure <i>router string isis number unicast-import</i>
Tree	unicast-import
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Submit IPv4 routes into unicast RTM
Context	configure <i>router string isis number unicast-import ipv4 boolean</i>
Tree	ipv4
Default	true
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Submit IPv6 routes into unicast RTM
Context	configure <i>router string isis number unicast-import ipv6 boolean</i>
Tree	ipv6
Default	true
Introduced	16.0.R1
Platforms	All

l2tp

Synopsis	Enter the l2tp context
Context	configure <i>router string l2tp</i>
Tree	l2tp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of L2TP
Context	configure router <i>string</i> l2tp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	Attribute of the Value Pair (AVP) hiding algorithm
Context	configure router <i>string</i> l2tp avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *boolean*

Synopsis	Use challenge-response authentication
Context	configure router <i>string</i> l2tp challenge <i>boolean</i>
Tree	challenge
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure router <i>string</i> l2tp destruct-timeout <i>number</i>
Tree	destruct-timeout
Range	60 to 86400
Default	60
Units	seconds

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis Enter the **ethernet-tunnel** context
Context **configure** [router](#) *string* [l2tp](#) [ethernet-tunnel](#)
Tree [ethernet-tunnel](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number* | *keyword*)

Synopsis Timeout for a session setup retry
Context **configure** [router](#) *string* [l2tp](#) [ethernet-tunnel](#) [reconnect-timeout](#) (*number* | *keyword*)
Tree [reconnect-timeout](#)
Range 10 to 3600
Default infinite
Units seconds
Options infinite
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-avps

Synopsis Enter the **exclude-avps** context
Context **configure** [router](#) *string* [l2tp](#) [exclude-avps](#)
Tree [exclude-avps](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number *boolean*

Synopsis Calling Number AVP to exclude
Context **configure** [router](#) *string* [l2tp](#) [exclude-avps](#) [calling-number](#) *boolean*

Tree	calling-number
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-rx-lcp-conf-req *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	configure router <i>string</i> l2tp exclude-avps initial-rx-lcp-conf-req <i>boolean</i>
Tree	initial-rx-lcp-conf-req
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> l2tp failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-max-session-lifetime *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	configure router <i>string</i> l2tp failover recovery-max-session-lifetime <i>number</i>
Tree	recovery-max-session-lifetime
Range	2 to 4294967295
Default	2
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure router <i>string</i> l2tp failover recovery-method <i>keyword</i>
Tree	recovery-method
Default	mcs
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure router <i>string</i> l2tp failover recovery-time <i>number</i>
Tree	recovery-time
Range	0 to 900
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp [*id*] *reference*

Synopsis	Enter the track-srrp list instance
Context	configure router <i>string</i> l2tp failover track-srrp <i>reference</i>
Tree	track-srrp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	configure router <i>string</i> l2tp failover track-srrp <i>reference</i>
Tree	track-srrp
Reference	configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) sync track-srrp <i>number</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer reference

Synopsis	Multi-chassis peer address
Context	configure router string l2tp failover track-srrp reference peer reference
Tree	peer
Reference	configure redundancy multi-chassis peer (ipv4-address-no-zone ipv6-address-no-zone)
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag string

Synopsis	Synchronization tag on the multi-chassis peer
Context	configure router string l2tp failover track-srrp reference sync-tag string
Tree	sync-tag
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group [tunnel-group-name] string

Synopsis	Enter the group list instance
Context	configure router string l2tp group string
Tree	group
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[tunnel-group-name] string

Synopsis	Tunnel group name
Context	configure router string l2tp group string
Tree	group
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the L2TP tunnel group
Context	configure router string l2tp group string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding keyword

Synopsis	The AVP hiding algorithm
Context	configure router string l2tp group string avp-hiding keyword
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge keyword

Synopsis	Enable use of challenge-response authentication
Context	configure router string l2tp group string challenge keyword
Tree	challenge
Options	false, true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [router](#) *string* [l2tp group](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis Destruction timeout
Context **configure** [router](#) *string* [l2tp group](#) *string* **destruct-timeout** *number*
Tree [destruct-timeout](#)
Range 60 to 86400
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis Enter the **ethernet-tunnel** context
Context **configure** [router](#) *string* [l2tp group](#) *string* **ethernet-tunnel**
Tree [ethernet-tunnel](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number* | *keyword*)

Synopsis Timeout for a session setup retry at group level
Context **configure** [router](#) *string* [l2tp group](#) *string* **ethernet-tunnel** **reconnect-timeout** (*number* | *keyword*)
Tree [reconnect-timeout](#)
Range 10 to 3600

Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure <i>router string l2tp group string failover</i>
Tree	<i>failover</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure <i>router string l2tp group string failover recovery-method keyword</i>
Tree	<i>recovery-method</i>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure <i>router string l2tp group string failover recovery-time number</i>
Tree	<i>recovery-time</i>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis	Hello interval
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Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>group</i> <i>string</i> <i>hello-interval</i> (<i>number</i> <i>keyword</i>)
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>group</i> <i>string</i> <i>idle-timeout</i> (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>group</i> <i>string</i> <i>l2tpv3</i>
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length (*number* | *keyword*)

Synopsis	Cookie field length
Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>group</i> <i>string</i> <i>l2tpv3</i> <i>cookie-length</i> (<i>number</i> <i>keyword</i>)
Tree	cookie-length
Range	4 8
Options	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis Hashing algorithm that calculates the message digest
 Context **configure** *router string l2tp group string l2tpv3 digest-type keyword*
 Tree [digest-type](#)
 Options none, md5, sha1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis Length for the local L2TPv3 nonce (random number)
 Context **configure** *router string l2tp group string l2tpv3 nonce-length number*
 Tree [nonce-length](#)
 Range 0 | 16 to 64
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis L2TPv3 password
 Context **configure** *router string l2tp group string l2tpv3 password string*
 Tree [password](#)
 String Length 1 to 115
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust (*number* | *keyword*)

Synopsis TCP maximum segment size (MSS) on private network
 Context **configure** *router string l2tp group string l2tpv3 private-tcp-mss-adjust (number | keyword)*
 Tree [private-tcp-mss-adjust](#)
 Range 512 to 9000

Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	configure router <i>string</i> l2tp group <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pw-cap-list

Synopsis	Enter the pw-cap-list context
Context	configure router <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list
Tree	pw-cap-list
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	configure router <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list ethernet <i>boolean</i>
Tree	ethernet
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-vlan *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Advertise Ethernet VLAN pseudowire type
 Context **configure** *router string l2tp group string l2tpv3 pw-cap-list ethernet-vlan boolean*
 Tree [ethernet-vlan](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rem-router-id *string*

Synopsis Filter on remote router ID
 Context **configure** *router string l2tp group string l2tpv3 rem-router-id string*
 Tree [rem-router-id](#)
 Default 0.0.0.0
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-password-change *boolean*

Synopsis Enable tracking of password changes
 Context **configure** *router string l2tp group string l2tpv3 track-password-change boolean*
 Tree [track-password-change](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis Enter the **lac** context

Context	configure <i>router string l2tp group string lac</i>
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	configure <i>router string l2tp group string lac df-bit keyword</i>
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins

Synopsis	Enter the Ins context
Context	configure <i>router string l2tp group string Ins</i>
Tree	Ins
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis	ISA LNS group
Context	configure <i>router string l2tp group string Ins Ins-group reference</i>
Tree	Ins-group
Reference	configure <i>isa Ins-group number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	configure <i>router string l2tp group string Ins load-balance-method keyword</i>

Tree	load-balance-method
Default	per-session
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
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Context	configure <i>router string l2tp group string lns mlppp endpoint ip (ipv4-address keyword)</i>
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac (*mac-address | keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure <i>router string l2tp group string lns mlppp endpoint mac (mac-address keyword)</i>
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	configure <i>router string l2tp group string lns mlppp interleave boolean</i>
Tree	interleave
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay (*number | keyword*)

Synopsis	Maximum fragment delay caused by transmission on a link
Context	configure <i>router string l2tp group string lns mlppp max-fragment-delay (number keyword)</i>
Tree	max-fragment-delay
Range	5 to 1000
Default	no-fragmentation

Units	milliseconds
Options	no-fragmentation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis	Maximum MLPPP links
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp max-links <i>number</i>
Tree	max-links
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassemble-timeout *number*

Synopsis	Reassembly timeout
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp reassemble-timeout <i>number</i>
Tree	reassemble-timeout
Range	100 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns mlppp short-sequence-numbers <i>boolean</i>
Tree	short-sequence-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the ppp context
Context	configure router string l2tp group string ins ppp
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	configure router string l2tp group string ins ppp authentication <i>keyword</i>
Tree	authentication
Default	pref-chap
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	configure router string l2tp group string ins ppp authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the chap-challenge-length context
Context	configure router string l2tp group string ins ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis	Upper bound of the PPP CHAP challenge length
Context	configure <i>router string l2tp group string lns ppp chap-challenge-length end number</i>
Tree	end
Range	8 to 64
Default	64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis	Lower bound of the PPP CHAP challenge length
Context	configure <i>router string l2tp group string lns ppp chap-challenge-length start number</i>
Tree	start
Range	8 to 64
Default	32
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis	Enter the default-group-interface context
Context	configure <i>router string l2tp group string lns ppp default-group-interface</i>
Tree	default-group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface string

Synopsis	Group interface
Context	configure <i>router string l2tp group string lns ppp default-group-interface interface string</i>
Tree	interface

String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis Administrative service name
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp default-group-interface](#) *service-name* *string*
 Tree [service-name](#)
 String Length 1 to 64
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *boolean*

Synopsis Allow IPCP subnet negotiation for PPPoE hosts
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp ipcp-subnet-negotiation](#) *boolean*
 Tree [ipcp-subnet-negotiation](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis Enter the **keepalive** context
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp keepalive](#)
 Tree [keepalive](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis PPP keepalive interval
 Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp keepalive interval](#) *number*
 Tree [interval](#)

Range	10 to 300
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	configure router string l2tp group string lns ppp keepalive multiplier <i>number</i>
Tree	multiplier
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	configure router string l2tp group string lns ppp lcp-force-ack-accm <i>boolean</i>
Tree	lcp-force-ack-accm
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	configure router string l2tp group string lns ppp lcp-ignore-magic-numbers <i>boolean</i>
Tree	lcp-ignore-magic-numbers
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis	Maximum PPP MTU size
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp mtu <i>number</i>
Tree	mtu
Range	512 to 9212
Default	1500
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication boolean

Synopsis	Use authentication AVPs that are received from LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp proxy-authentication <i>boolean</i>
Tree	proxy-authentication
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp boolean

Synopsis	Proxy LCP AVPs that are received from LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp proxy-lcp <i>boolean</i>
Tree	proxy-lcp
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp boolean

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> lns ppp reject-disabled-ncp <i>boolean</i>
Tree	reject-disabled-ncp
Default	false
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db string

Synopsis Local user database for PPP PAP and CHAP authentication
Context **configure** [router string](#) [l2tp group string](#) [lns ppp user-db string](#)
Tree [user-db](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address string

Synopsis Local address
Context **configure** [router string](#) [l2tp group string](#) [local-address string](#)
Tree [local-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name string

Synopsis Local host name used to distinguish tunnels
Context **configure** [router string](#) [l2tp group string](#) [local-name string](#)
Tree [local-name](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab number

Synopsis Maximum retries for established tunnels
Context **configure** [router string](#) [l2tp group string](#) [max-retries-estab number](#)
Tree [max-retries-estab](#)
Range 2 to 7
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
 Context **configure** *router string l2tp group string max-retries-not-estab number*
 Tree [max-retries-not-estab](#)
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS
 Context **configure** *router string l2tp group string password string*
 Tree [password](#)
 String Length 1 to 115
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

protocol *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Protocol version
 Context **configure** *router string l2tp group string protocol keyword*
 Tree [protocol](#)
 Default v2
 Options v2, v3, v3draft
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	configure router <i>string</i> l2tp group <i>string</i> radius-accounting-policy <i>reference</i>
Tree	radius-accounting-policy
Reference	configure aaa radius l2tp-accounting-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	configure router <i>string</i> l2tp group <i>string</i> receive-window-size <i>number</i>
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	configure router <i>string</i> l2tp group <i>string</i> session-assign-method <i>keyword</i>
Tree	session-assign-method
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit (*number* | *keyword*)

Synopsis	Session limit
Context	configure router <i>string</i> l2tp group <i>string</i> session-limit (<i>number</i> <i>keyword</i>)
Tree	session-limit
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel [*tunnel-name*] *string*

Synopsis	Enter the tunnel list instance
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i>
Tree	tunnel
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[tunnel-name] *string*

Synopsis	Tunnel name
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i>
Tree	tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> auto-establish <i>boolean</i>
Tree	auto-establish

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avp-hiding *keyword*

Synopsis	The AVP hiding algorithm
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> avp-hiding <i>keyword</i>
Tree	avp-hiding
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

challenge *keyword*

Synopsis	Enable use of challenge-response authentication
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> challenge <i>keyword</i>
Tree	challenge
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destruct-timeout *number*

Synopsis	Destruction timeout
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> destruct-timeout <i>number</i>

Tree	destruct-timeout
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis	Enter the failover context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover
Tree	failover
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover recovery-method <i>keyword</i>
Tree	recovery-method
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover recovery-time <i>number</i>
Tree	recovery-time
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis	Hello interval
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> hello-interval (<i>number</i> <i>keyword</i>)
Tree	hello-interval
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2tpv3

Synopsis	Enter the I2tpv3 context
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> I2tpv3
Tree	I2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	configure router <i>string</i> I2tp group <i>string</i> tunnel <i>string</i> I2tpv3 private-tcp-mss-adjust (<i>number</i> <i>keyword</i>)
Tree	private-tcp-mss-adjust

Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust (*number | keyword*)

Synopsis	TCP maximum segment size (MSS) on public network
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number keyword</i>)
Tree	public-tcp-mss-adjust
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the lac context
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lac
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	configure router <i>string</i> l2tp <i>group</i> <i>string</i> tunnel <i>string</i> lac df-bit <i>keyword</i>
Tree	df-bit
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

Ins

Synopsis	Enter the Ins context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins
Tree	Ins
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis	ISA LNS group
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins Ins-group <i>reference</i>
Tree	Ins-group
Reference	configure isa Ins-group <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins load-balance-method <i>keyword</i>
Tree	load-balance-method
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis	Enter the mlppp context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> Ins mlppp
Tree	mlppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

endpoint

Synopsis	Enter the endpoint context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint
Tree	endpoint
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>)
Tree	ip
Options	system
Notes	The following elements are part of a choice: ip or mac .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

mac (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>)
Tree	mac
Options	system
Notes	The following elements are part of a choice: ip or mac .

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

interleave *keyword*

Synopsis Use of Link fragmentation and interleaving
 Context **configure** *router string l2tp group string tunnel string lns mlppp interleave keyword*
 Tree [interleave](#)
 Options false, true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-fragment-delay *number*

Synopsis Maximum fragment delay caused by transmission on a link
 Context **configure** *router string l2tp group string tunnel string lns mlppp max-fragment-delay number*
 Tree [max-fragment-delay](#)
 Range 5 to 1000
 Units milliseconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

max-links *number*

Synopsis Maximum MLPPP links
 Context **configure** *router string l2tp group string tunnel string lns mlppp max-links number*
 Tree [max-links](#)
 Range 1 to 8
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

reassembly-timeout *number*

Synopsis Reassembly timeout

Context	configure <i>router string l2tp group string tunnel string lns mlppp reassembly-timeout number</i>
Tree	reassembly-timeout
Range	100 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

short-sequence-numbers *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	configure <i>router string l2tp group string tunnel string lns mlppp short-sequence-numbers keyword</i>
Tree	short-sequence-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

ppp

Synopsis	Enter the ppp context
Context	configure <i>router string l2tp group string tunnel string lns ppp</i>
Tree	ppp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	configure <i>router string l2tp group string tunnel string lns ppp authentication keyword</i>
Tree	authentication
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp authentication-policy <i>string</i>
Tree	authentication-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

chap-challenge-length

Synopsis	Enter the chap-challenge-length context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length
Tree	chap-challenge-length
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length end <i>number</i>
Tree	end
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length start <i>number</i>
Tree	start
Range	8 to 64
Units	octets

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-group-interface

Synopsis Enter the **default-group-interface** context
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#)
 Tree [default-group-interface](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *string*

Synopsis Group interface
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#) [interface](#) *string*
 Tree [interface](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service-name *string*

Synopsis Administrative service name
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#) [service-name](#) *string*
 Tree [service-name](#)
 String Length 1 to 64
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipcp-subnet-negotiation *keyword*

Synopsis Use of IPCP subnet negotiation for PPPoE hosts
 Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [ipcp-subnet-negotiation](#) *keyword*

Tree	ipcp-subnet-negotiation
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis	PPP keepalive interval
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp keepalive <i>interval</i> <i>number</i>
Tree	interval
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis	PPP keepalive multiplier
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp keepalive <i>multiplier</i> <i>number</i>
Tree	multiplier
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp lcp-force-ack-accm <i>keyword</i>
Tree	lcp-force-ack-accm
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp lcp-ignore-magic-numbers <i>keyword</i>
Tree	lcp-ignore-magic-numbers
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis	Maximum PPP MTU size
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp mtu <i>number</i>
Tree	mtu
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-authentication *keyword*

Synopsis	Authentication AVPs that are received from LAC
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp proxy-authentication <i>keyword</i>

Tree	proxy-authentication
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

proxy-lcp *keyword*

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp proxy-lcp <i>keyword</i>
Tree	proxy-lcp
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *keyword*

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp reject-disabled-ncp <i>keyword</i>
Tree	reject-disabled-ncp
Options	false, true
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> ins ppp user-db <i>string</i>
Tree	user-db
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
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Context **configure router** *string* **l2tp group** *string* **tunnel** *string* **local-address** *string*
 Tree **local-address**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis Local host name used to distinguish tunnels
 Context **configure router** *string* **l2tp group** *string* **tunnel** *string* **local-name** *string*
 Tree **local-name**
 String Length 1 to 64
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis Maximum retries for established tunnels
 Context **configure router** *string* **l2tp group** *string* **tunnel** *string* **max-retries-estab** *number*
 Tree **max-retries-estab**
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
 Context **configure router** *string* **l2tp group** *string* **tunnel** *string* **max-retries-not-estab** *number*
 Tree **max-retries-not-estab**
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS

Context	configure <i>router string l2tp group string tunnel string password string</i>
Tree	password
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer string

Synopsis	Peer address
Context	configure <i>router string l2tp group string tunnel string peer string</i>
Tree	peer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference number

Synopsis	Tunnel preference number with its group
Context	configure <i>router string l2tp group string tunnel string preference number</i>
Tree	preference
Range	0 to 16777215
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy reference

Synopsis	RADIUS accounting policy
Context	configure <i>router string l2tp group string tunnel string radius-accounting-policy reference</i>
Tree	radius-accounting-policy
Reference	configure <i>aaa radius l2tp-accounting-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis	L2TP receive window size
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> receive-window-size <i>number</i>
Tree	receive-window-size
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-name *string*

Synopsis	Remote tunnel host name
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> remote-name <i>string</i>
Tree	remote-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit (*number* | *keyword*)

Synopsis	L2TP session limit for each tunnel of this router
Context	configure router <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> session-limit (<i>number</i> <i>keyword</i>)
Tree	session-limit
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-session-limit *number*

Synopsis	L2TP session limit for each group of this router
Context	configure router <i>string</i> l2tp group-session-limit <i>number</i>
Tree	group-session-limit
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hello-interval (*number* | *keyword*)

Synopsis	Hello interval
Context	configure router <i>string</i> l2tp hello-interval (<i>number</i> <i>keyword</i>)
Tree	hello-interval
Range	10 to 3600
Default	300
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

idle-timeout (*number* | *keyword*)

Synopsis	Idle timeout
Context	configure router <i>string</i> l2tp idle-timeout (<i>number</i> <i>keyword</i>)
Tree	idle-timeout
Range	0 to 3600
Default	infinite
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-avps

Synopsis	Enter the ignore-avps context
Context	configure router <i>string</i> l2tp ignore-avps
Tree	ignore-avps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sequencing-required *boolean*

Synopsis	Ignore Sequencing Required AVP
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Context	configure <i>router</i> <i>string</i> <i>l2tp ignore-avps sequencing-required</i> <i>boolean</i>
Tree	sequencing-required
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

l2tpv3

Synopsis	Enter the l2tpv3 context
Context	configure <i>router</i> <i>string</i> <i>l2tp l2tpv3</i>
Tree	l2tpv3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cookie-length *number*

Synopsis	Cookie field length
Context	configure <i>router</i> <i>string</i> <i>l2tp l2tpv3 cookie-length</i> <i>number</i>
Tree	cookie-length
Range	4 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

digest-type *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	configure <i>router</i> <i>string</i> <i>l2tp l2tpv3 digest-type</i> <i>keyword</i>
Tree	digest-type
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nonce-length *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
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Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>l2tpv3</i> <i>nonce-length</i> <i>number</i>
Tree	<i>nonce-length</i>
Range	0 16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis	L2TPv3 password
Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>l2tpv3</i> <i>password</i> <i>string</i>
Tree	<i>password</i>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>l2tpv3</i> <i>private-tcp-mss-adjust</i> <i>number</i>
Tree	<i>private-tcp-mss-adjust</i>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

public-tcp-mss-adjust *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	configure <i>router</i> <i>string</i> <i>l2tp</i> <i>l2tpv3</i> <i>public-tcp-mss-adjust</i> <i>number</i>
Tree	<i>public-tcp-mss-adjust</i>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transport-type

Synopsis	Enter the transport-type context
Context	configure <i>router string l2tp l2tpv3 transport-type</i>
Tree	transport-type
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel
Context	configure <i>router string l2tp l2tpv3 transport-type ip boolean</i>
Tree	ip
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis	Enter the lac context
Context	configure <i>router string l2tp lac</i>
Tree	lac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-number-format *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	configure <i>router string l2tp lac calling-number-format string</i>
Tree	calling-number-format
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cisco-nas-port

Synopsis	Enter the cisco-nas-port context
Context	configure router string l2tp lac cisco-nas-port
Tree	cisco-nas-port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet *string*

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context	configure router string l2tp lac cisco-nas-port ethernet string
Tree	ethernet
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *boolean*

Synopsis	Send all L2TP packets with DF bit set to 1
Context	configure router string l2tp lac df-bit boolean
Tree	df-bit
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis	Local address
Context	configure router string l2tp local-address string
Tree	local-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis	Local host name
Context	configure router <i>string</i> l2tp local-name <i>string</i>
Tree	local-name
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis	Maximum retries for established tunnels
Context	configure router <i>string</i> l2tp max-retries-estab <i>number</i>
Tree	max-retries-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis	Maximum retries for unestablished tunnels
Context	configure router <i>string</i> l2tp max-retries-not-estab <i>number</i>
Tree	max-retries-not-estab
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

next-attempt *keyword*

Synopsis	Tunnel that is selected when previous session setup failed
Context	configure router <i>string</i> l2tp next-attempt <i>keyword</i>
Tree	next-attempt
Default	next-preference-level
Options	same-preference-level, next-preference-level

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis L2TP password
Context **configure** [router](#) *string* [l2tp](#) **password** *string*
Tree [password](#)
String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-address-change-policy *keyword*

Synopsis Reaction for L2TP response from a different address
Context **configure** [router](#) *string* [l2tp](#) **peer-address-change-policy** *keyword*
Tree [peer-address-change-policy](#)
Default reject
Options accept, ignore, reject
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis RADIUS accounting policy
Context **configure** [router](#) *string* [l2tp](#) **radius-accounting-policy** *reference*
Tree [radius-accounting-policy](#)
Reference **configure** [aaa](#) **radius** [l2tp-accounting-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis L2TP receive window size
Context **configure** [router](#) *string* [l2tp](#) **receive-window-size** *number*

Tree	receive-window-size
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replace-result-code

Synopsis	Enter the replace-result-code context
Context	configure router <i>string</i> l2tp replace-result-code
Tree	replace-result-code
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis	Replace result code with general error code
Context	configure router <i>string</i> l2tp replace-result-code cdn-invalid-dst <i>boolean</i>
Tree	cdn-invalid-dst
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis	Replace result code with general error
Context	configure router <i>string</i> l2tp replace-result-code cdn-permanent-no-facilities <i>boolean</i>
Tree	cdn-permanent-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis	Replace result code with general error
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Context	configure router <i>string</i> l2tp replace-result-code cdn-temporary-no-facilities <i>boolean</i>
Tree	cdn-temporary-no-facilities
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rtm-debounce-time (*number* | *keyword*)

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	configure router <i>string</i> l2tp rtm-debounce-time (<i>number</i> <i>keyword</i>)
Tree	rtm-debounce-time
Range	0 to 5000
Default	infinite
Units	milliseconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-assign-method *keyword*

Synopsis	Session assignment method
Context	configure router <i>string</i> l2tp session-assign-method <i>keyword</i>
Tree	session-assign-method
Default	existing-first
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis	L2TP session limit of this router
Context	configure router <i>string</i> l2tp session-limit <i>number</i>
Tree	session-limit
Range	1 to 250000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-selection-blacklist

Synopsis Enter the **tunnel-selection-blacklist** context

Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#)

Tree [tunnel-selection-blacklist](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

add-tunnel-on

Synopsis Enter the **add-tunnel-on** context

Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#)

Tree [add-tunnel-on](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-change-timeout *boolean*

Synopsis Enable a timed-out tunnel to be forced to the denylist

Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [address-change-timeout](#) *boolean*

Tree [address-change-timeout](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-err-code *boolean*

Synopsis Add to deny if CDN is received with code: General error

Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [cdn-err-code](#) *boolean*

Tree [cdn-err-code](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-invalid-dst *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 6

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **cdn-invalid-dst** *boolean*

Tree [cdn-invalid-dst](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-permanent-no-facilities *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 5

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **cdn-permanent-no-facilities** *boolean*

Tree [cdn-permanent-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cdn-temporary-no-facilities *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 4

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **cdn-temporary-no-facilities** *boolean*

Tree [cdn-temporary-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-err-code *boolean*

Synopsis Add to denylist if received with general error code

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **stop-ccn-err-code** *boolean*

Tree	stop-ccn-err-code
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop-ccn-other *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other <i>boolean</i>
Tree	stop-ccn-other
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-cdn-not-established-in-time *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time <i>boolean</i>
Tree	tx-cdn-not-established-in-time
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-list-length (*number* | *keyword*)

Synopsis	Number of tunnels or peers in the denylist
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist max-list-length (<i>number</i> <i>keyword</i>)
Tree	max-list-length
Range	1 to 65535
Default	infinite
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-time *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist max-time <i>number</i>
Tree	max-time
Range	1 to 60
Default	5
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout-action *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	configure router <i>string</i> l2tp tunnel-selection-blacklist timeout-action <i>keyword</i>
Tree	timeout-action
Default	remove-from-blacklist
Options	remove-from-blacklist, try-one-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tunnel-session-limit *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	configure router <i>string</i> l2tp tunnel-session-limit <i>number</i>
Tree	tunnel-session-limit
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ldp

Synopsis	Enable the ldp context
Context	configure router <i>string</i> ldp
Tree	ldp

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LDP
Context	configure router <i>string</i> ldp admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

aggregate-prefix-match

Synopsis	Enable the aggregate-prefix-match context
Context	configure router <i>string</i> ldp aggregate-prefix-match
Tree	aggregate-prefix-match
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP aggregate prefix match
Context	configure router <i>string</i> ldp aggregate-prefix-match admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

prefix-exclude *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	configure router <i>string</i> ldp aggregate-prefix-match prefix-exclude <i>reference</i>

Tree	prefix-exclude
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

class-forwarding *keyword*

Synopsis	Allow class-based forwarding for LDP over RSVP
Context	configure router <i>string</i> ldp class-forwarding <i>keyword</i>
Tree	class-forwarding
Options	lsr, ler, lsr-and-ler
Introduced	16.0.R1
Platforms	All

consider-system-ip-in-gep *boolean*

Synopsis	Apply global export policy for system IP FEC creation
Context	configure router <i>string</i> ldp consider-system-ip-in-gep <i>boolean</i>
Tree	consider-system-ip-in-gep
Default	false
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
Context	configure router <i>string</i> ldp egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

fec-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the fec-prefix list instance
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-prefix
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP egress statistics
Context	configure router <i>string</i> ldp egress-statistics fec-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1

Platforms All

collect-stats *boolean*

Synopsis Collect statistics

Context **configure** **router** *string* **ldp** **egress-statistics** **fec-prefix** (*ipv4-prefix | ipv6-prefix*) **collect-stats** *boolean*

Tree [collect-stats](#)

Default false

Introduced 16.0.R1

Platforms All

entropy-label-capability *boolean*

Synopsis Enable entropy label capability on the LDP instance

Context **configure** **router** *string* **ldp** **entropy-label-capability** *boolean*

Tree [entropy-label-capability](#)

Default false

Introduced 16.0.R1

Platforms All

export-policy *reference*

Synopsis Export policies to determine routes exported to LDP

Context **configure** **router** *string* **ldp** **export-policy** *reference*

Tree [export-policy](#)

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

export-tunnel-table *reference*

Synopsis Tunnel table export policies to export tunneled routes

Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>export-tunnel-table</i> <i>reference</i>
Tree	export-tunnel-table
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

fast-reroute

Synopsis	Enable the fast-reroute context
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>fast-reroute</i>
Tree	fast-reroute
Introduced	16.0.R1
Platforms	All

backup-sr-tunnel *boolean*

Synopsis	Use SR tunnel as a remote LFA backup tunnel next-hop by an LDP FEC
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>fast-reroute</i> <i>backup-sr-tunnel</i> <i>boolean</i>
Tree	backup-sr-tunnel
Default	false
Introduced	16.0.R1
Platforms	All

fec-originate [[fec-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the fec-originate list instance
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>fec-originate</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-originate
Introduced	16.0.R1
Platforms	All

[fec-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Static FEC IP prefix
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	fec-originate
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertised-label *number*

Synopsis	Label that is advertised to upstream peer
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) advertised-label <i>number</i>
Tree	advertised-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

interface *string*

Synopsis	Interface name for this static FEC prefix
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) interface <i>string</i>
Tree	interface
String Length	0 to 32
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop

Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

pop *boolean*

Synopsis	Pop the label and transmit without the label
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pop <i>boolean</i>
Tree	pop
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

swap-label *number*

Synopsis	Value mapped to egress label associated with next-hop entry that LSR uses to swap incoming label
Context	configure router <i>string</i> ldp fec-originate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) swap-label <i>number</i>
Tree	swap-label
Range	6 to 1048575
Notes	The following elements are part of a choice: (interface , next-hop , and swap-label) or pop .
Introduced	16.0.R1
Platforms	All

generate-basic-fec-only *boolean*

Synopsis	Enable mLDP to generate a basic FEC
Context	configure router <i>string</i> ldp generate-basic-fec-only <i>boolean</i>
Tree	generate-basic-fec-only
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enter the graceful-restart context
Context	configure router <i>string</i> ldp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1
Platforms	All

helper-mode *boolean*

Synopsis	Enable graceful restart helper
Context	configure router <i>string</i> ldp graceful-restart helper-mode <i>boolean</i>
Tree	helper-mode
Default	false
Introduced	16.0.R1
Platforms	All

maximum-recovery-time *number*

Synopsis	Value for the local maximum recovery time
Context	configure router <i>string</i> ldp graceful-restart maximum-recovery-time <i>number</i>
Tree	maximum-recovery-time
Range	15 to 1800
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

neighbor-liveness-time *number*

Synopsis	Value for the neighbor liveness timer
Context	configure router <i>string</i> ldp graceful-restart neighbor-liveness-time <i>number</i>
Tree	neighbor-liveness-time
Range	5 to 300
Default	120

Units	seconds
Introduced	16.0.R1
Platforms	All

implicit-null-label *boolean*

Synopsis	Signal the implicit null label value for all LDP FECs for which the node is the egress LER
Context	configure router <i>string</i> ldp implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Default	false
Introduced	16.0.R1
Platforms	All

import-mcast-policy *reference*

Synopsis	Import policy for mLDP FECs arriving on the node
Context	configure router <i>string</i> ldp import-mcast-policy <i>reference</i>
Tree	import-mcast-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

import-pmsi-routes

Synopsis	Enter the import-pmsi-routes context
Context	configure router <i>string</i> ldp import-pmsi-routes
Tree	import-pmsi-routes
Introduced	19.5.R1
Platforms	All

mvpn *boolean*

Synopsis	Import BGP MVPN inter-AS routes
Context	configure router <i>string</i> ldp import-pmsi-routes mvpn <i>boolean</i>
Tree	mvpn
Default	false
Introduced	19.5.R1
Platforms	All

mvpn-no-export-community *boolean*

Synopsis	Import BGP MVPN intra-AS routes
Context	configure router <i>string</i> ldp import-pmsi-routes mvpn-no-export-community <i>boolean</i>
Tree	mvpn-no-export-community
Default	false
Introduced	19.5.R1
Platforms	All

import-policy *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	configure router <i>string</i> ldp import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-tunnel-table *reference*

Synopsis	Tunnel table import policies to control the insertion of non-host prefixes resolved by LDP
Context	configure router <i>string</i> ldp import-tunnel-table <i>reference</i>
Tree	import-tunnel-table
Reference	configure policy-options policy-statement <i>string</i>

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface-parameters

Synopsis	Enter the interface-parameters context
Context	configure router <i>string</i> ldp interface-parameters
Tree	interface-parameters
Introduced	16.0.R1
Platforms	All

interface [[ip-int-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[[ip-int-name](#)] *reference*

Synopsis	Interface name
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i>
Tree	interface
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
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Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 boolean

Synopsis	Allow BFD tracking of IPv4 LDP Session for interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 boolean

Synopsis	Allow BFD tracking of IPv6 LDP session for interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> bfd-liveness ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enable the ipv4 context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

fec-type-capability

Synopsis	Enter the fec-type-capability context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1
Platforms	All

p2mp-ipv4 *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 fec-type-capability p2mp-ipv4 <i>boolean</i>
Tree	p2mp-ipv4
Default	true
Introduced	16.0.R1

Platforms All

p2mp-ipv6 *boolean*

Synopsis Enable IPv6 P2MP FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [fec-type-capability](#) [p2mp-ipv6](#) *boolean*

Tree [p2mp-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [fec-type-capability](#) [prefix-ipv4](#) *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv6 *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [fec-type-capability](#) [prefix-ipv6](#) *boolean*

Tree [prefix-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

hello

Synopsis Enable the **hello** context

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv4](#) [hello](#)

Tree	hello
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for Hello
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for keepalive
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Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 local-lsr-id interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv4 transport-address <i>keyword</i>
Tree	transport-address
Options	interface, system
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enable the ipv6 context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

fec-type-capability

Synopsis	Enter the fec-type-capability context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 fec-type-capability
Tree	fec-type-capability
Introduced	16.0.R1

Platforms All

p2mp-ipv4 *boolean*

Synopsis Enable IPv4 P2MP FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv6](#) [fec-type-capability](#) [p2mp-ipv4](#) *boolean*

Tree [p2mp-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

p2mp-ipv6 *boolean*

Synopsis Enable IPv6 P2MP FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv6](#) [fec-type-capability](#) [p2mp-ipv6](#) *boolean*

Tree [p2mp-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv6](#) [fec-type-capability](#) [prefix-ipv4](#) *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv6 *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** [router](#) *string* [ldp](#) [interface-parameters](#) [interface](#) *reference* [ipv6](#) [fec-type-capability](#) [prefix-ipv6](#) *boolean*

Tree	prefix-ipv6
Default	true
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router string ldp interface-parameters interface reference ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	configure router string ldp interface-parameters interface reference ipv6 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	configure router string ldp interface-parameters interface reference ipv6 keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router string ldp interface-parameters interface reference ipv6 local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

format-32bit *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 local-lsr-id format-32bit <i>boolean</i>
Tree	format-32bit
Default	false
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 local-lsr-id interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> ipv6 transport-address <i>keyword</i>
Tree	transport-address
Options	interface, system
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for the LDP interface
Context	configure router <i>string</i> ldp interface-parameters interface <i>reference</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight

Max. Range	0 to 4294967295
Introduced	20.2.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> ldp interface-parameters ipv4
Tree	ipv4
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router <i>string</i> ldp interface-parameters ipv4 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the Hello factor
Context	configure router <i>string</i> ldp interface-parameters ipv4 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp interface-parameters ipv4 hello timeout <i>number</i>
Tree	timeout

Range	3 to 65535
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> ldp interface-parameters ipv4 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Value for the keep-alive factor
Context	configure router <i>string</i> ldp interface-parameters ipv4 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Timeout value for keepalive
Context	configure router <i>string</i> ldp interface-parameters ipv4 keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters ipv4 transport-address <i>keyword</i>
Tree	transport-address
Default	system
Options	interface, system
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> ldp interface-parameters ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router <i>string</i> ldp interface-parameters ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the Hello factor
Context	configure router <i>string</i> ldp interface-parameters ipv6 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>hello</i> <i>timeout</i> <i>number</i>
Tree	timeout
Range	3 to 65535
Default	15
Units	seconds
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>keepalive</i>
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Value for the keep-alive factor
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>keepalive</i> <i>factor</i> <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	configure <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>ipv6</i> <i>keepalive</i> <i>timeout</i> <i>number</i>
Tree	timeout
Range	3 to 65535

Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

transport-address *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	configure router <i>string</i> ldp interface-parameters ipv6 transport-address <i>keyword</i>
Tree	transport-address
Default	system
Options	interface, system
Introduced	16.0.R1
Platforms	All

label-withdrawal-delay *number*

Synopsis	Time interval during which LDP delays for the withdrawal of FEC-label binding
Context	configure router <i>string</i> ldp label-withdrawal-delay <i>number</i>
Tree	label-withdrawal-delay
Range	3 to 120
Units	seconds
Introduced	16.0.R1
Platforms	All

ldp-shortcut

Synopsis	Enter the ldp-shortcut context
Context	configure router <i>string</i> ldp ldp-shortcut
Tree	ldp-shortcut
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Forward IPv4 packets by using LDP shortcuts
Context	configure router <i>string</i> ldp ldp-shortcut ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Forward IPv6 packets by using LDP shortcuts
Context	configure router <i>string</i> ldp ldp-shortcut ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

legacy-ipv4-lsr-interop *boolean*

Synopsis	Allow interoperability with legacy IPv4 LSR implementations
Context	configure router <i>string</i> ldp legacy-ipv4-lsr-interop <i>boolean</i>
Tree	legacy-ipv4-lsr-interop
Default	false
Introduced	16.0.R1
Platforms	All

lsp-bfd [[prefix-list](#)] *reference*

Synopsis	Enter the lsp-bfd list instance
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i>
Tree	lsp-bfd
Max. Instances	16
Introduced	16.0.R1
Platforms	All

[prefix-list] reference

Synopsis	Name of a router policy options prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i>
Tree	lsp-bfd
Reference	configure policy-options prefix-list <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bfd-liveness boolean

Synopsis	Enable BFD on LDP LSPs with FECs that match the prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template reference

Synopsis	BFD template to apply to BFD sessions associated with the prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i> bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>string</i>
Introduced	16.0.R1
Platforms	All

failure-action keyword

Synopsis	Reaction to BFD session failure for the prefix list
Context	configure router <i>string</i> ldp lsp-bfd <i>reference</i> failure-action <i>keyword</i>
Tree	failure-action
Options	down
Introduced	16.0.R1

Platforms All

lsp-ping-interval (*number* | *keyword*)

Synopsis LSP ping transmit interval for periodic verification

Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **lsp-ping-interval** (*number* | *keyword*)

Tree **lsp-ping-interval**

Range 60 to 300

Default 60

Units seconds

Options none

Introduced 16.0.R1

Platforms All

priority *number*

Synopsis Prefix list to control the search order

Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **priority** *number*

Tree **priority**

Range 1 to 99

Default 1

Introduced 16.0.R1

Platforms All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address in LSP ping packets and BFD control packets associated with prefix list

Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **source-address**

Introduced 16.0.R1

Platforms All

max-ecmp-routes *number*

Synopsis Maximum ECMP value for LDP

Context	configure router <i>string ldp max-ecmp-routes number</i>
Tree	max-ecmp-routes
Description	This command sets the maximum number of ECMP routes that LDP may use to resolve the next hop for a FEC as permitted by the RTM or TTM. The system-wide maximum number of ECMP routes is set by the configure router ecmp command; therefore, the operational maximum number used by LDP is set to the lesser of the values configured by this command and the configure router ecmp command.
Range	1 to 64
Default	32
Introduced	19.10.R1
Platforms	All

mcast-upstream-asbr-frr *boolean*

Synopsis	Enable ASBR MoFRR to allow local leaf to perform MoFRR for multiple ASBRs
Context	configure router <i>string ldp mcast-upstream-asbr-frr boolean</i>
Tree	mcast-upstream-asbr-frr
Default	false
Introduced	16.0.R1
Platforms	All

mcast-upstream-frr *boolean*

Synopsis	Use fast upstream switchover for mLDP FECs
Context	configure router <i>string ldp mcast-upstream-frr boolean</i>
Tree	mcast-upstream-frr
Default	false
Introduced	16.0.R1
Platforms	All

mp-mbb-time *number*

Synopsis	MP MBB time
Context	configure router <i>string ldp mp-mbb-time number</i>
Tree	mp-mbb-time

Range	0 to 10
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

prefer-mcast-tunnel-in-tunnel *boolean*

Synopsis	Use T-LDP session to the peer for FEC resolution
Context	configure router <i>string</i> ldp prefer-mcast-tunnel-in-tunnel <i>boolean</i>
Tree	prefer-mcast-tunnel-in-tunnel
Default	true
Introduced	21.2.R1
Platforms	All

prefer-protocol-stitching *boolean*

Synopsis	Stitch LDP ILM to SR NHLFE even if LDP NHLFE exists
Context	configure router <i>string</i> ldp prefer-protocol-stitching <i>boolean</i>
Tree	prefer-protocol-stitching
Description	When configured to true , an LDP ILM stitches to an SR NHLFE, even if an LDP NHLFE exists. When configured to false , the stitching preference of an LDP ILM is to an LDP NHLFE.
Default	false
Introduced	21.7.R1
Platforms	All

prefer-tunnel-in-tunnel *boolean*

Synopsis	Preference tunnel-in-tunnel over a simple LDP tunnel
Context	configure router <i>string</i> ldp prefer-tunnel-in-tunnel <i>boolean</i>
Tree	prefer-tunnel-in-tunnel
Default	true
Introduced	16.0.R1
Platforms	All

resolve-root-using *keyword*

Synopsis	Resolution route table for multicast FECs
Context	configure <i>router string</i> ldp resolve-root-using <i>keyword</i>
Tree	resolve-root-using
Default	ucast-rtm
Options	ucast-rtm, mcast-rtm
Introduced	16.0.R1
Platforms	All

session-parameters

Synopsis	Enter the session-parameters context
Context	configure <i>router string</i> ldp session-parameters
Tree	session-parameters
Introduced	16.0.R1
Platforms	All

peer [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure <i>router string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	configure <i>router string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

adv-adj-addr-only *boolean*

Synopsis Distribute only the local addresses used to establish the Hello adjacencies with a peer

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **adv-adj-addr-only** *boolean*

Tree [adv-adj-addr-only](#)

Default false

Introduced 16.0.R1

Platforms All

adv-local-lsr-id *boolean*

Synopsis Advertise local LSR ID over a specified LDP session

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **adv-local-lsr-id** *boolean*

Tree [adv-local-lsr-id](#)

Default false

Introduced 16.0.R1

Platforms All

community *string*

Synopsis Community string associated with a session to a specified peer

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **community** *string*

Tree [community](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

dod-label-distribution *boolean*

Synopsis Use LDP Downstream-on-Demand (DoD) label distribution procedures

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone | ipv6-address-no-zone*) **dod-label-distribution** *boolean*

Tree	dod-label-distribution
Default	false
Introduced	16.0.R1
Platforms	All

export-addresses *reference*

Synopsis	Export policies to determine which local addresses should be distributed to this peer
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) export-addresses <i>reference</i>
Tree	export-addresses
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

export-prefixes *reference*

Synopsis	Export policies to determine which FEC prefixes are redistributed to LDP and TLDP peers
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) export-prefixes <i>reference</i>
Tree	export-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

fec-limit

Synopsis	Enter the fec-limit context
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Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit
Tree	fec-limit
Introduced	16.0.R1
Platforms	All

limit number

Synopsis	Maximum number of FECs to be accepted from this peer LSR
Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit limit number
Tree	limit
Range	0 1 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

log-only boolean

Synopsis	Trap and syslog message to generate when reaching the threshold and limit
Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit log-only boolean
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

threshold number

Synopsis	Threshold that generates trap and warning when reached
Context	configure router string ldp session-parameters peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fec-limit threshold number
Tree	threshold
Range	1 to 100
Default	90
Introduced	16.0.R1

Platforms All

fec-type-capability

Synopsis Enter the **fec-type-capability** context

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability**

Tree [fec-type-capability](#)

Introduced 16.0.R1

Platforms All

p2mp *boolean*

Synopsis Enable P2MP FEC capability for the session

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability p2mp** *boolean*

Tree [p2mp](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv4 *boolean*

Synopsis Enable IPv4 prefix FEC capability for the session

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability prefix-ipv4** *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

prefix-ipv6 *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **fec-type-capability prefix-ipv6** *boolean*

Tree [prefix-ipv6](#)

Default	true
Introduced	16.0.R1
Platforms	All

fec129-cisco-interop *boolean*

Synopsis	Allow translation between non-compliant FEC 129 formats of Cisco
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fec129-cisco-interop <i>boolean</i>
Tree	fec129-cisco-interop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-prefixes *reference*

Synopsis	FEC prefixes to be redistributed to this LDP peer
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) import-prefixes <i>reference</i>
Tree	import-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

pe-id-mac-flush-interop *boolean*

Synopsis	Send PE-ID TLV in LDP MAC withdrawal message
Context	configure router <i>string</i> ldp session-parameters peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) pe-id-mac-flush-interop <i>boolean</i>
Tree	pe-id-mac-flush-interop
Default	false
Introduced	16.0.R1
Platforms	All

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	configure <i>router</i> <i>string</i> <i>ldp</i> shortcut-local-ttl-propagate <i>boolean</i>
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

shortcut-transit-ttl-propagate *boolean*

Synopsis	Enable TTL propagation over LSP shortcut
Context	configure <i>router</i> <i>string</i> <i>ldp</i> shortcut-transit-ttl-propagate <i>boolean</i>
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

targeted-session

Synopsis	Enter the targeted-session context
Context	configure <i>router</i> <i>string</i> <i>ldp</i> targeted-session
Tree	targeted-session
Introduced	16.0.R1
Platforms	All

auto-rx

Synopsis	Enter the auto-rx context
Context	configure <i>router</i> <i>string</i> <i>ldp</i> targeted-session auto-rx
Tree	auto-rx
Description	Commands in this context specify the LDP session configuration to accept targeted Hello messages from any peer.
Introduced	20.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router string ldp targeted-session auto-rx ipv4</i>
Tree	ipv4
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	configure <i>router string ldp targeted-session auto-rx ipv4 admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	configure <i>router string ldp targeted-session auto-rx ipv4 tunneling boolean</i>
Tree	tunneling
Description	<p>When configured to true, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the auto-rx and auto-tx contexts are both administratively enabled, this command must be set to true for LDP rLFA to function properly.</p> <p>When configured to false, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	20.10.R1
Platforms	All

auto-tx

Synopsis	Enter the auto-tx context
Context	configure router <i>string</i> ldp targeted-session auto-tx
Tree	auto-tx
Description	Commands in this context specify the LDP session configuration to send targeted Hello messages toward PQ nodes determined by the rLFA algorithm.
Introduced	20.10.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> ldp targeted-session auto-tx ipv4
Tree	ipv4
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	configure router <i>string</i> ldp targeted-session auto-tx ipv4 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

tunneling *boolean*

Synopsis	Enable tunneling for targeted peers
Context	configure router <i>string</i> ldp targeted-session auto-tx ipv4 tunneling <i>boolean</i>
Tree	tunneling
Description	When configured to true , this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.

If the **auto-rx** context is administratively disabled, this command should be set to **true** for LDP rLFA to function properly.

When configured to **false**, FEC label bindings are not sent via the LDP session.

Default	false
Introduced	20.10.R1
Platforms	All

export-prefixes *reference*

Synopsis	Export route policy to determine which routes are exported to this targeted LDP session
Context	configure router <i>string</i> ldp targeted-session export-prefixes <i>reference</i>
Tree	export-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import-prefixes *reference*

Synopsis	Import route policy to determine which routes are accepted from targeted LDP neighbors
Context	configure router <i>string</i> ldp targeted-session import-prefixes <i>reference</i>
Tree	import-prefixes
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> ldp targeted-session ipv4
Tree	ipv4

Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router string ldp targeted-session ipv4 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for Hello
Context	configure router string ldp targeted-session ipv4 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Timeout value for Hello
Context	configure router string ldp targeted-session ipv4 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Default	45
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enter the hello-reduction context
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Context	configure <i>router string ldp targeted-session ipv4 hello-reduction</i>
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure <i>router string ldp targeted-session ipv4 hello-reduction admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure <i>router string ldp targeted-session ipv4 hello-reduction factor number</i>
Tree	factor
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure <i>router string ldp targeted-session ipv4 keepalive</i>
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	configure router <i>string</i> ldp targeted-session ipv4 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for keepalive
Context	configure router <i>string</i> ldp targeted-session ipv4 keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Default	40
Units	seconds
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> ldp targeted-session ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enter the hello context
Context	configure router <i>string</i> ldp targeted-session ipv6 hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	configure router <i>string</i> ldp targeted-session ipv6 hello factor <i>number</i>
Tree	factor
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp targeted-session ipv6 hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Default	45
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enter the hello-reduction context
Context	configure router <i>string</i> ldp targeted-session ipv6 hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>string</i> ldp targeted-session ipv6 hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor number

Synopsis	Hello reduction dampening factor
Context	configure router <i>string</i> ldp targeted-session ipv6 hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enter the keepalive context
Context	configure router <i>string</i> ldp targeted-session ipv6 keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for keepalive
Context	configure router <i>string</i> ldp targeted-session ipv6 keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Timeout value for keepalive
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Context	configure <i>router string ldp targeted-session ipv6 keepalive timeout number</i>
Tree	timeout
Range	3 to 65535
Default	40
Units	seconds
Introduced	16.0.R1
Platforms	All

peer [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure <i>router string ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	configure <i>router string ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	peer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LDP peer
Context	configure <i>router string ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone) admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD tracking of LDP session for the peer

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **bfd-liveness** *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 16.0.R1

Platforms All

hello

Synopsis Enable the **hello** context

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello**

Tree [hello](#)

Introduced 16.0.R1

Platforms All

factor *number*

Synopsis Factor value for Hello

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **factor** *number*

Tree [factor](#)

Range 1 to 255

Introduced 16.0.R1

Platforms All

timeout *number*

Synopsis Timeout value for Hello

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **timeout** *number*

Tree [timeout](#)

Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enable the hello-reduction context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor number

Synopsis	Factor value for keepalive
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout number

Synopsis	Time that LDP waits before tearing down session
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) keepalive timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-lsr-id
Tree	local-lsr-id
Introduced	16.0.R1

Platforms All

format-32bit *boolean*

Synopsis Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) **local-lsr-id format-32bit** *boolean*

Tree [format-32bit](#)

Default false

Introduced 16.0.R1

Platforms All

interface-name *reference*

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) **local-lsr-id interface-name** *reference*

Tree [interface-name](#)

Reference **configure** *router string interface* *string*

Introduced 16.0.R1

Platforms All

mcast-tunneling

Synopsis Enable the **mcast-tunneling** context

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) **mcast-tunneling**

Tree [mcast-tunneling](#)

Introduced 21.2.R1

Platforms All

lsp [*lsp-name*] *string*

Synopsis Add a list entry for **lsp**

Context **configure** *router string ldp targeted-session peer* (*ipv4-address-no-zone | ipv6-address-no-zone*) **mcast-tunneling lsp** *string*

Tree	lsp
Max. Instances	4
Introduced	21.2.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name
Context	configure router <i>string</i> ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone) mcast-tunneling lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

tunneling

Synopsis	Enable the tunneling context
Context	configure router <i>string</i> ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone) tunneling
Tree	tunneling
Introduced	16.0.R1
Platforms	All

lsp [[lsp-name](#)] *string*

Synopsis	Add a list entry for lsp
Context	configure router <i>string</i> ldp targeted-session peer (ipv4-address-no-zone ipv6-address-no-zone) tunneling lsp <i>string</i>
Tree	lsp
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name
Context	configure router <i>string</i> ldp targeted-session peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunneling lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

peer-template [**template-name**] *string*

Synopsis	Enter the peer-template list instance
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i>
Tree	peer-template
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[template-name] *string*

Synopsis	Name for the targeted peer template
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i>
Tree	peer-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the peer template
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

adv-local-lsr-id *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> adv-local-lsr-id <i>boolean</i>
Tree	adv-local-lsr-id
Default	false
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD tracking of LDP session for sessions created by peer template
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community string associated with a session to a specified peer
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> community <i>string</i>
Tree	community
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

hello

Synopsis	Enable the hello context
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello
Tree	hello
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for Hello
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Timeout value for Hello
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello timeout <i>number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-reduction

Synopsis	Enable the hello-reduction context
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello-reduction
Tree	hello-reduction
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello-reduction admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R3
Platforms	All

factor *number*

Synopsis	Hello reduction dampening factor
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> hello-reduction factor <i>number</i>
Tree	factor
Range	3 to 20
Introduced	16.0.R1
Platforms	All

keepalive

Synopsis	Enable the keepalive context
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> keepalive
Tree	keepalive
Introduced	16.0.R1
Platforms	All

factor *number*

Synopsis	Factor value for keepalive
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> keepalive factor <i>number</i>
Tree	factor
Range	1 to 255
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	configure <i>router string ldp targeted-session peer-template string keepalive timeout number</i>
Tree	timeout
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

local-lsr-id

Synopsis	Enter the local-lsr-id context
Context	configure <i>router string ldp targeted-session peer-template string local-lsr-id</i>
Tree	local-lsr-id
Introduced	16.0.R1
Platforms	All

interface-name *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	configure <i>router string ldp targeted-session peer-template string local-lsr-id interface-name reference</i>
Tree	interface-name
Reference	configure <i>router string interface string</i>
Introduced	16.0.R1
Platforms	All

mcast-tunneling *boolean*

Synopsis	Enable MLDP over RSVP-TE tunnels for the template
Context	configure <i>router string ldp targeted-session peer-template string mcast-tunneling boolean</i>
Tree	mcast-tunneling

Default	false
Introduced	21.2.R1
Platforms	All

tunneling *boolean*

Synopsis	Allow LDP over tunnels
Context	configure router <i>string</i> ldp targeted-session peer-template <i>string</i> tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

peer-template-map [**template-map-name**] *reference*

Synopsis	Enter the peer-template-map list instance
Context	configure router <i>string</i> ldp targeted-session peer-template-map <i>reference</i>
Tree	peer-template-map
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[template-map-name] *reference*

Synopsis	Name to identify the targeted peer template
Context	configure router <i>string</i> ldp targeted-session peer-template-map <i>reference</i>
Tree	peer-template-map
Reference	configure router <i>string</i> ldp targeted-session peer-template <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

policy-map *reference*

Synopsis	Targeted peer template to apply to the given policies
Context	configure router <i>string</i> ldp targeted-session peer-template-map <i>reference</i> policy-map <i>reference</i>
Tree	policy-map
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

resolve-v6-prefix-over-shortcut *boolean*

Synopsis	Resolve IPv6 prefix over IGP shortcuts
Context	configure router <i>string</i> ldp targeted-session resolve-v6-prefix-over-shortcut <i>boolean</i>
Tree	resolve-v6-prefix-over-shortcut
Description	When configured to true , the system enables the resolution of IPv6 LDP unicast prefix FECs over IGP shortcuts. When configured to false , the resolution is not allowed.
Default	false
Introduced	22.7.R1
Platforms	All

sdp-auto-targeted-session *boolean*

Synopsis	Allow auto-creation of targeted sessions by SDP
Context	configure router <i>string</i> ldp targeted-session sdp-auto-targeted-session <i>boolean</i>
Tree	sdp-auto-targeted-session
Default	true
Introduced	16.0.R1
Platforms	All

tcp-session-parameters

Synopsis	Enter the tcp-session-parameters context
Context	configure router <i>string</i> ldp tcp-session-parameters
Tree	tcp-session-parameters
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key between LDP peers
Context	configure router <i>string</i> ldp tcp-session-parameters authentication-key <i>string</i>
Tree	authentication-key
Description	This command specifies the authentication key used to establish a session between LDP peers.

Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.

The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.

String Length	1 to 370
Introduced	21.2.R1
Platforms	All

authentication-keychain *reference*

Synopsis	Authentication keychain to use for the TCP session
Context	configure router <i>string</i> ldp tcp-session-parameters authentication-keychain <i>reference</i>
Tree	authentication-keychain
Description	This command configures the authentication keychain to use for the TCP session. The per-peer authentication configuration takes precedence over the global authentication configuration.
Reference	configure system security keychains keychain <i>string</i>
Introduced	21.2.R1

Platforms All

peer-transport [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **peer-transport** list instance

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-transport](#)

Introduced 16.0.R1

Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the TCP connection to the LDP peer

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-transport](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

authentication-key *string*

Synopsis Authentication key for the peer

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [authentication-key](#) *string*

Tree [authentication-key](#)

String Length 1 to 370

Introduced 16.0.R1

Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain to use for the session

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [authentication-keychain](#) *reference*

Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

path-mtu-discovery *boolean*

Synopsis	Allow Path MTU Discovery for associated TCP connections
Context	configure router <i>string</i> ldp tcp-session-parameters peer-transport (ipv4-address-no-zone ipv6-address-no-zone) path-mtu-discovery <i>boolean</i>
Tree	path-mtu-discovery
Default	false
Introduced	16.0.R1
Platforms	All

ttl-security *number*

Synopsis	Minimum TTL value for incoming packets
Context	configure router <i>string</i> ldp tcp-session-parameters peer-transport (ipv4-address-no-zone ipv6-address-no-zone) ttl-security <i>number</i>
Tree	ttl-security
Range	1 to 255
Introduced	16.0.R1
Platforms	All

tunnel-down-damp-time *number*

Synopsis	Time interval for an LDP to damp a tunnel down event before posting to the Route Table Manager (RTM)
Context	configure router <i>string</i> ldp tunnel-down-damp-time <i>number</i>
Tree	tunnel-down-damp-time
Range	0 to 20
Default	3
Units	seconds
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Tunnel table preference value for address FECs
Context	configure <i>router</i> <i>string</i> <i>ldp</i> tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the tunnel table preference for an LDP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	9
Introduced	21.10.R1
Platforms	All

weighted-ecmp *boolean*

Synopsis	Allow weighted ECMP load-balancing
Context	configure <i>router</i> <i>string</i> <i>ldp</i> weighted-ecmp <i>boolean</i>
Tree	weighted-ecmp
Description	<p>When configured to true, the system allows weighted ECMP on LDP using RSVP LSPs or SR-TE LSPs. LDP labeled packets are sprayed across the RSVP or SR-TE LSP ECMP set in proportion to the configured load-balancing weight of LSPs.</p> <p>When configured to false, the system removes weighted ECMP load-balancing.</p>
Default	false
Introduced	16.0.R1
Platforms	All

leak-export

Synopsis	Enter the leak-export context
Context	configure <i>router</i> <i>string</i> leak-export

Tree	leak-export
Introduced	16.0.R4
Platforms	All

leak-export-limit *number*

Synopsis	Maximum limit on number of GRT routes leaked into VPRNs
Context	configure router <i>string</i> leak-export leak-export-limit <i>number</i>
Tree	leak-export-limit
Range	1 to 10000
Default	5
Introduced	16.0.R4
Platforms	All

policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	configure router <i>string</i> leak-export policy-name (<i>policy-expr-string</i> <i>string</i>)
Tree	policy-name
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

lsp-bfd

Synopsis	Enter the lsp-bfd context
Context	configure router <i>string</i> lsp-bfd
Tree	lsp-bfd
Introduced	16.0.R1
Platforms	All

bfd-sessions *number*

Synopsis	Maximum number of LSP BFD session tail-ends
Context	configure router <i>string</i> lsp-bfd bfd-sessions <i>number</i>
Tree	bfd-sessions
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tail-end

Synopsis	Enter the tail-end context
Context	configure router <i>string</i> lsp-bfd tail-end
Tree	tail-end
Introduced	20.10.R1
Platforms	All

multiplier *number*

Synopsis	Missed message threshold before session is set to down
Context	configure router <i>string</i> lsp-bfd tail-end multiplier <i>number</i>
Tree	multiplier
Range	1 to 20
Default	3
Introduced	20.10.R1
Platforms	All

receive-interval *number*

Synopsis	The BFD receive interval for LSP tail-end
Context	configure router <i>string</i> lsp-bfd tail-end receive-interval <i>number</i>
Tree	receive-interval
Range	100 to 1000
Default	1000
Units	milliseconds
Introduced	20.10.R1

Platforms All

transmit-interval *number*

Synopsis The BFD transmit interval for LSP tail-end

Context **configure** *router string lsp-bfd tail-end transmit-interval number*

Tree [transmit-interval](#)

Range 100 to 1000

Default 1000

Units milliseconds

Introduced 20.10.R1

Platforms All

mc-maximum-routes

Synopsis Enter the **mc-maximum-routes** context

Context **configure** *router string mc-maximum-routes*

Tree [mc-maximum-routes](#)

Introduced 16.0.R1

Platforms All

log-only *boolean*

Synopsis Action when the maximum number of multicast routes, held within a VRF context, is reached

Context **configure** *router string mc-maximum-routes log-only boolean*

Tree [log-only](#)

Default false

Introduced 16.0.R1

Platforms All

threshold *number*

Synopsis Mid-level water marker for the number of multicast routes which this VRF holds

Context **configure** *router string mc-maximum-routes threshold number*

Tree [threshold](#)

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	configure router <i>string</i> mc-maximum-routes value <i>number</i>
Tree	value
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

mld

Synopsis	Enable the mld context
Context	configure router <i>string</i> mld
Tree	mld
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MLD
Context	configure router <i>string</i> mld admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-group-interface **forwarding-service** *string* **group-interface-name** *reference*

Synopsis	Enter the forwarding-group-interface list instance
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Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i>
Tree	forwarding-group-interface
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis	Forwarding service for the subscriber interface
Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i>
Tree	forwarding-group-interface
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis	Group interface name
Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i>
Tree	forwarding-group-interface
Reference	configure <i>service</i> <i>vpn</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>admin-state</i> <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac
Tree	mcac
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited

Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac policy <i>reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p>

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
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Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-response-interval</i> <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-source-address</i> <i>string</i>
Tree	query-source-address
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>router-alert-check</i> <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	configure <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>sub-hosts-only</i> <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	configure router <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> version <i>keyword</i>
Tree	version
Default	2
Options	1, 2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	configure router <i>string</i> mld group-if-query-source-address <i>string</i>
Tree	group-if-query-source-address
Introduced	16.0.R1
Platforms	All

group-interface [[group-interface-name](#)] *reference*

Synopsis	Enter the group-interface list instance
Context	configure router <i>string</i> mld group-interface <i>reference</i>
Tree	group-interface
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] reference

Synopsis	Group interface name
Context	configure router <i>string</i> mld group-interface <i>reference</i>
Tree	group-interface
Reference	configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of the MLD interface
Context	configure router <i>string</i> mld group-interface <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy reference

Synopsis	Import policy to filter MLD packets
Context	configure router <i>string</i> mld group-interface <i>reference</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources number

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> mld group-interface <i>reference</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources

Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure <i>router string mld group-interface reference</i> maximum-number-groups <i>number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure <i>router string mld group-interface reference</i> maximum-number-sources <i>number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis	Enter the mcac context
Context	configure <i>router string mld group-interface reference</i> mcac
Tree	mcac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> mld group-interface <i>reference</i> mcac interface-policy <i>reference</i>

Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy reference

Synopsis	Multicast CAC policy name
Context	configure router <i>string mld group-interface reference mcac policy reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval number

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string mld group-interface reference query-interval number</i>
Tree	query-interval
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> mld group-interface <i>reference</i> query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> mld group-interface <i>reference</i> query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis	Source address for MLD queries
Context	configure router <i>string</i> mld group-interface <i>reference</i> query-source-address <i>string</i>
Tree	query-source-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	configure router <i>string</i> mld group-interface <i>reference</i> router-alert-check <i>boolean</i>
Tree	router-alert-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	configure router <i>string</i> mld group-interface <i>reference</i> sub-hosts-only <i>boolean</i>
Tree	sub-hosts-only
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis	Enable subnet checking
Context	configure router <i>string</i> mld group-interface <i>reference</i> subnet-check <i>boolean</i>
Tree	subnet-check
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis	MLD protocol version
Context	configure router <i>string</i> mld group-interface <i>reference</i> version <i>keyword</i>
Tree	version
Default	2
Options	1, 2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [**ip-interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> mld interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[ip-interface-name] *string*

Synopsis	IP interface name
Context	configure router <i>string</i> mld interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MLD interface
Context	configure router <i>string</i> mld interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy to filter MLD packets
Context	configure router <i>string</i> mld interface <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Introduced	16.0.R1
Platforms	All

maximum-number-group-sources *number*

Synopsis	Maximum number of group sources for this interface
Context	configure router <i>string</i> mld interface <i>string</i> maximum-number-group-sources <i>number</i>
Tree	maximum-number-group-sources

Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	configure <i>router string mld interface string maximum-number-groups number</i>
Tree	maximum-number-groups
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	configure <i>router string mld interface string maximum-number-sources number</i>
Tree	maximum-number-sources
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure <i>router string mld interface string mcac</i>
Tree	mcac
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure router <i>string</i> mld interface <i>string</i> mcac bandwidth
Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> mld interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> mld interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> mld interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy

Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[[level-id](#)] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>

Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [[number-lag-port-down](#)] *number*

Synopsis	Enter the number-down list instance
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i>
Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure router <i>string</i> mld interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i>
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> mld interface <i>string</i> mcac <i>policy reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	configure mcac <i>policy</i> <i>string</i>
Introduced	16.0.R1

Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages

Context **configure** [router](#) *string* [mld interface](#) *string* [query-interval](#) *number*

Tree [query-interval](#)

Range 2 to 1024

Introduced 16.0.R1

Platforms All

query-last-member-interval *number*

Synopsis Time between group-specific query messages

Context **configure** [router](#) *string* [mld interface](#) *string* [query-last-member-interval](#) *number*

Tree [query-last-member-interval](#)

Range 1 to 1023

Introduced 16.0.R1

Platforms All

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages

Context **configure** [router](#) *string* [mld interface](#) *string* [query-response-interval](#) *number*

Tree [query-response-interval](#)

Range 1 to 1023

Introduced 16.0.R1

Platforms All

router-alert-check *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages

Context **configure** [router](#) *string* [mld interface](#) *string* [router-alert-check](#) *boolean*

Tree [router-alert-check](#)

Default true

Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range [start](#) *string* [end](#) *string*

Synopsis	Enter the group-range list instance
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[start](#) *string*

Synopsis	Lower bound of the group range
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

[end](#) *string*

Synopsis	Upper bound of the group range
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i>
Tree	group-range

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [[source-address](#)] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Min. Instances	1
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure router <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> mld interface <i>string</i> static
Tree	static
Introduced	16.0.R1
Platforms	All

group [[group-address](#)] *string*

Synopsis	Enter the group list instance
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Context	configure <i>router string mld interface string static group string</i>
Tree	<i>group</i>
Introduced	16.0.R1
Platforms	All

[group-address] *string*

Synopsis	Group address of multicast channel
Context	configure <i>router string mld interface string static group string</i>
Tree	<i>group</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [*source-address*] *string*

Synopsis	Add a list entry for source
Context	configure <i>router string mld interface string static group string source string</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure <i>router string mld interface string static group string source string</i>
Tree	<i>source</i>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
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Context	configure <i>router string mld interface string static group string starg</i>
Tree	<i>starg</i>
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R2
Platforms	All

group-range *start string end string step string*

Synopsis	Enter the group-range list instance
Context	configure <i>router string mld interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Introduced	16.0.R1
Platforms	All

start *string*

Synopsis	Lower bound of the static multicast group
Context	configure <i>router string mld interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

end *string*

Synopsis	Upper bound of the static multicast group
Context	configure <i>router string mld interface string static group-range start string end string step string</i>
Tree	<i>group-range</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

step *string*

Synopsis	Step interval for the group-range addresses
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

source [**source-address**] *string*

Synopsis	Add a list entry for source
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	The following elements are part of a mandatory choice: source or starg .
Introduced	16.0.R1
Platforms	All

[source-address] *string*

Synopsis	Source IP address
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i>
Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

starg

Synopsis	any source address (*,G)
Context	configure router <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> starg
Tree	starg
Notes	The following elements are part of a mandatory choice: source or starg .

Introduced	16.0.R2
Platforms	All

version *keyword*

Synopsis	MLD protocol version
Context	configure router <i>string</i> mld interface <i>string</i> version <i>keyword</i>
Tree	version
Default	2
Options	1, 2
Introduced	16.0.R1
Platforms	All

query-interval *number*

Synopsis	Time between two consecutive host-query messages
Context	configure router <i>string</i> mld query-interval <i>number</i>
Tree	query-interval
Range	2 to 1024
Default	125
Units	seconds
Introduced	16.0.R1
Platforms	All

query-last-member-interval *number*

Synopsis	Time between group-specific query messages
Context	configure router <i>string</i> mld query-last-member-interval <i>number</i>
Tree	query-last-member-interval
Range	1 to 1023
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	configure router <i>string</i> mld query-response-interval <i>number</i>
Tree	query-response-interval
Range	1 to 1023
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

robust-count *number*

Synopsis	Number of retries after expected message loss
Context	configure router <i>string</i> mld robust-count <i>number</i>
Tree	robust-count
Range	2 to 10
Default	2
Introduced	16.0.R1
Platforms	All

ssm-translate

Synopsis	Enter the ssm-translate context
Context	configure router <i>string</i> mld ssm-translate
Tree	ssm-translate
Introduced	16.0.R1
Platforms	All

group-range **start** *string* **end** *string*

Synopsis	Enter the group-range list instance
Context	configure router <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i>
Tree	group-range
Introduced	16.0.R1

Platforms All

start string

Synopsis Lower bound of the group range
 Context **configure** [router string mld ssm-translate group-range start string end string](#)
 Tree [group-range](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

end string

Synopsis Upper bound of the group range
 Context **configure** [router string mld ssm-translate group-range start string end string](#)
 Tree [group-range](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

source [source-address] string

Synopsis Add a list entry for **source**
 Context **configure** [router string mld ssm-translate group-range start string end string source string](#)
 Tree [source](#)
 Min. 1
 Instances
 Introduced 16.0.R1
 Platforms All

[source-address] string

Synopsis Source IP address
 Context **configure** [router string mld ssm-translate group-range start string end string source string](#)

Tree	source
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

mpls

Synopsis	Enable the mpls context
Context	configure router string mpls
Tree	mpls
Introduced	16.0.R1
Platforms	All

admin-group-frr *boolean*

Synopsis	Use admin group constraints for FRR path computation
Context	configure router string mpls admin-group-frr boolean
Tree	admin-group-frr
Default	false
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS instance
Context	configure router string mpls admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

auto-bandwidth-multipliers

Synopsis	Enter the auto-bandwidth-multipliers context
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Context	configure router <i>string</i> mpls auto-bandwidth-multipliers
Tree	auto-bandwidth-multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	configure router <i>string</i> mpls auto-bandwidth-multipliers adjust-multiplier <i>number</i>
Tree	adjust-multiplier
Range	1 to 16383
Default	288
Introduced	16.0.R1
Platforms	All

sample-multiplier *number*

Synopsis	Collection intervals in a sample interval
Context	configure router <i>string</i> mpls auto-bandwidth-multipliers sample-multiplier <i>number</i>
Tree	sample-multiplier
Range	1 to 511
Default	1
Introduced	16.0.R1
Platforms	All

auto-lsp [[template-name](#)] *reference*

Synopsis	Enter the auto-lsp list instance
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i>
Tree	auto-lsp
Max. Instances	500
Introduced	16.0.R1
Platforms	All

[template-name] reference

Synopsis	LSP template name
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i>
Tree	auto-lsp
Reference	configure router <i>string</i> mpls lsp-template <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

one-hop boolean

Synopsis	Enable one-hop point-to-point LSP automatic signaling
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i> one-hop <i>boolean</i>
Tree	one-hop
Description	This command enables the automatic signaling of one-hop point-to-point LSPs.
Default	false
Notes	The following elements are part of a choice: one-hop or policy .
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Peer prefix policy name
Context	configure router <i>string</i> mpls auto-lsp <i>reference</i> policy <i>reference</i>
Tree	policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	The following elements are part of a choice: one-hop or policy . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

aux-stats

Synopsis	Enable the aux-stats context
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>aux-stats</i>
Tree	<i>aux-stats</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sr boolean

Synopsis	Traffic type count in MPLS statistics table
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>aux-stats</i> <i>sr</i> <i>boolean</i>
Tree	<i>sr</i>
Description	This command configures the type of traffic to count in the auxiliary MPLS statistics table. It refers to any type of segment routing traffic (SR-OSPF, SR-ISIS, SR-TE, and so on).
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bypass-resignal-timer number

Synopsis	Resignal timer for bypass
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>bypass-resignal-timer</i> <i>number</i>
Tree	<i>bypass-resignal-timer</i>
Range	1 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

class-forwarding-policy [policy-name] string

Synopsis	Enter the class-forwarding-policy list instance
Context	configure <i>router</i> <i>string</i> <i>mpls</i> <i>class-forwarding-policy</i> <i>string</i>
Tree	<i>class-forwarding-policy</i>
Max. Instances	15

Introduced 16.0.R1
 Platforms All

[policy-name] *string*

Synopsis Name of class forwarding policy
 Context **configure** *router string mpls class-forwarding-policy string*
 Tree *class-forwarding-policy*
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

default-set *number*

Synopsis Default forwarding set ID
 Context **configure** *router string mpls class-forwarding-policy string default-set number*
 Tree *default-set*
 Range 1 to 6
 Default 1
 Introduced 16.0.R1
 Platforms All

fc [*fc-name*] *keyword*

Synopsis Enter the **fc** list instance
 Context **configure** *router string mpls class-forwarding-policy string fc keyword*
 Tree *fc*
 Introduced 16.0.R1
 Platforms All

[fc-name] *keyword*

Synopsis Forwarding class name for LSP
 Context **configure** *router string mpls class-forwarding-policy string fc keyword*

Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

forwarding-set *number*

Synopsis	Forwarding set ID for forwarding classes
Context	configure router <i>string</i> mpls class-forwarding-policy <i>string</i> fc <i>keyword</i> forwarding-set <i>number</i>
Tree	forwarding-set
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

cspf-on-loose-hop *boolean*

Synopsis	Calculate CSPF until next loose hop on LSR
Context	configure router <i>string</i> mpls cspf-on-loose-hop <i>boolean</i>
Tree	cspf-on-loose-hop
Default	false
Introduced	16.0.R1
Platforms	All

dynamic-bypass *boolean*

Synopsis	Create dynamic bypass LSPs in FRR
Context	configure router <i>string</i> mpls dynamic-bypass <i>boolean</i>
Tree	dynamic-bypass
Default	true
Introduced	16.0.R1
Platforms	All

entropy-label

Synopsis	Enter the entropy-label context
Context	configure router <i>string</i> mpls entropy-label
Tree	entropy-label
Introduced	16.0.R1
Platforms	All

rsvp-te *boolean*

Synopsis	Apply entropy labels to RSVP-TE LSPs
Context	configure router <i>string</i> mpls entropy-label rsvp-te <i>boolean</i>
Tree	rsvp-te
Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Apply entropy labels to SR-TE LSPs
Context	configure router <i>string</i> mpls entropy-label sr-te <i>boolean</i>
Tree	sr-te
Introduced	16.0.R1
Platforms	All

exponential-backoff-retry *boolean*

Synopsis	Use exponential back-off timer when retrying an LSP
Context	configure router <i>string</i> mpls exponential-backoff-retry <i>boolean</i>
Tree	exponential-backoff-retry
Default	false
Introduced	16.0.R1
Platforms	All

forwarding-policies

Synopsis	Enable the forwarding-policies context
----------	---

Context	configure router <i>string</i> mpls forwarding-policies
Tree	forwarding-policies
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MPLS forwarding policies
Context	configure router <i>string</i> mpls forwarding-policies admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

forwarding-policy [[policy-name](#)] *string*

Synopsis	Enter the forwarding-policy list instance
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i>
Tree	forwarding-policy
Max. Instances	65536
Introduced	16.0.R1
Platforms	All

[policy-name] *string*

Synopsis	Forwarding policy name
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i>
Tree	forwarding-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS forwarding policy
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

binding-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Binding label
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> binding-label <i>number</i>
Tree	binding-label
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> egress-statistics
Tree	egress-statistics
Introduced	19.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
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Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.7.R1
Platforms	All

endpoint (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure endpoint address.
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> endpoint (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	endpoint
Introduced	16.0.R4
Platforms	All

ingress-statistics

Synopsis	Enable the ingress-statistics context
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> ingress-statistics
Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> ingress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable

Options	enable, disable
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Metric of an MPLS forwarding policy
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	16.0.R4
Platforms	All

next-hop-group [**index**] *number*

Synopsis	Enter the next-hop-group list instance
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i>
Tree	next-hop-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[index] *number*

Synopsis	Index for next hop group
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i>
Tree	next-hop-group
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of NHG in MPLS forwarding policy
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-next-hop

Synopsis	Enable the backup-next-hop context
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> backup-next-hop
Tree	backup-next-hop
Introduced	16.0.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> backup-next-hop next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Introduced	16.0.R1
Platforms	All

pushed-labels [*index*] *number*

Synopsis	Enter the pushed-labels list instance
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> backup-next-hop pushed-labels <i>number</i>
Tree	pushed-labels
Max. Instances	10

Introduced 16.0.R4
 Platforms All

[index] *number*

Synopsis Index for push label
 Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number*
 Tree [pushed-labels](#)
 Range 1 to 10
 Notes This element is part of a list key.
 Introduced 16.0.R4
 Platforms All

label *number*

Synopsis Label value
 Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number label number*
 Tree [label](#)
 Range 1 to 1048575
 Notes This element is mandatory.
 Introduced 16.0.R4
 Platforms All

load-balancing-weight *number*

Synopsis Load balancing weight of an NHG entry
 Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number load-balancing-weight number*
 Tree [load-balancing-weight](#)
 Range 1 to 4294967295
 Introduced 16.0.R4
 Platforms All

primary-next-hop

Synopsis	Enable the primary-next-hop context
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop</i>
Tree	primary-next-hop
Introduced	16.0.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Next hop address
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Introduced	16.0.R1
Platforms	All

pushed-labels [[index](#)] *number*

Synopsis	Enter the pushed-labels list instance
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop pushed-labels number</i>
Tree	pushed-labels
Max. Instances	10
Introduced	16.0.R4
Platforms	All

[[index](#)] *number*

Synopsis	Index for push label
Context	configure <i>router string mpls forwarding-policies forwarding-policy string next-hop-group number primary-next-hop pushed-labels number</i>
Tree	pushed-labels
Range	1 to 10
Notes	This element is part of a list key.

Introduced	16.0.R4
Platforms	All

label *number*

Synopsis	Label value
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> primary-next-hop pushed-labels <i>number</i> label <i>number</i>
Tree	label
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

resolution-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Resolution type for next hop group
Context	configure router <i>string</i> mpls forwarding-policies forwarding-policy <i>string</i> next-hop-group <i>number</i> resolution-type <i>keyword</i>
Tree	resolution-type
Options	direct, indirect
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

preference *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference number
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Context	configure <i>router string mpls forwarding-policies forwarding-policy string preference number</i>
Tree	preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer
Context	configure <i>router string mpls forwarding-policies forwarding-policy string revert-timer number</i>
Tree	revert-timer
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Tunnel table preference
Context	configure <i>router string mpls forwarding-policies forwarding-policy string tunnel-table-pref number</i>
Tree	tunnel-table-pref
Description	<p>This command configures the TTM preference value of an MPLS forwarding policy.</p> <p>The <i>preference-value</i> parameter is used by applications to select one tunnel type to bind to in TTM when multiple tunnel types are enabled for the application.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

reserved-label-block *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	configure router <i>string</i> mpls forwarding-policies reserved-label-block <i>reference</i>
Tree	reserved-label-block
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	16.0.R1
Platforms	All

frr-object *boolean*

Synopsis	Signal with fast reroute object
Context	configure router <i>string</i> mpls frr-object <i>boolean</i>
Tree	frr-object
Default	true
Introduced	16.0.R1
Platforms	All

hold-timer *number*

Synopsis	Hold timer value
Context	configure router <i>string</i> mpls hold-timer <i>number</i>
Tree	hold-timer
Range	0 to 1000
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure router <i>string</i> mpls ingress-statistics

Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

lsp sender (*ipv4-address-no-zone | ipv6-address-no-zone*) **lsp-name string**

Synopsis	Enter the lsp list instance
Context	configure router string mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) lsp-name string
Tree	lsp
Introduced	16.0.R1
Platforms	All

sender (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Sender address
Context	configure router string mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) lsp-name string
Tree	lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

lsp-name string

Synopsis	LSP name
Context	configure router string mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) lsp-name string
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect statistics
Context	configure router <i>string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) lsp-name <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
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Context	configure <i>router string</i> mpls ingress-statistics lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>lsp-name string stat-mode keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

p2mp-template-lsp sender (*ipv4-address-no-zone | ipv6-address-no-zone*) **rsvp-session-name** *string*

Synopsis	Enter the p2mp-template-lsp list instance
Context	configure <i>router string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>rsvp-session-name string</i>
Tree	p2mp-template-lsp
Introduced	16.0.R1
Platforms	All

sender (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Sender address
Context	configure <i>router string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>rsvp-session-name string</i>
Tree	p2mp-template-lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rsvp-session-name *string*

Synopsis	RSVP session name
Context	configure <i>router string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>rsvp-session-name string</i>
Tree	p2mp-template-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	configure router <i>string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	configure router <i>string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false

Introduced	16.0.R1
Platforms	All

max-stats *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	configure router <i>string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> max-stats <i>number</i>
Tree	max-stats
Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	configure router <i>string</i> mpls ingress-statistics p2mp-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

p2p-template-lsp **sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **rsvp-session-name** *string*

Synopsis	Enter the p2p-template-lsp list instance
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i>

Tree	p2p-template-lsp
Introduced	16.0.R1
Platforms	All

sender (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i>
Tree	p2p-template-lsp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rsvp-session-name *string*

Synopsis	RSVP session name
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i>
Tree	p2p-template-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>

Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

max-stats *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> max-stats <i>number</i>
Tree	max-stats

Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

stat-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	configure router <i>string</i> mpls ingress-statistics p2p-template-lsp sender (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) rsvp-session-name <i>string</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

interface [**interface-name**] *reference*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> mpls interface <i>reference</i>
Tree	interface
Description	<p>Commands in this context configure the attributes for MPLS protocol support on an IP interface.</p> <p>MPLS commands are not executed on an IP interface where MPLS is not enabled. An MPLS interface must be explicitly enabled (admin-state enabled).</p> <p>The MPLS interface must be admin-state disabled to delete the interface definition.</p> <p>A corresponding RSVP interface must also be configured. The MPLS interface cannot be deleted without also deleting the RSVP interface.</p>
Introduced	16.0.R1
Platforms	All

[interface-name] *reference*

Synopsis	Router interface name
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Context	configure router string mpls interface reference
Tree	interface
Reference	configure router string interface string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-group *reference*

Synopsis	Administrative groups supported by the interface
Context	configure router string mpls interface reference admin-group reference
Tree	admin-group
Description	<p>This command specifies the administrative groups that the interface supports.</p> <p>This information is advertised as part of OSPF and IS-IS to help CSPF compute constrained LSPs that must include or exclude certain administrative groups. An MPLS interface is assumed to belong to all the administrative groups unless this command is issued under the interface configuration. With this command configured, the interface is assumed to belong to only the groups specifically configured in this command.</p> <p>Only the administrative groups bound to an MPLS interface are advertised in TE link TLVs and sub-TLVs when the traffic-engineering option is enabled in IS-IS or OSPF. IES and VPRN interfaces do not have their attributes advertised in TE TLVs.</p>
Reference	configure routing-options if-attribute admin-group string
Max. Instances	32
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the MPLS interface
Context	configure router string mpls interface reference admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

label-map [[in-label](#)] *number*

Synopsis	Enter the label-map list instance
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i>
Tree	label-map
Introduced	16.0.R1
Platforms	All

[in-label] *number*

Synopsis	Match the incoming MPLS label
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i>
Tree	label-map
Range	32 to 1048575
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the label map
Context	configure router <i>string</i> mpls interface <i>reference</i> label-map <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

pop**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Pop (remove) the incoming label and forward packet based on service header
Context	configure router string mpls interface reference label-map number pop
Tree	pop
Notes	The following elements are part of a choice: pop or swap .
Introduced	16.0.R1
Platforms	All

swap

Synopsis	Enable the swap context
Context	configure router string mpls interface reference label-map number swap
Tree	swap
Notes	The following elements are part of a choice: pop or swap .
Introduced	16.0.R1
Platforms	All

next-hop *string*

Synopsis	IP address for the next hop
Context	configure router string mpls interface reference label-map number swap next-hop string
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-label (*number* | *keyword*)

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	configure router string mpls interface reference label-map number swap out-label (<i>number</i> <i>keyword</i>)
Tree	out-label
Range	16 to 1048575

Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

srlg-group [*name*] *reference*

Synopsis	Add a list entry for srlg-group
Context	configure router <i>string</i> mpls interface <i>reference</i> srlg-group <i>reference</i>
Tree	srlg-group
Max. Instances	64
Introduced	16.0.R1
Platforms	All

[name] *reference*

Synopsis	Shared Risk Link Group (SRLG) name
Context	configure router <i>string</i> mpls interface <i>reference</i> srlg-group <i>reference</i>
Tree	srlg-group
Reference	configure routing-options if-attribute srlg-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

te-metric *number*

Synopsis	TE metric for the interface
Context	configure router <i>string</i> mpls interface <i>reference</i> te-metric <i>number</i>
Tree	te-metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

least-fill-min-thd *number*

Synopsis	Percentage of the least fill minimum threshold value
Context	configure router <i>string</i> mpls least-fill-min-thd <i>number</i>
Tree	least-fill-min-thd
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

least-fill-reoptim-thd *number*

Synopsis	Percentage of the least fill reoptimization threshold value
Context	configure router <i>string</i> mpls least-fill-reoptim-thd <i>number</i>
Tree	least-fill-reoptim-thd
Range	0 to 100
Default	10
Units	percent
Introduced	16.0.R1
Platforms	All

logger-event-bundling *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Merge and bundle MPLS traps
Context	configure router <i>string</i> mpls logger-event-bundling <i>boolean</i>
Tree	logger-event-bundling
Default	false
Introduced	16.0.R1
Platforms	All

lsp [*lsp-name*] *string*

Synopsis	Enter the lsp list instance
Context	configure router <i>string</i> mpls lsp <i>string</i>
Tree	lsp
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	Labeled Switch path name
Context	configure router <i>string</i> mpls lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp <i>string</i> adaptive <i>boolean</i>
Tree	adaptive
Default	true
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

admin-tag [[name](#)] *reference*

Synopsis	Add a list entry for admin-tag
Context	configure router <i>string</i> mpls lsp <i>string</i> admin-tag <i>reference</i>
Tree	admin-tag
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[name] *reference*

Synopsis	Name of the admin tags
Context	configure router <i>string</i> mpls lsp <i>string</i> admin-tag <i>reference</i>
Tree	admin-tag
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adspec *boolean*

Synopsis	Include ADSPEC object in RSVP messages
Context	configure router <i>string</i> mpls lsp <i>string</i> adspec <i>boolean</i>
Tree	adspec
Default	false
Introduced	16.0.R1
Platforms	All

auto-bandwidth

Synopsis	Enable the auto-bandwidth context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth
Tree	auto-bandwidth
Introduced	16.0.R1

Platforms All

adjust-down

Synopsis Enter the **adjust-down** context

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [adjust-down](#)

Tree [adjust-down](#)

Introduced 16.0.R1

Platforms All

bw number

Synopsis Minimum difference in absolute bandwidth

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [adjust-down](#) [bw](#) *number*

Tree [bw](#)

Range 0 to 6400000

Default 0

Units megabps

Introduced 16.0.R1

Platforms All

percent number

Synopsis Minimum difference in percent

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [adjust-down](#) [percent](#) *number*

Tree [percent](#)

Range 0 to 100

Default 5

Units percent

Introduced 16.0.R1

Platforms All

adjust-up

Synopsis Enter the **adjust-up** context

Context	configure <i>router string mpls lsp string auto-bandwidth adjust-up</i>
Tree	<i>adjust-up</i>
Introduced	16.0.R1
Platforms	All

bw number

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-up bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent number

Synopsis	Minimum difference in percent
Context	configure <i>router string mpls lsp string auto-bandwidth adjust-up percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

fc [fc-name] keyword

Synopsis	Enter the fc list instance
Context	configure <i>router string mpls lsp string auto-bandwidth fc keyword</i>
Tree	<i>fc</i>
Max. Instances	8
Introduced	16.0.R1

Platforms All

[fc-name] *keyword*

Synopsis Forwarding class name for LSP
Context **configure** *router string mpls lsp string auto-bandwidth fc keyword*
Tree **fc**
Options be, l2, af, l1, h2, ef, h1, nc
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

sampling-weight *number*

Synopsis Forwarding class weight for LSP
Context **configure** *router string mpls lsp string auto-bandwidth fc keyword sampling-weight number*
Tree **sampling-weight**
Range 0 to 100
Default 100
Units percent
Introduced 16.0.R1
Platforms All

max-bandwidth *number*

Synopsis Maximum bandwidth of auto-bandwidth to request for the LSP
Context **configure** *router string mpls lsp string auto-bandwidth max-bandwidth number*
Tree **max-bandwidth**
Range 0 to 6400000
Default 100000
Units megabps
Introduced 16.0.R1
Platforms All

min-bandwidth *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth min-bandwidth <i>number</i>
Tree	min-bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

monitor-bandwidth *boolean*

Synopsis	Collect and display auto-bandwidth measurements for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth monitor-bandwidth <i>boolean</i>
Tree	monitor-bandwidth
Default	false
Introduced	16.0.R1
Platforms	All

multipliers

Synopsis	Enter the multipliers context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth multipliers
Tree	multipliers
Introduced	16.0.R1
Platforms	All

adjust-multiplier *number*

Synopsis	Number of collection intervals in the adjust interval
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth multipliers adjust-multiplier <i>number</i>
Tree	adjust-multiplier
Range	1 to 16383
Introduced	16.0.R1

Platforms All

sample-multiplier *number*

Synopsis Multiplier for collection intervals in a sample interval

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [multipliers](#) [sample-multiplier](#) *number*

Tree [sample-multiplier](#)

Range 1 to 511

Introduced 16.0.R1

Platforms All

overflow-limit

Synopsis Enable the **overflow-limit** context

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [overflow-limit](#)

Tree [overflow-limit](#)

Introduced 16.0.R1

Platforms All

bw *number*

Synopsis Minimum difference in absolute bandwidth

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [overflow-limit](#) [bw](#) *number*

Tree [bw](#)

Range 1 to 6400000

Units megabps

Introduced 16.0.R1

Platforms All

number *number*

Synopsis Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt

Context **configure** [router](#) *string* [mpls lsp](#) *string* [auto-bandwidth](#) [overflow-limit](#) [number](#) *number*

Tree [number](#)

Range 1 to 10

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	configure <i>router string mpls lsp string auto-bandwidth overflow-limit threshold number</i>
Tree	threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

underflow-limit

Synopsis	Enable the underflow-limit context
Context	configure <i>router string mpls lsp string auto-bandwidth underflow-limit</i>
Tree	underflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	configure <i>router string mpls lsp string auto-bandwidth underflow-limit bw number</i>
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth underflow-limit number <i>number</i>
Tree	number
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth underflow-limit threshold <i>number</i>
Tree	threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

use-last-adj-bw

Synopsis	Enable the use-last-adj-bw context
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth use-last-adj-bw
Tree	use-last-adj-bw
Introduced	16.0.R5
Platforms	All

secondary-retry-limit (*number* | *keyword*)

Synopsis	Maximum number of retry limits for secondary paths
Context	configure router <i>string</i> mpls lsp <i>string</i> auto-bandwidth use-last-adj-bw secondary-retry-limit (<i>number</i> <i>keyword</i>)
Tree	secondary-retry-limit

Description	This command configures the maximum number of retry attempts for secondary paths. After each successful attempt, the counter is reset to zero.
Range	1 to 10000
Default	5
Options	infinite
Introduced	16.0.R5
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd bfd-template <i>reference</i>
Tree	bfd-template
Reference	configure bfd bfd-template <i>string</i>
Introduced	16.0.R1
Platforms	All

failure-action *keyword*

Synopsis	Action when LSP BFD fails on the RSVP SR-TE LSP
Context	configure <i>router string mpls lsp string bfd failure-action keyword</i>
Tree	failure-action
Description	The command specifies the action when LSP BFD fails on an RSVP, SR-TE, or LDP LSP. Regardless of the failure action specified, when the BFD session goes down on the LSP, the system generates an SNMP trap.
Default	none
Options	none, down, failover, failover-or-down
Introduced	16.0.R1
Platforms	All

lsp-ping-interval (*number | keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	configure <i>router string mpls lsp string bfd lsp-ping-interval (number keyword)</i>
Tree	lsp-ping-interval
Range	60 to 300
Default	60
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	configure <i>router string mpls lsp string bfd return-path-label number</i>
Tree	return-path-label
Description	This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet. The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	All

bgp-shortcut *boolean*

Synopsis	Include LSP for BGP routes
Context	configure router <i>string</i> mpls lsp <i>string</i> bgp-shortcut <i>boolean</i>
Tree	bgp-shortcut
Introduced	16.0.R1
Platforms	All

bgp-transport-tunnel *boolean*

Synopsis	Include LSP as transport LSP for labeled BGP routes
Context	configure router <i>string</i> mpls lsp <i>string</i> bgp-transport-tunnel <i>boolean</i>
Tree	bgp-transport-tunnel
Introduced	16.0.R1
Platforms	All

binding-sid *number*

Synopsis	Binding SID for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> binding-sid <i>number</i>
Tree	binding-sid
Description	This command binds a label to the LSP. The label value must belong to the reserved label block that is configured with the configure router mpls lsp-bsid-block command.
Range	32 to 1048575
Introduced	22.10.R1
Platforms	All

class-forwarding

Synopsis	Enable the class-forwarding context
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding
Tree	class-forwarding
Introduced	16.0.R1
Platforms	All

forwarding-set

Synopsis	Enter the forwarding-set context
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding forwarding-set
Tree	forwarding-set
Notes	The following elements are part of a choice: (default-lsp and fc) or forwarding-set .
Introduced	16.0.R1
Platforms	All

policy reference

Synopsis	Name for the class based forwarding policy for LSP instances
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding forwarding-set policy reference
Tree	policy
Reference	configure router <i>string</i> mpls class-forwarding-policy string
Introduced	16.0.R1
Platforms	All

set number

Synopsis	Forwarding set ID
Context	configure router <i>string</i> mpls lsp <i>string</i> class-forwarding forwarding-set set number
Tree	set
Range	1 to 6
Introduced	16.0.R1
Platforms	All

class-type number

Synopsis	Class type for an LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> class-type number
Tree	class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

accounting-policy *reference*

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

collect-stats *boolean*

Synopsis	Collect LSP statistics
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics collect-stats <i>boolean</i>
Tree	collect-stats
Description	When configured to true , this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	configure router <i>string</i> mpls lsp <i>string</i> egress-statistics stat-mode <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

entropy-label *keyword*

Synopsis	Entropy label
Context	configure router <i>string</i> mpls lsp <i>string</i> entropy-label <i>keyword</i>
Tree	entropy-label
Options	false, true
Introduced	16.0.R1
Platforms	All

exclude-admin-group *reference*

Synopsis	Name of admin group excluded when LSP is set up
Context	configure router <i>string</i> mpls lsp <i>string</i> exclude-admin-group <i>reference</i>
Tree	exclude-admin-group
Reference	configure routing-options <i>if-attribute</i> admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

exclude-node (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Exclude Routers object to be included in the bypass path message
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Context	configure router <i>string</i> mpls lsp <i>string</i> exclude-node (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	exclude-node
Introduced	16.0.R1
Platforms	All

fallback-path-computation-method *keyword*

Synopsis	Fallback path computation method
Context	configure router <i>string</i> mpls lsp <i>string</i> fallback-path-computation-method <i>keyword</i>
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.2.R1
Platforms	All

fast-reroute

Synopsis	Enable the fast-reroute context
Context	configure router <i>string</i> mpls lsp <i>string</i> fast-reroute
Tree	fast-reroute
Introduced	16.0.R1
Platforms	All

frr-method *keyword*

Synopsis	Fast Reroute method
Context	configure router <i>string</i> mpls lsp <i>string</i> fast-reroute frr-method <i>keyword</i>
Tree	frr-method
Options	one-to-one, facility
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	configure router <i>string</i> mpls lsp <i>string</i> fast-reroute hop-limit <i>number</i>
Tree	hop-limit
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> fast-reroute node-protect <i>boolean</i>
Tree	node-protect
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> fast-reroute propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

from (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address of this LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> from (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	from

Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Maximum number of hops that an LSP can traverse including ingress and egress routers
Context	configure router <i>string</i> mpls lsp <i>string</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Default	255
Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>string</i> mpls lsp <i>string</i> igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	configure router <i>string</i> mpls lsp <i>string</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	configure router <i>string</i> mpls lsp <i>string</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte

Description	When configured to true , the router performs the local SPF and the SR-TE LSP is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	23.3.R1
Platforms	All

lfa-type *keyword*

Synopsis	LSP usage in LFA SPF
Context	configure router <i>string</i> mpls lsp <i>string</i> igp-shortcut lfa-type <i>keyword</i>
Tree	lfa-type
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	16.0.R1
Platforms	All

relative-metric *number*

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	configure router <i>string</i> mpls lsp <i>string</i> igp-shortcut relative-metric <i>number</i>
Tree	relative-metric
Range	-10 to 10
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	16.0.R1
Platforms	All

include-admin-group *reference*

Synopsis	Admin group name included when LSP is set up
Context	configure router <i>string</i> mpls lsp <i>string</i> include-admin-group <i>reference</i>
Tree	include-admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32

Introduced 16.0.R1
Platforms All

label-stack-reduction *boolean*

Synopsis Enable/disable label compression for LSP path.
Context **configure** *router string mpls lsp string label-stack-reduction boolean*
Tree [label-stack-reduction](#)
Default false
Introduced 19.7.R1
Platforms All

ldp-over-rsvp *boolean*

Synopsis Include this LSP in LDP over RSVP
Context **configure** *router string mpls lsp string ldp-over-rsvp boolean*
Tree [ldp-over-rsvp](#)
Introduced 16.0.R1
Platforms All

least-fill *boolean*

Synopsis Enable least-fill path selection for this LSP
Context **configure** *router string mpls lsp string least-fill boolean*
Tree [least-fill](#)
Default false
Introduced 16.0.R1
Platforms All

load-balancing-weight *number*

Synopsis Load balancing weight for an MPLS LSP
Context **configure** *router string mpls lsp string load-balancing-weight number*
Tree [load-balancing-weight](#)
Range 1 to 4294967295

Introduced	16.0.R1
Platforms	All

local-sr-protection *keyword*

Synopsis	Local SR protection preference for LSP path computation
Context	configure <i>router string mpls lsp string local-sr-protection keyword</i>
Tree	local-sr-protection
Default	preferred
Options	none, preferred, mandatory
Introduced	19.7.R1
Platforms	All

lsp-self-ping *keyword*

Synopsis	LSP Self Ping activation status on the RSVP-TE LSP
Context	configure <i>router string mpls lsp string lsp-self-ping keyword</i>
Tree	lsp-self-ping
Description	When configured, the system uses this setting for the LSP regardless of the value configured under configure router mpls lsp-self-ping rsvp-te . When unconfigured, the command inherits the value configured under configure router mpls lsp-self-ping rsvp-te .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

main-ct-retry-limit *number*

Synopsis	Maximum number of retries before reverting to backup CT
Context	configure <i>router string mpls lsp string main-ct-retry-limit number</i>
Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

max-sr-labels

Synopsis	Enter the max-sr-labels context
Context	configure router <i>string</i> mpls lsp <i>string</i> max-sr-labels
Tree	max-sr-labels
Introduced	16.0.R1
Platforms	All

additional-frr-labels *number*

Synopsis	Value for the maximum additional overhead labels
Context	configure router <i>string</i> mpls lsp <i>string</i> max-sr-labels additional-frr-labels <i>number</i>
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

label-stack-size *number*

Synopsis	Maximum label stack size
Context	configure router <i>string</i> mpls lsp <i>string</i> max-sr-labels label-stack-size <i>number</i>
Tree	label-stack-size
Description	This command configures the maximum label stack size of the primary path of the SR-TE LSP.
Range	1 to 11
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	LSP metric that forces to a constant value
Context	configure router <i>string</i> mpls lsp <i>string</i> metric <i>number</i>
Tree	metric
Range	0 to 16777215
Introduced	16.0.R1

Platforms All

metric-type *keyword*

Synopsis Metric type used for LSP path computation

Context **configure** *router string mpls lsp string metric-type keyword*

Tree [metric-type](#)

Default igp

Options igp, te

Introduced 19.7.R1

Platforms All

override-tunnel-elc *boolean*

Synopsis Override any received entropy label capability

Context **configure** *router string mpls lsp string override-tunnel-elc boolean*

Tree [override-tunnel-elc](#)

Description When configured to **true**, this command allows the system to override any received entropy label capability advertisement.
When configured to **false**, this command disables the override.

Default false

Introduced 21.10.R1

Platforms All

p2mp-id *number*

Synopsis Unique identifier as Point-to-Multipoint (P2MP) identifier

Context **configure** *router string mpls lsp string p2mp-id number*

Tree [p2mp-id](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

path-computation-method *keyword*

Synopsis	Path computation method
Context	configure router <i>string</i> mpls lsp <i>string</i> path-computation-method <i>keyword</i>
Tree	path-computation-method
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

path-profile [*profile-id*] *number*

Synopsis	Enter the path-profile list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> path-profile <i>number</i>
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	16.0.R1
Platforms	All

[profile-id] *number*

Synopsis	Profile ID for the specified LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> path-profile <i>number</i>
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

path-group *number*

Synopsis	Path-group ID for the specified LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> path-profile <i>number</i> path-group <i>number</i>
Tree	path-group
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

pce-associations

Synopsis	Enter the pce-associations context
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	22.5.R1
Platforms	All

diversity [**diversity-name**] *reference*

Synopsis	Add a list entry for diversity
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations diversity <i>reference</i>
Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[diversity-name] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations diversity <i>reference</i>
Tree	diversity

Reference	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

policy [[policy-name](#)] *reference*

Synopsis	Add a list entry for policy
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[policy-name] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Reference	configure router <i>string</i> pcep pcc pce-associations policy <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

pce-control *boolean*

Synopsis	Enable PCE controlled LSP mode of operation
Context	configure router <i>string</i> mpls lsp <i>string</i> pce-control <i>boolean</i>
Tree	pce-control
Description	When configured to true , this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.

When configured to **false**, the PCE-controlled mode of operation for the LSP has no effect.

Default	false
Introduced	16.0.R1
Platforms	All

pce-report *keyword*

Synopsis	Global configuration of reporting to PCE to override
Context	configure <i>router string mpls lsp string pce-report keyword</i>
Tree	pce-report
Options	false, true
Introduced	16.0.R1
Platforms	All

primary [[path-name](#)] *reference*

Synopsis	Enter the primary list instance
Context	configure <i>router string mpls lsp string primary reference</i>
Tree	primary
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[path-name] *reference*

Synopsis	Path name
Context	configure <i>router string mpls lsp string primary reference</i>
Tree	primary
Reference	configure <i>router string mpls path string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> adaptive <i>boolean</i>
Tree	adaptive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-class-type *number*

Synopsis	Class-type for the LSP or LSP path
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> backup-class-type <i>number</i>
Tree	backup-class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1

Platforms All

bfd

Synopsis Enter the **bfd** context

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#)

Tree [bfd](#)

Description Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.

Introduced 16.0.R1

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#) [bfd-liveness](#) *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 16.0.R1

Platforms All

bfd-template *reference*

Synopsis BFD template to be used by LSP BFD sessions

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#) [bfd-template](#) *reference*

Tree [bfd-template](#)

Reference **configure** [bfd](#) [bfd-template](#) *string*

Introduced 16.0.R1

Platforms All

lsp-ping-interval (*number* | *keyword*)

Synopsis Interval for periodic LSP ping for BFD bootstrapping

Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bfd](#) [lsp-ping-interval](#) (*number* | *keyword*)

Tree [lsp-ping-interval](#)

Range	60 to 300
Default	60
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

return-path-label *number*

Synopsis	S-BFD return-path label
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> bfd return-path-label <i>number</i>
Tree	return-path-label
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up

- the initial administrative state of the LSP
- the retry signaling of non-standby secondary paths

Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	All

class-type *number*

Synopsis	Class-type
Context	configure <i>router string mpls lsp string primary reference class-type number</i>
Tree	class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

exclude-admin-group

Synopsis	Enable the exclude-admin-group context
Context	configure <i>router string mpls lsp string primary reference exclude-admin-group</i>
Tree	exclude-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	configure <i>router string mpls lsp string primary reference exclude-admin-group group reference</i>
Tree	group
Reference	configure <i>routing-options if-attribute admin-group string</i>
Max. Instances	32
Min. Instances	1

Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> include-admin-group
Tree	include-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> include-admin-group group <i>reference</i>
Tree	group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> priority
Tree	priority
Introduced	16.0.R1
Platforms	All

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary <i>reference</i> record-label <i>boolean</i>
Tree	record-label
Default	true
Introduced	16.0.R1
Platforms	All

primary-p2mp-instance [[instance-name](#)] *string*

Synopsis	Enter the primary-p2mp-instance list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i>
Tree	primary-p2mp-instance
Max. Instances	1
Introduced	16.0.R4
Platforms	All

[instance-name] *string*

Synopsis	P2MP LSP instance name
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i>
Tree	primary-p2mp-instance
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> adaptive <i>boolean</i>
Tree	adaptive
Introduced	16.0.R4

Platforms All

admin-state *keyword*

Synopsis Administrative state of the LSP path

Context **configure** *router string mpls lsp string primary-p2mp-instance string admin-state keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R4

Platforms All

bandwidth *number*

Synopsis Amount of bandwidth to be reserved

Context **configure** *router string mpls lsp string primary-p2mp-instance string bandwidth number*

Tree [bandwidth](#)

Range 0 to 6400000

Default 0

Units megabps

Introduced 16.0.R4

Platforms All

exclude-admin-group

Synopsis Enable the **exclude-admin-group** context

Context **configure** *router string mpls lsp string primary-p2mp-instance string exclude-admin-group*

Tree [exclude-admin-group](#)

Introduced 16.0.R4

Platforms All

group *reference*

Synopsis Groups to exclude when the LSP path is setup

Context	configure <i>router string mpls lsp string primary-p2mp-instance string exclude-admin-group group reference</i>
Tree	<i>group</i>
Reference	configure <i>routing-options if-attribute admin-group string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure <i>router string mpls lsp string primary-p2mp-instance string hop-limit number</i>
Tree	<i>hop-limit</i>
Range	2 to 255
Introduced	16.0.R4
Platforms	All

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure <i>router string mpls lsp string primary-p2mp-instance string include-admin-group</i>
Tree	<i>include-admin-group</i>
Introduced	16.0.R4
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	configure <i>router string mpls lsp string primary-p2mp-instance string include-admin-group group reference</i>
Tree	<i>group</i>
Reference	configure <i>routing-options if-attribute admin-group string</i>

Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> priority
Tree	priority
Introduced	21.10.R1
Platforms	All

hold-priority *number*

Synopsis	Hold priority when not enough bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	21.10.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	21.10.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R4
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> record-label <i>boolean</i>
Tree	record-label
Default	true
Introduced	16.0.R4
Platforms	All

s2l-path [**path-name**] *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the s2l-path list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference to (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	s2l-path
Max. Instances	650
Introduced	16.0.R4
Platforms	All

[path-name] *reference*

Synopsis	P2MP LSP name
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference to (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	s2l-path

Reference	configure router <i>string</i> mpls path <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

to ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	System IP address of the egress router
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference</i> to (ipv4-address-no-zone ipv6-address-no-zone)
Tree	s2l-path
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the S2L sub-LSP for a P2MP LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> primary-p2mp-instance <i>string</i> s2l-path <i>reference</i> to (ipv4-address-no-zone ipv6-address-no-zone) admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin groups via session attribute object
Context	configure router <i>string</i> mpls lsp <i>string</i> propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

retry-limit *number*

Synopsis	Number of attempts to re-establish LSP after it fails
Context	configure router <i>string</i> mpls lsp <i>string</i> retry-limit <i>number</i>
Tree	retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

retry-timer *number*

Synopsis	Time for LSP re-establishment attempts after failure
Context	configure router <i>string</i> mpls lsp <i>string</i> retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer for the LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> revert-timer <i>number</i>
Tree	revert-timer
Range	1 to 4320
Units	minutes
Introduced	16.0.R1
Platforms	All

rsvp-resv-style *keyword*

Synopsis	Reservation style for RSVP
Context	configure router <i>string</i> mpls lsp <i>string</i> rsvp-resv-style <i>keyword</i>
Tree	rsvp-resv-style
Default	se

Options	se, ff
Introduced	16.0.R1
Platforms	All

secondary [[path-name](#)] *reference*

Synopsis	Enter the secondary list instance
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i>
Tree	secondary
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[\[path-name\]](#) *reference*

Synopsis	Path name
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i>
Tree	secondary
Reference	configure router <i>string</i> mpls path <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean*

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> adaptive <i>boolean</i>
Tree	adaptive
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP path
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Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth to be reserved
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

bfd

Synopsis	Enter the bfd context
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bfd
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	19.7.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bfd bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	19.7.R1

Platforms All

bfd-template *reference*

Synopsis BFD template to be used by LSP BFD sessions

Context **configure** [router](#) *string* [mpls lsp](#) *string* [secondary](#) *reference* [bfd](#) [bfd-template](#) *reference*

Tree [bfd-template](#)

Reference **configure** [bfd](#) [bfd-template](#) *string*

Introduced 19.7.R1

Platforms All

lsp-ping-interval (*number* | *keyword*)

Synopsis Interval for periodic LSP ping for BFD bootstrapping

Context **configure** [router](#) *string* [mpls lsp](#) *string* [secondary](#) *reference* [bfd](#) [lsp-ping-interval](#) (*number* | *keyword*)

Tree [lsp-ping-interval](#)

Range 60 to 300

Default 60

Units seconds

Options none

Introduced 19.7.R1

Platforms All

return-path-label *number*

Synopsis S-BFD return-path label

Context **configure** [router](#) *string* [mpls lsp](#) *string* [secondary](#) *reference* [bfd](#) [return-path-label](#) *number*

Tree [return-path-label](#)

Description This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.

The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	All

class-type *number*

Synopsis	Class-type
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Introduced	16.0.R1
Platforms	All

exclude-admin-group

Synopsis	Enable the exclude-admin-group context
Context	configure <i>router string mpls lsp string secondary reference</i> exclude-admin-group
Tree	exclude-admin-group
Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	configure <i>router string mpls lsp string secondary reference</i> exclude-admin-group group reference
Tree	group
Reference	configure <i>routing-options if-attribute</i> admin-group string
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	configure <i>router string mpls lsp string secondary reference</i> hop-limit number
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

include-admin-group

Synopsis	Enable the include-admin-group context
Context	configure <i>router string mpls lsp string secondary reference</i> include-admin-group
Tree	include-admin-group

Introduced	16.0.R1
Platforms	All

group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> include-admin-group group <i>reference</i>
Tree	group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

path-preference *number*

Synopsis	Path preference for the secondary standby path
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> path-preference <i>number</i>
Tree	path-preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

priority

Synopsis	Enter the priority context
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> priority
Tree	priority
Introduced	16.0.R1
Platforms	All

hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> priority hold-priority <i>number</i>
Tree	hold-priority
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> priority setup-priority <i>number</i>
Tree	setup-priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> record <i>boolean</i>
Tree	record
Default	true
Introduced	16.0.R1
Platforms	All

record-label *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> record-label <i>boolean</i>
Tree	record-label
Default	true

Introduced	16.0.R1
Platforms	All

srlg *boolean*

Synopsis	Use SRLG constraint in secondary path computation for an LSP at the head-end LER
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> srlg <i>boolean</i>
Tree	srlg
Default	false
Introduced	16.0.R1
Platforms	All

standby *boolean*

Synopsis	Keep secondary path indefinitely in hot standby state
Context	configure router <i>string</i> mpls lsp <i>string</i> secondary <i>reference</i> standby <i>boolean</i>
Tree	standby
Default	false
Introduced	16.0.R1
Platforms	All

soft-preemption *boolean*

Synopsis	Enable soft preemption
Context	configure router <i>string</i> mpls lsp <i>string</i> soft-preemption <i>boolean</i>
Tree	soft-preemption
Description	<p>When configured to true, the P2MP LSP preemption is governed by the configure router rsvp preemption-timer value.</p> <p>When configured to false, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.</p> <p>For P2P LSPs, soft preemption is always enabled and cannot be disabled.</p>
Introduced	22.2.R1
Platforms	All

to (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	configure <i>router string mpls lsp string to</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	<i>to</i>
Introduced	16.0.R1
Platforms	All

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP for bypass protection, point to multipoint, segment routing or MPLS-TP static LSP
Context	configure <i>router string mpls lsp string type keyword</i>
Tree	<i>type</i>
Options	p2p-rsvp, p2p-static-mpls, p2p-rsvp-bypass, p2mp-rsvp, p2mp-rsvp-auto, p2p-rsvp-mesh, p2p-rsvp-one-hop, p2p-sr-te, p2p-sr-te-mesh, p2p-sr-te-one-hop, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

vprn-auto-bind *boolean*

Synopsis	Include this LSP in auto-bind for VPRN services
Context	configure <i>router string mpls lsp string vprn-auto-bind boolean</i>
Tree	<i>vprn-auto-bind</i>
Introduced	16.0.R1
Platforms	All

lsp-bsid-block *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block for binding SIDs
Context	configure <i>router</i> <i>string</i> <i>mpls</i> lsp-bsid-block <i>reference</i>
Tree	lsp-bsid-block
Description	This command references a pre-existing reserved label block for statically configured binding SIDs.
Reference	configure <i>router</i> <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	22.7.R1
Platforms	All

lsp-history

Synopsis	Enable the lsp-history context
Context	configure <i>router</i> <i>string</i> <i>mpls</i> lsp-history
Tree	lsp-history
Description	<p>Commands in this context control the recording of LSP history events.</p> <p>When the context is created, memory is allocated for storing up to 100 of the most recent LSP history events.</p> <p>When the context is deleted, memory is deallocated.</p>
Introduced	22.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of LSP history recording
Context	configure <i>router</i> <i>string</i> <i>mpls</i> lsp-history admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	22.10.R1
Platforms	All

lsp-init-retry-timeout *number*

Synopsis	LSP initial retry timeout
Context	configure <i>router string mpls lsp-init-retry-timeout number</i>
Tree	lsp-init-retry-timeout
Range	10 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

lsp-self-ping

Synopsis	Enter the lsp-self-ping context
Context	configure <i>router string mpls lsp-self-ping</i>
Tree	lsp-self-ping
Description	<p>Commands in this context configure LSP Self Ping parameters.</p> <p>LSP Self Ping checks that the datapath of an RSVP LSP has been programmed by all LSRs along its path before switching the traffic to it. If enabled, LSP Self Ping packets are sent periodically at a configurable interval following the receipt of the RESV message for an RSVP LSP path following an MBB or other event where the active path changes while the previous active path stayed up. The router will not switch traffic to the new path until an LSP Self Ping reply is received from the far-end LER.</p> <p>When configured under the MPLS context, LSP Self Ping is enabled for all RSVP LSPs, unless it is explicitly disabled for a given LSP.</p>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

interval *number*

Synopsis	MPLS periodic LSP Self Ping interval
Context	configure <i>router string mpls lsp-self-ping interval number</i>
Tree	interval
Description	<p>This command configures the interval at which LSP Self Ping packets are periodically sent on a candidate path of an RSVP LSP.</p> <p>This value is used for all LSPs that have LSP Self Ping enabled.</p>
Range	1 to 10

Default	1
Units	seconds
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rsvp-te boolean

Synopsis	Activate LSP Self Ping on RSVP-TE LSPs
Context	configure router <i>string</i> mpls lsp-self-ping rsvp-te boolean
Tree	rsvp-te
Description	When configured to true , this command enables LSP Self Ping on all RSVP-TE LSPs, unless an individual LSP has this explicitly disabled under the configure router mpls lsp lsp-self-ping command or in the LSP template. When configured to false , this command disables LSP Self Ping on all RSVP-TE LSPs.
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout number

Synopsis	MPLS LSP Self Ping timeout
Context	configure router <i>string</i> mpls lsp-self-ping timeout number
Tree	timeout
Description	This command configures a timeout value for the LSP Self Ping timer. The LSP Self Ping timer starts when the RESV message is received for an LSP. The system periodically sends LSP Self Ping packets until the timer expires or the first LSP Self Ping reply is received, whichever comes first. If the timer expires before an LSP Self Ping packet is received, the configured timeout action is performed.
Range	3 to 3600
Default	300
Units	seconds
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timeout-action *keyword*

Synopsis	Action taken when LSP Self Ping timer expires
Context	configure router <i>string</i> mpls lsp-self-ping timeout-action <i>keyword</i>
Tree	timeout-action
Default	retry
Options	retry, switch
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lsp-template [**template-name**] *string*

Synopsis	Enter the lsp-template list instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i>
Tree	lsp-template
Description	Commands in this context configure the attributes of an LSP template that can be referenced by a client application when dynamic LSPs must be created.
Max. Instances	4096
Introduced	16.0.R1
Platforms	All

[template-name] *string*

Synopsis	LSP template name
Context	configure router <i>string</i> mpls lsp-template <i>string</i>
Tree	lsp-template
Description	This command specifies the name of the LSP template. An LSP template name and LSP name must not be the same.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adaptive *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable make-before-break functionality
Context	configure router <i>string</i> mpls lsp-template <i>string</i> adaptive <i>boolean</i>
Tree	adaptive
Default	true
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

admin-tag [*name*] *reference*

Synopsis	Add a list entry for admin-tag
Context	configure router <i>string</i> mpls lsp-template <i>string</i> admin-tag <i>reference</i>
Tree	admin-tag
Max. Instances	4
Introduced	16.0.R1
Platforms	All

[name] *reference*

Synopsis	Name of the admin tags
Context	configure router <i>string</i> mpls lsp-template <i>string</i> admin-tag <i>reference</i>

Tree	admin-tag
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adspec *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include ADSPEC objects in RSVP messages
Context	configure router <i>string</i> mpls lsp-template <i>string</i> adspec <i>boolean</i>
Tree	adspec
Default	false
Introduced	16.0.R1
Platforms	All

auto-bandwidth

Synopsis	Enable the auto-bandwidth context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth
Tree	auto-bandwidth
Introduced	16.0.R1
Platforms	All

adjust-down

Synopsis	Enter the adjust-down context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth adjust-down
Tree	adjust-down
Introduced	16.0.R1
Platforms	All

bw number

Synopsis	Minimum difference in absolute bandwidth
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth adjust-down bw <i>number</i>
Tree	bw
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent number

Synopsis	Minimum difference in percent
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth adjust-down percent <i>number</i>
Tree	percent
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

adjust-up

Synopsis	Enter the adjust-up context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth adjust-up
Tree	adjust-up
Introduced	16.0.R1
Platforms	All

bw number

Synopsis	Minimum difference in absolute bandwidth
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth adjust-up bw <i>number</i>
Tree	bw

Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

percent *number*

Synopsis	Minimum difference in percent
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth adjust-up percent <i>number</i>
Tree	percent
Range	0 to 100
Default	5
Units	percent
Introduced	16.0.R1
Platforms	All

fc [**fc-name**] *keyword*

Synopsis	Enter the fc list instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth fc <i>keyword</i>
Tree	fc
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[fc-name] *keyword*

Synopsis	Forwarding class name for LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

sampling-weight *number*

Synopsis	Forwarding class weight for LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth fc <i>keyword</i> sampling-weight <i>number</i>
Tree	sampling-weight
Range	0 to 100
Default	100
Units	percent
Introduced	16.0.R1
Platforms	All

max-bandwidth *number*

Synopsis	Maximum bandwidth of auto-bandwidth to request for the LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth max-bandwidth <i>number</i>
Tree	max-bandwidth
Range	0 to 6400000
Default	100000
Units	megabps
Introduced	16.0.R1
Platforms	All

min-bandwidth *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth min-bandwidth <i>number</i>
Tree	min-bandwidth
Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1

Platforms All

monitor-bandwidth *boolean*

Synopsis Collect and display auto-bandwidth measurements for the LSP

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [monitor-bandwidth](#) *boolean*

Tree [monitor-bandwidth](#)

Default false

Introduced 16.0.R1

Platforms All

multipliers

Synopsis Enter the **multipliers** context

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [multipliers](#)

Tree [multipliers](#)

Introduced 16.0.R1

Platforms All

adjust-multiplier *number*

Synopsis Number of collection intervals in the adjust interval

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [multipliers](#) [adjust-multiplier](#) *number*

Tree [adjust-multiplier](#)

Range 1 to 16383

Introduced 16.0.R1

Platforms All

sample-multiplier *number*

Synopsis Multiplier for collection intervals in a sample interval

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [multipliers](#) [sample-multiplier](#) *number*

Tree [sample-multiplier](#)

Range	1 to 511
Introduced	16.0.R1
Platforms	All

overflow-limit

Synopsis	Enable the overflow-limit context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth overflow-limit
Tree	overflow-limit
Introduced	16.0.R1
Platforms	All

bw number

Synopsis	Minimum difference in absolute bandwidth
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth overflow-limit bw <i>number</i>
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number number

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth overflow-limit number <i>number</i>
Tree	number
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth overflow-limit threshold <i>number</i>
Tree	threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

underflow-limit

Synopsis	Enable the underflow-limit context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth underflow-limit
Tree	underflow-limit
Introduced	16.0.R1
Platforms	All

bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth underflow-limit bw <i>number</i>
Tree	bw
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth underflow-limit number <i>number</i>
Tree	number

Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

threshold *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	configure router <i>string</i> mpls lsp-template <i>string</i> auto-bandwidth underflow-limit threshold <i>number</i>
Tree	threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

backup-class-type *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup class type for this LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> backup-class-type <i>number</i>
Tree	backup-class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Amount of bandwidth reserved for the P2MP instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bandwidth <i>number</i>
Tree	bandwidth

Range	0 to 6400000
Default	0
Units	megabps
Introduced	16.0.R1
Platforms	All

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the bfd context
Context	configure <i>router string mpls lsp-template string bfd</i>
Tree	bfd
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	configure <i>router string mpls lsp-template string bfd bfd-liveness boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

bfd-template *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	configure <i>router string mpls lsp-template string bfd bfd-template reference</i>
Tree	bfd-template
Reference	configure <i>bfd bfd-template string</i>
Introduced	16.0.R1

Platforms All

failure-action *keyword*

Synopsis Action to take when LSP BFD session fails

Context **configure** *router string mpls lsp-template string bfd failure-action keyword*

Tree [failure-action](#)

Default none

Options none, down, failover-or-down

Introduced 16.0.R1

Platforms All

lsp-ping-interval (*number | keyword*)

Synopsis Interval for periodic LSP ping for BFD bootstrapping

Context **configure** *router string mpls lsp-template string bfd lsp-ping-interval (number | keyword)*

Tree [lsp-ping-interval](#)

Range 60 to 300

Default 60

Units seconds

Options none

Introduced 16.0.R1

Platforms All

return-path-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis S-BFD return-path label

Context **configure** *router string mpls lsp-template string bfd return-path-label number*

Tree [return-path-label](#)

Description This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.

The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router.

Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

wait-for-up-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to wait for BFD to become operationally available
Context	configure router <i>string</i> mpls lsp-template <i>string</i> bfd wait-for-up-timer <i>number</i>
Tree	wait-for-up-timer
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> • a path undergoing MBB when BFD is up • the initial administrative state of the LSP • the retry signaling of non-standby secondary paths
Range	1 to 60
Default	4
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bgp-shortcut *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/disable use of RSVP LSP for IPv4 BGP routes.
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>bgp-shortcut</i> <i>boolean</i>
Tree	bgp-shortcut
Introduced	16.0.R1
Platforms	All

bgp-transport-tunnel *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow use of RSVP-TE LSP as transport for tunnel routes
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>bgp-transport-tunnel</i> <i>boolean</i>
Tree	bgp-transport-tunnel
Default	true
Introduced	16.0.R1
Platforms	All

binding-sid *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Request to allocate and bind a label
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>binding-sid</i> <i>boolean</i>
Tree	binding-sid
Description	When configured to true , the system allocates and binds a label to any LSP that is created using the template. When configured to false , this command removes the configuration but this does not affect LSPs that were already created using the template.
Default	false

Introduced 22.10.R1
 Platforms All

class-forwarding



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **class-forwarding** context
 Context **configure** *router string mpls lsp-template string class-forwarding*
 Tree *class-forwarding*
 Introduced 16.0.R1
 Platforms All

forwarding-set



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **forwarding-set** context
 Context **configure** *router string mpls lsp-template string class-forwarding forwarding-set*
 Tree *forwarding-set*
 Notes The following elements are part of a choice: (**default-lsp** and **fc**) or **forwarding-set**.
 Introduced 16.0.R1
 Platforms All

policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name for the class based forwarding policy for LSP instances
 Context **configure** *router string mpls lsp-template string class-forwarding forwarding-set policy reference*
 Tree *policy*

Reference	configure <i>router</i> <i>string</i> <i>mpls class-forwarding-policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	All

set *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding set ID
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>class-forwarding forwarding-set</i> <i>set</i> <i>number</i>
Tree	set
Range	1 to 6
Introduced	16.0.R1
Platforms	All

class-type *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Class type for an LSP template
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>class-type</i> <i>number</i>
Tree	class-type
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

default-path *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default path to be used for signaling LSP instances
Context	configure router <i>string</i> mpls lsp-template <i>string</i> default-path <i>reference</i>
Tree	default-path
Reference	configure router <i>string</i> mpls path <i>string</i>
Introduced	16.0.R1
Platforms	All

egress-statistics**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the egress-statistics context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> egress-statistics
Tree	egress-statistics
Introduced	16.0.R1
Platforms	All

accounting-policy *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	configure router <i>string</i> mpls lsp-template <i>string</i> egress-statistics accounting-policy <i>reference</i>
Tree	accounting-policy
Reference	configure log accounting-policy <i>number</i>
Introduced	16.0.R1
Platforms	All

collect-stats *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect LSP statistics
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>egress-statistics</i> collect-stats <i>boolean</i>
Tree	collect-stats
Description	<p>When configured to true, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.</p> <p>When configured to false, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

stat-mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>egress-statistics</i> stat-mode <i>keyword</i>
Tree	stat-mode
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

entropy-label *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Entropy label for an LSP template
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Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>entropy-label</i> <i>keyword</i>
Tree	entropy-label
Options	false, true
Introduced	16.0.R1
Platforms	All

exclude-admin-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name excluded when LSP is set up
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> exclude-admin-group <i>reference</i>
Tree	exclude-admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

fallback-path-computation-method *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fallback path computation method
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> fallback-path-computation-method <i>keyword</i>
Tree	fallback-path-computation-method
Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.10.R1
Platforms	All

family *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address family that specifies template use in SR-TE LSP
Context	configure <i>router string mpls lsp-template string family keyword</i>
Tree	<i>family</i>
Description	This command specifies the address family for which the LSP template applies in an SR-TE LSP. An LSP template is required for each address family.
Default	ipv4
Options	ipv4, ipv6
Introduced	20.5.R1
Platforms	All

fast-reroute**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the fast-reroute context
Context	configure <i>router string mpls lsp-template string fast-reroute</i>
Tree	<i>fast-reroute</i>
Introduced	16.0.R1
Platforms	All

fr-method *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fast Reroute method for the LSPs that are dynamically created using this LSP template
Context	configure <i>router string mpls lsp-template string fast-reroute fr-method keyword</i>
Tree	<i>fr-method</i>

Default	facility
Options	one-to-one, facility
Introduced	16.0.R1
Platforms	All

hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	configure router <i>string</i> mpls lsp-template <i>string</i> fast-reroute hop-limit <i>number</i>
Tree	hop-limit
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

node-protect *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> fast-reroute node-protect <i>boolean</i>
Tree	node-protect
Default	false
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> fast-reroute propagate-admin-group <i>boolean</i>
Tree	propagate-admin-group
Default	false
Introduced	16.0.R1
Platforms	All

from (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the ingress router for the LSP template
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> from (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	from
Introduced	16.0.R1
Platforms	All

hop-limit *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum hops for an LSP created using this LSP template
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> hop-limit <i>number</i>
Tree	hop-limit
Range	2 to 255
Introduced	16.0.R1
Platforms	All

igp-shortcut**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the igp-shortcut context
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R1
Platforms	All

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	configure router <i>string</i> mpls lsp-template <i>string</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	configure router <i>string</i> mpls lsp-template <i>string</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	When configured to true , the router performs local SPF and the SR-TE LSP template is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command and when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	23.3.R1
Platforms	All

lfa-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP usage in LFA SPF
Context	configure router <i>string</i> mpls lsp-template <i>string</i> igp-shortcut lfa-type <i>keyword</i>

Tree	lfa-type
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	16.0.R1
Platforms	All

relative-metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	configure router <i>string</i> mpls lsp-template <i>string</i> igp-shortcut relative-metric <i>number</i>
Tree	relative-metric
Range	-10 to 10
Notes	The following elements are part of a choice: lfa-type or relative-metric .
Introduced	16.0.R1
Platforms	All

include-admin-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name included when LSP is set up
Context	configure router <i>string</i> mpls lsp-template <i>string</i> include-admin-group <i>reference</i>
Tree	include-admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

label-stack-reduction *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable label compression for LSP path
Context	configure router <i>string</i> mpls lsp-template <i>string</i> label-stack-reduction <i>boolean</i>
Tree	label-stack-reduction
Default	false
Introduced	19.7.R1
Platforms	All

ldp-over-rsvp *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include this LSP in LDP over RSVP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	true
Introduced	16.0.R1
Platforms	All

least-fill *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable least-fill path selection for this LSP template
Context	configure router <i>string</i> mpls lsp-template <i>string</i> least-fill <i>boolean</i>
Tree	least-fill
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Load balancing weight for an MPLS LSP template
Context	configure <i>router string mpls lsp-template string load-balancing-weight number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

local-sr-protection *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local SR protection preference for LSP path computation
Context	configure <i>router string mpls lsp-template string local-sr-protection keyword</i>
Tree	local-sr-protection
Default	preferred
Options	none, preferred, mandatory
Introduced	19.7.R1
Platforms	All

lsp-self-ping *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP Self Ping activation status on RSVP-TE LSP template
Context	configure <i>router string mpls lsp-template string lsp-self-ping keyword</i>
Tree	lsp-self-ping
Description	When configured, the system uses this setting for the LSP template regardless of the value configured under configure router mpls lsp-self-ping rsvp-te .

When unconfigured, the command inherits the value configured under **configure router mpls lsp-self-ping rsvp-te**.

Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

main-ct-retry-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of retries before reverting to backup CT
Context	configure router <i>string</i> mpls lsp-template <i>string</i> main-ct-retry-limit <i>number</i>
Tree	main-ct-retry-limit
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

max-sr-labels



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the max-sr-labels context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> max-sr-labels
Tree	max-sr-labels
Introduced	16.0.R1
Platforms	All

additional-frr-labels *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of additional overhead labels
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Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>max-sr-labels</i> <i>additional-frr-labels</i> <i>number</i>
Tree	additional-frr-labels
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

label-stack-size *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size for the maximum segment routing label stack
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>max-sr-labels</i> <i>label-stack-size</i> <i>number</i>
Tree	label-stack-size
Range	1 to 11
Introduced	16.0.R1
Platforms	All

metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP template metric
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>metric</i> <i>number</i>
Tree	metric
Range	0 to 16777215
Default	0
Introduced	16.0.R1
Platforms	All

metric-type *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Metric type used for LSP path computation
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>metric-type</i> <i>keyword</i>
Tree	<i>metric-type</i>
Default	igp
Options	igp, te
Introduced	19.7.R1
Platforms	All

override-tunnel-elic *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Override any received entropy label capability
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>override-tunnel-elic</i> <i>boolean</i>
Tree	<i>override-tunnel-elic</i>
Description	When configured to true , this command allows the system to override any received entropy label capability advertisement. When configured to false , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

path-computation-method *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path computation method
Context	configure <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>path-computation-method</i> <i>keyword</i>

Tree	path-computation-method
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

path-profile [[profile-id](#)] *number*

Synopsis	Enter the path-profile list instance
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-profile <i>number</i>
Tree	path-profile
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	21.10.R1
Platforms	All

[profile-id] *number*

Synopsis	Profile ID for the specified LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-profile <i>number</i>
Tree	path-profile
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

path-group *number*

Synopsis	Path-group ID for the specified LSP
Context	configure router <i>string</i> mpls lsp-template <i>string</i> path-profile <i>number</i> path-group <i>number</i>
Tree	path-group

Max. Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	All

pce-associations



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the pce-associations context
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations
Tree	pce-associations
Description	Commands in this context configure the LSP binding with one or more PCEP associations.
Introduced	22.5.R1
Platforms	All

diversity [[diversity-name](#)] *reference*

Synopsis	Add a list entry for diversity
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations diversity <i>reference</i>
Tree	diversity
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[\[diversity-name\]](#) *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations diversity <i>reference</i>
Tree	diversity

Reference	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

policy [[policy-name](#)] *reference*

Synopsis	Add a list entry for policy
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

[policy-name] *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-associations policy <i>reference</i>
Tree	policy
Reference	configure router <i>string</i> pcep pcc pce-associations policy <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

pce-control *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PCE controlled LSP mode of operation
Context	configure router <i>string</i> mpls lsp-template <i>string</i> pce-control <i>boolean</i>
Tree	pce-control

Description	When configured to true , this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router. When configured to false , the PCE-controlled mode of operation for the LSP has no effect.
Default	false
Introduced	21.10.R1
Platforms	All

pce-report *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable reporting modes to PCE for RSVP-TE or SR-TE LSPs
Context	configure <i>router string mpls lsp-template string pce-report keyword</i>
Tree	pce-report
Options	false, true
Introduced	16.0.R1
Platforms	All

priority



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the priority context
Context	configure <i>router string mpls lsp-template string priority</i>
Tree	priority
Introduced	16.0.R1
Platforms	All

hold-priority *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold priority when insufficient bandwidth is available to set up LSP
Context	configure <i>router string mpls lsp-template string priority hold-priority number</i>
Tree	<i>hold-priority</i>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

setup-priority *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Setup priority when insufficient bandwidth is available to set up LSP
Context	configure <i>router string mpls lsp-template string priority setup-priority number</i>
Tree	<i>setup-priority</i>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

propagate-admin-group *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable admin groups via session attribute object
Context	configure <i>router string mpls lsp-template string propagate-admin-group boolean</i>
Tree	<i>propagate-admin-group</i>
Default	false

Introduced 16.0.R1
 Platforms All

record *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable recording of all hops for this LSP template
 Context **configure** *router* *string* *mpls lsp-template* *string* *record* *boolean*
 Tree [record](#)
 Default true
 Introduced 16.0.R1
 Platforms All

record-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable recording of labels at each node or instance
 Context **configure** *router* *string* *mpls lsp-template* *string* *record-label* *boolean*
 Tree [record-label](#)
 Default true
 Introduced 16.0.R1
 Platforms All

retry-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of attempts to re-establish LSP after it fails
 Context **configure** *router* *string* *mpls lsp-template* *string* *retry-limit* *number*
 Tree [retry-limit](#)

Range	1 to 10000
Introduced	16.0.R1
Platforms	All

retry-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time for LSP re-establishment attempts after failure
Context	configure router <i>string</i> mpls lsp-template <i>string</i> retry-timer <i>number</i>
Tree	retry-timer
Range	1 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

soft-preemption *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable soft preemption
Context	configure router <i>string</i> mpls lsp-template <i>string</i> soft-preemption <i>boolean</i>
Tree	soft-preemption
Description	<p>When configured to true, the P2MP LSP preemption is governed by the configure router rsvp preemption-timer value.</p> <p>When configured to false, the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.</p> <p>For P2P LSPs, soft preemption is always enabled and cannot be disabled.</p>
Introduced	22.2.R1
Platforms	All

template-id (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Template ID
Context	configure <i>router string mpls lsp-template string template-id (number keyword)</i>
Tree	<i>template-id</i>
Description	This command specifies the value that is signaled in the PCE to identify the LSP template.
Range	1 to 4294967295
Options	default
Introduced	16.0.R5
Platforms	All

type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP template type
Context	configure <i>router string mpls lsp-template string type keyword</i>
Tree	<i>type</i>
Description	This command configures the type of a template that can be referenced by a client application where dynamic LSP creation is required. The LSP template type is mandatory.
Options	p2mp-rsvp, p2p-rsvp-one-hop, p2p-rsvp-mesh, p2p-sr-te-one-hop, p2p-sr-te-mesh, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

vprn-auto-bind *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Include LSP template in auto-bind for VPRN services

Context **configure** *router* *string* *mpls lsp-template* *string* *vprn-auto-bind* *boolean*

Tree [vprn-auto-bind](#)

Default true

Introduced 16.0.R1

Platforms All

max-bypass-associations *number*

Synopsis Maximum number of LSPs associated with a bypass tunnel

Context **configure** *router* *string* *mpls max-bypass-associations* *number*

Tree [max-bypass-associations](#)

Range 100 to 131072

Default 1000

Introduced 16.0.R1

Platforms All

max-bypass-plr-associations *number*

Synopsis Maximum number of PLRs per RSVP-TE bypass LSP

Context **configure** *router* *string* *mpls max-bypass-plr-associations* *number*

Tree [max-bypass-plr-associations](#)

Range 1 to 16

Default 16

Introduced 19.10.R1

Platforms All

mbb-prefer-current-hops *boolean*

Synopsis	Select preference to use the current hops for Make-Before-Break (MBB)
Context	configure router <i>string</i> mpls mbb-prefer-current-hops <i>boolean</i>
Tree	mbb-prefer-current-hops
Default	false
Introduced	16.0.R1
Platforms	All

p2mp-resignal-timer *number*

Synopsis	Resignal timer for P2MP LSPs
Context	configure router <i>string</i> mpls p2mp-resignal-timer <i>number</i>
Tree	p2mp-resignal-timer
Range	60 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

p2mp-s2l-fast-retry *number*

Synopsis	Fast retry timer for P2MP S2L paths
Context	configure router <i>string</i> mpls p2mp-s2l-fast-retry <i>number</i>
Tree	p2mp-s2l-fast-retry
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

p2p-active-path-fast-retry *number*

Synopsis	Fast retry timer for P2P active paths
Context	configure router <i>string</i> mpls p2p-active-path-fast-retry <i>number</i>
Tree	p2p-active-path-fast-retry
Range	1 to 10
Units	seconds

Introduced	16.0.R1
Platforms	All

path [*path-name*] *string*

Synopsis	Enter the path list instance
Context	configure <i>router string mpls path string</i>
Tree	<i>path</i>
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

[path-name] *string*

Synopsis	Name for this LSP path
Context	configure <i>router string mpls path string</i>
Tree	<i>path</i>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the path used for LSPs
Context	configure <i>router string mpls path string admin-state keyword</i>
Tree	<i>admin-state</i>
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hop [*hop-index*] *number*

Synopsis	Enter the hop list instance
Context	configure <i>router string mpls path string hop number</i>
Tree	<i>hop</i>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

[hop-index] *number*

Synopsis	Index to identify a particular hop
Context	configure <i>router string mpls path string hop number</i>
Tree	<i>hop</i>
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the transit router
Context	configure <i>router string mpls path string hop number ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	<i>ip-address</i>
Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	16.0.R1
Platforms	All

sid-label *number*

Synopsis	MPLS label for tunnel hop in the path of an SR-TE LSP
Context	configure router <i>string</i> mpls <i>path</i> <i>string</i> hop <i>number</i> sid-label <i>number</i>
Tree	sid-label
Range	32 to 1048575
Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	19.10.R1
Platforms	All

type *keyword*

Synopsis	Tunnel hop type
Context	configure router <i>string</i> mpls <i>path</i> <i>string</i> hop <i>number</i> type <i>keyword</i>
Tree	type
Options	strict, loose
Notes	The following elements are part of a mandatory choice: (ip-address and type) or sid-label .
Introduced	16.0.R1
Platforms	All

pce-init-lsp

Synopsis	Enable the pce-init-lsp context
Context	configure router <i>string</i> mpls pce-init-lsp
Tree	pce-init-lsp
Introduced	16.0.R5
Platforms	All

sr-te

Synopsis	Enable the sr-te context
Context	configure router <i>string</i> mpls pce-init-lsp sr-te
Tree	sr-te
Introduced	16.0.R5

Platforms All

admin-state *keyword*

Synopsis Administrative state of SR-TE PCE-initiated LSP support

Context **configure** *router string mpls pce-init-lsp sr-te admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R5

Platforms All

pce-report

Synopsis Enter the **pce-report** context

Context **configure** *router string mpls pce-report*

Tree [pce-report](#)

Introduced 16.0.R1

Platforms All

rsvp-te *boolean*

Synopsis Allow PCE reporting for all TE LSPs of RSVP-TE type

Context **configure** *router string mpls pce-report rsvp-te boolean*

Tree [rsvp-te](#)

Default false

Introduced 16.0.R1

Platforms All

sr-te *boolean*

Synopsis Allow PCE reporting for all TE LSPs of SR-TE type

Context **configure** *router string mpls pce-report sr-te boolean*

Tree [sr-te](#)

Default false

Introduced	16.0.R1
Platforms	All

resignal-on-igp-overload *boolean*

Synopsis	Resignal all RSVP-TE LSPs upon IGP overload
Context	configure <i>router string mpls resignal-on-igp-overload boolean</i>
Tree	resignal-on-igp-overload
Description	<p>When configured to true, the receipt of the IS-IS overload bit in the TE-DB triggers the immediate resignaling of all RSVP-TE LSPs. MPLS forces the expiry of the resignal timer and the TE-DB computes a new CSPF for each RSVP-TE LSP active path. The re-optimization causes the immediate transition of RSVP-TE LSP paths away from the IS-IS node in overload using the MBB operation.</p> <p>This command cannot be configured to true when the retry-on-igp-overload command is configured to true.</p> <p>When configured to false, the default behavior is maintained where MBB re-optimization occurs only when a timer-based resignal is performed or a manual resignal is executed.</p>
Default	false
Introduced	20.10.R1
Platforms	All

resignal-timer *number*

Synopsis	Resignal timer for RSVP LSPs
Context	configure <i>router string mpls resignal-timer number</i>
Tree	resignal-timer
Range	30 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

retry-on-igp-overload *boolean*

Synopsis	Tear down LSPs when IGP is in overload state
Context	configure <i>router string mpls retry-on-igp-overload boolean</i>
Tree	retry-on-igp-overload
Default	false

Introduced	16.0.R1
Platforms	All

secondary-fast-retry-timer *number*

Synopsis	Fast retry timer for secondary paths
Context	configure router <i>string</i> mpls secondary-fast-retry-timer <i>number</i>
Tree	secondary-fast-retry-timer
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

shortcut-local-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	configure router <i>string</i> mpls shortcut-local-ttl-propagate <i>boolean</i>
Tree	shortcut-local-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

shortcut-transit-ttl-propagate *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets for transit packets
Context	configure router <i>string</i> mpls shortcut-transit-ttl-propagate <i>boolean</i>
Tree	shortcut-transit-ttl-propagate
Default	true
Introduced	16.0.R1
Platforms	All

sr-te-resignal

Synopsis	Enter the sr-te-resignal context
Context	configure router <i>string</i> mpls sr-te-resignal

Tree	sr-te-resignal
Introduced	19.10.R1
Platforms	All

resignal-on-igp-event *boolean*

Synopsis	Re-optimize SR-TE LSPs upon IGP link events
Context	configure router <i>string</i> mpls sr-te-resignal resignal-on-igp-event <i>boolean</i>
Tree	resignal-on-igp-event
Description	<p>When configured to true, the system signals the re-optimization of all SR-TE LSPs when one or more IGP link down events are received in theTE-DB. The triggered behavior is identical to the timer-based or resignal behavior or the manual-based resignal behavior used with a delay option. MPLS forces the expiry of the resignal timer and all active paths of all SR-TE LSPs are re-evaluated.</p> <p>When configured to false, re-optimization is not triggered by IGP events.</p>
Default	false
Introduced	19.10.R1
Platforms	All

resignal-on-igp-overload *boolean*

Synopsis	Enable resignaling of SR-TE LSPs upon IGP overload
Context	configure router <i>string</i> mpls sr-te-resignal resignal-on-igp-overload <i>boolean</i>
Tree	resignal-on-igp-overload
Description	<p>When configured to true, the system enables ad-hoc re-optimization of the CSPF paths of all SR-TE LSPs when IS-IS receives an IS-IS overload bit advertisement from a remote router.</p> <p>When this command is enabled on the router and an IGP overload bit is set in a Layer 1 or Layer 2 IS-IS LSP received from a remote router, MPLS performs an ad-hoc re-optimization of all the paths of all the SR-TE LSPs that have paths computed by the local CSPF. For each SR-TE LSP current path that transits the router in overload, the CSPF looks for a new path that avoids the router. For each SR-TE LSP current path that terminates on the router in overload, the CSPF checks if a better path exists. In both cases, if a new path is not found the system maintains the current path when operationally up.</p> <p>The ad-hoc re-optimization triggers the timer-based re-optimization by forcing the resignal timer to expire. Therefore, the user must use the configure router mpls sr-te-resignal resignal-timer command to configure the resignal timer for the SR-TE application.</p>

When configured to **false**, MPLS does not act immediately on an IS-IS overload bit from a remote router. MPLS acts on it at the next timer-based or manual re-optimization of the SR-TE LSPs.

Default	false
Introduced	23.3.R1
Platforms	All

resignal-timer *number*

Synopsis	Resignal timer for SR-TE LSPs
Context	configure router <i>string</i> mpls sr-te-resignal resignal-timer <i>number</i>
Tree	resignal-timer
Description	This command configures the time the system waits before signaling the re-optimization of all SR-TE LSPs.
Range	30 to 10080
Units	minutes
Introduced	19.10.R1
Platforms	All

srlg-database

Synopsis	Enter the srlg-database context
Context	configure router <i>string</i> mpls srlg-database
Tree	srlg-database
Introduced	16.0.R1
Platforms	All

router-id [[router-address](#)] *string*

Synopsis	Enter the router-id list instance
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

[router-address] *string*

Synopsis	Router ID for the system
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i>
Tree	router-id
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the interface entry
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

interface [**interface-address**] *string* **srlg-group** *reference*

Synopsis	Add a list entry for interface
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> interface <i>string</i> srlg-group <i>reference</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-address] *string*

Synopsis	IP address of the interface
Context	configure router <i>string</i> mpls srlg-database router-id <i>string</i> interface <i>string</i> srlg-group <i>reference</i>
Tree	interface
Notes	This element is part of a list key.
Introduced	16.0.R2

Platforms All

srlg-group *reference*

Synopsis SRLG group name

Context **configure** **router** *string* **mpls** **srlg-database** **router-id** *string* **interface** *string* **srlg-group** *reference*

Tree [interface](#)

Reference **configure** **routing-options** **if-attribute** **srlg-group** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

srlg-frr *keyword*

Synopsis Use of SRLG constraint for FRR path computation

Context **configure** **router** *string* **mpls** **srlg-frr** *keyword*

Tree [srlg-frr](#)

Options loose, strict

Introduced 16.0.R1

Platforms All

static-lsp [[lsp-name](#)] *string*

Synopsis Enter the **static-lsp** list instance

Context **configure** **router** *string* **mpls** **static-lsp** *string*

Tree [static-lsp](#)

Max. Instances 1000

Introduced 16.0.R1

Platforms All

[[lsp-name](#)] *string*

Synopsis Labeled Switch path name

Context **configure** **router** *string* **mpls** **static-lsp** *string*

Tree	static-lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static LSP
Context	configure router <i>string</i> mpls static-lsp <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

metric *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS static LSP metric to select an LSP
Context	configure router <i>string</i> mpls static-lsp <i>string</i> metric <i>number</i>
Tree	metric
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

push

Synopsis	Enable the push context
Context	configure router <i>string</i> mpls static-lsp <i>string</i> push
Tree	push
Introduced	16.0.R1
Platforms	All

next-hop string

Synopsis	IP address for the next hop
Context	configure <i>router string mpls static-lsp string push next-hop string</i>
Tree	next-hop
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

out-label (number | keyword)

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	configure <i>router string mpls static-lsp string push out-label (number keyword)</i>
Tree	out-label
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

to string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	configure <i>router string mpls static-lsp string to string</i>
Tree	to
Introduced	16.0.R1
Platforms	All

static-lsp-fast-retry number

Synopsis	Fast retry timer for static LSPs
Context	configure <i>router string mpls static-lsp-fast-retry number</i>

Tree	static-lsp-fast-retry
Range	1 to 30
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

strict-ero-nhop-direct-resolution *boolean*

Synopsis	Resolves RSVP-TE LSP ERO to local and host routes only
Context	configure router <i>string</i> mpls strict-ero-nhop-direct-resolution <i>boolean</i>
Tree	strict-ero-nhop-direct-resolution
Description	<p>When configured to true, the router enables the strict Explicit Route Object (ERO) next-hop direct resolution. The feature restricts the routes used to resolve the next hop of an ERO address to local and host routes. This command avoids using a next hop over a parallel link when a half link is up in the routing table.</p> <p>This command applies to an ERO when all of the following conditions are met:</p> <ul style="list-style-type: none"> • the ERO next hop is an IPv4 address • the ERO object is a strict hop • the IPv4 address matches the primary subnet of a local numbered interface <p>If no such route exists, RSVP rejects the PATH message with ErrCode = Routing Error (24) and SubErrCode = Bad Strict Node (2).</p> <p>When configured to false, the router disables the strict ERO next-hop direct resolution.</p>
Default	false
Introduced	22.5.R1
Platforms	All

tunnel-table-pref

Synopsis	Enter the tunnel-table-pref context
Context	configure router <i>string</i> mpls tunnel-table-pref
Tree	tunnel-table-pref
Description	Commands in this context configure the tunnel table preference for RSVP-TE LSP and SR-TE LSP tunnel types.
Introduced	21.10.R1
Platforms	All

rsvp-te number

Synopsis	RSVP-TE tunnel table preference
Context	configure router <i>string</i> mpls tunnel-table-pref rsvp-te number
Tree	rsvp-te
Description	<p>This command configures the tunnel table preference for RSVP-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>Nokia recommends that tunnel types have unique preference values. In a situation where two or more tunnel types are set to the same preference value, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	7
Introduced	21.10.R1
Platforms	All

sr-te number

Synopsis	SR-TE tunnel table preference
Context	configure router <i>string</i> mpls tunnel-table-pref sr-te number
Tree	sr-te
Description	<p>This command configures the tunnel table preference for SR-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the mixed-lsp-mode option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	8
Introduced	21.10.R1

Platforms All

user-srlg-db *boolean*

Synopsis Enable the use of user SRLG database
 Context **configure** **router** *string* **mpls** **user-srlg-db** *boolean*
 Tree [user-srlg-db](#)
 Default false
 Introduced 16.0.R1
 Platforms All

mpls-labels

Synopsis Enter the **mpls-labels** context
 Context **configure** **router** *string* **mpls-labels**
 Tree [mpls-labels](#)
 Introduced 16.0.R1
 Platforms All

bgp-labels-hold-timer *number*

Synopsis BGP labels hold timer for the ingress router
 Context **configure** **router** *string* **mpls-labels** **bgp-labels-hold-timer** *number*
 Tree [bgp-labels-hold-timer](#)
 Range 0 to 255
 Default 0
 Introduced 16.0.R1
 Platforms All

reserved-label-block [[label-block-name](#)] *string*

Synopsis Enter the **reserved-label-block** list instance
 Context **configure** **router** *string* **mpls-labels** **reserved-label-block** *string*
 Tree [reserved-label-block](#)
 Max. Instances 16

Introduced 16.0.R1
Platforms All

[label-block-name] *string*

Synopsis Name for the reserved label block
Context **configure** *router string mpls-labels reserved-label-block string*
Tree [reserved-label-block](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

end-label *number*

Synopsis End label for the reserved label block
Context **configure** *router string mpls-labels reserved-label-block string end-label number*
Tree [end-label](#)
Range 32 to 1048575
Introduced 16.0.R1
Platforms All

start-label *number*

Synopsis Start label value for the reserved label block
Context **configure** *router string mpls-labels reserved-label-block string start-label number*
Tree [start-label](#)
Range 32 to 1048575
Introduced 16.0.R1
Platforms All

sr-labels

Synopsis Enter the **sr-labels** context
Context **configure** *router string mpls-labels sr-labels*

Tree	sr-labels
Introduced	16.0.R1
Platforms	All

end number

Synopsis	End label for the SRGB
Context	configure router <i>string</i> mpls-labels sr-labels <i>end number</i>
Tree	end
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

start number

Synopsis	Start label value for the SRGB
Context	configure router <i>string</i> mpls-labels sr-labels <i>start number</i>
Tree	start
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

static-label-range number

Synopsis	Static label range on the ingress router
Context	configure router <i>string</i> mpls-labels static-label-range <i>number</i>
Tree	static-label-range
Range	0 to 1048544
Default	18400
Introduced	16.0.R1
Platforms	All

msdp

Synopsis	Enable the msdp context
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Context	configure <i>router string msdp</i>
Tree	<i>msdp</i>
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure <i>router string msdp active-source-limit number</i>
Tree	<i>active-source-limit</i>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure <i>router string msdp admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

data-encapsulation *boolean*

Synopsis	Enable encapsulation of multicast data used by MSDP
Context	configure <i>router string msdp data-encapsulation boolean</i>
Tree	<i>data-encapsulation</i>
Default	true
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

group [[name](#)] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> msdp group <i>string</i>
Tree	group
Introduced	19.10.R1
Platforms	All

[name] *string*

Synopsis	MSDP group name
Context	configure router <i>string</i> msdp group <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure router <i>string</i> msdp group <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000

Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure router <i>string</i> msdp group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1

Platforms All

local-address *string*

Synopsis Local end of an MSDP session
Context **configure** *router string msdp group string local-address string*
Tree [local-address](#)
Introduced 19.10.R1
Platforms All

mode *keyword*

Synopsis Topology of groups of peers
Context **configure** *router string msdp group string mode keyword*
Tree [mode](#)
Default standard
Options standard, mesh-group
Introduced 19.10.R1
Platforms All

peer [[ip-address](#)] *string*

Synopsis Enter the **peer** list instance
Context **configure** *router string msdp group string peer string*
Tree [peer](#)
Introduced 19.10.R1
Platforms All

[ip-address] *string*

Synopsis IP address of the remote MSDP router for peering
Context **configure** *router string msdp group string peer string*
Tree [peer](#)
Notes This element is part of a list key.
Introduced 19.10.R1

Platforms All

active-source-limit *number*

Synopsis Maximum number of active messages accepted by MSDP
 Context **configure** *router string msdp group string peer string active-source-limit number*
 Tree [active-source-limit](#)
 Range 0 to 1000000
 Introduced 19.10.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of MSDP
 Context **configure** *router string msdp group string peer string admin-state keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 19.10.R1
 Platforms All

authentication-key *string*

Synopsis MD5 authentication key for the MSDP peering session
 Context **configure** *router string msdp group string peer string authentication-key string*
 Tree [authentication-key](#)
 String Length 1 to 370
 Introduced 19.10.R1
 Platforms All

default-peer *boolean*

Synopsis Enable/Disable default peer as MSDP peer
 Context **configure** *router string msdp group string peer string default-peer boolean*
 Tree [default-peer](#)

Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
Context	configure router <i>string</i> msdp group <i>string</i> peer <i>string</i> local-address <i>string</i>
Tree	local-address
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure <i>router string msdp group string peer string receive-message-rate</i>
Tree	<i>receive-message-rate</i>
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	configure <i>router string msdp group string peer string receive-message-rate rate number</i>
Tree	<i>rate</i>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure <i>router string msdp group string peer string receive-message-rate threshold number</i>
Tree	<i>threshold</i>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure <i>router string msdp group string peer string receive-message-rate time number</i>
Tree	<i>time</i>
Range	1 to 600
Units	seconds
Introduced	19.10.R1

Platforms All

receive-message-rate

Synopsis Enter the **receive-message-rate** context

Context **configure** [router](#) *string* [msdp group](#) *string* [receive-message-rate](#)

Tree [receive-message-rate](#)

Introduced 19.10.R1

Platforms All

rate *number*

Synopsis Number of MSDP messages read from the TCP session

Context **configure** [router](#) *string* [msdp group](#) *string* [receive-message-rate](#) [rate](#) *number*

Tree [rate](#)

Range 10 to 10000

Introduced 19.10.R1

Platforms All

threshold *number*

Synopsis Limit for MSDP messages read from the TCP session

Context **configure** [router](#) *string* [msdp group](#) *string* [receive-message-rate](#) [threshold](#) *number*

Tree [threshold](#)

Range 1 to 1000000

Introduced 19.10.R1

Platforms All

time *number*

Synopsis Limit of MSDP messages read from the TCP session

Context **configure** [router](#) *string* [msdp group](#) *string* [receive-message-rate](#) [time](#) *number*

Tree [time](#)

Range 1 to 600

Units seconds

Introduced 19.10.R1
Platforms All

import-policy *reference*

Synopsis Policies to import Source Active state from the Source Active list into MSDP
Context **configure** *router string msdp import-policy reference*
Tree [import-policy](#)
Reference **configure** *policy-options policy-statement string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

local-address *string*

Synopsis Local end of an MSDP session
Context **configure** *router string msdp local-address string*
Tree [local-address](#)
Introduced 19.10.R1
Platforms All

peer [[ip-address](#)] *string*

Synopsis Enter the **peer** list instance
Context **configure** *router string msdp peer string*
Tree [peer](#)
Introduced 19.10.R1
Platforms All

[ip-address] *string*

Synopsis IP address of the remote MSDP router for peering
Context **configure** *router string msdp peer string*

Tree	peer
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	configure router <i>string</i> msdp peer <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MSDP
Context	configure router <i>string</i> msdp peer <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

authentication-key *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	configure router <i>string</i> msdp peer <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

default-peer *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	configure router <i>string</i> msdp peer <i>string</i> default-peer <i>boolean</i>
Tree	default-peer
Default	false
Introduced	19.10.R1
Platforms	All

export-policy *reference*

Synopsis	Policies to export source active state into MSDP
Context	configure router <i>string</i> msdp peer <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

import-policy *reference*

Synopsis	Policies to import Source Active state from the Source Active list into MSDP
Context	configure router <i>string</i> msdp peer <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

local-address *string*

Synopsis	Local end of an MSDP session
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Context	configure <i>router string msdp peer string local-address string</i>
Tree	<i>local-address</i>
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure <i>router string msdp peer string receive-message-rate</i>
Tree	<i>receive-message-rate</i>
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	configure <i>router string msdp peer string receive-message-rate rate number</i>
Tree	<i>rate</i>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure <i>router string msdp peer string receive-message-rate threshold number</i>
Tree	<i>threshold</i>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	configure <i>router string msdp peer string receive-message-rate time number</i>

Tree	time
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

receive-message-rate

Synopsis	Enter the receive-message-rate context
Context	configure router <i>string</i> msdp receive-message-rate
Tree	receive-message-rate
Introduced	19.10.R1
Platforms	All

rate *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp receive-message-rate <i>rate</i> <i>number</i>
Tree	rate
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

threshold *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	configure router <i>string</i> msdp receive-message-rate threshold <i>number</i>
Tree	threshold
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

time *number*

Synopsis	Limit of MSDP messages read from the TCP session
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Context	configure <i>router string msdp receive-message-rate time number</i>
Tree	<i>time</i>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure <i>router string msdp rpf-table keyword</i>
Tree	<i>rpf-table</i>
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	19.10.R1
Platforms	All

source [*ip-prefix*] *string*

Synopsis	Enter the source list instance
Context	configure <i>router string msdp source string</i>
Tree	<i>source</i>
Introduced	19.10.R1
Platforms	All

[*ip-prefix*] *string*

Synopsis	Source IP address for accepted active source messages
Context	configure <i>router string msdp source string</i>
Tree	<i>source</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

active-source-limit *number*

Synopsis	Number of active source messages accepted by MSDP
Context	configure router <i>string</i> msdp <i>source</i> <i>string</i> active-source-limit <i>number</i>
Tree	active-source-limit
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

source-active-cache-lifetime *number*

Synopsis	Lifetime given to SA cache entries when created or refreshed
Context	configure router <i>string</i> msdp <i>source-active-cache-lifetime</i> <i>number</i>
Tree	source-active-cache-lifetime
Range	90 to 600
Default	90
Units	seconds
Introduced	19.10.R1
Platforms	All

mss-adjust

Synopsis	Enable the mss-adjust context
Context	configure router <i>string</i> mss-adjust
Tree	mss-adjust
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	configure router <i>string</i> mss-adjust nat-group <i>number</i>
Tree	nat-group

Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-size *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	configure router <i>string</i> mss-adjust segment-size <i>number</i>
Tree	segment-size
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtrace2

Synopsis	Enter the mtrace2 context
Context	configure router <i>string</i> mtrace2
Tree	mtrace2
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of multicast path tracing
Context	configure router <i>string</i> mtrace2 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

udp-port *number*

Synopsis	Destination UDP port for mstat2 mtrace2 test, or unsolicited mstat2 mtrace2 packets
Context	configure router <i>string</i> mtrace2 udp-port <i>number</i>
Tree	udp-port
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

multicast-info-policy *reference*

Synopsis	Multicast policy name for virtual router
Context	configure router <i>string</i> multicast-info-policy <i>reference</i>
Tree	multicast-info-policy
Reference	configure multicast-management multicast-info-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

nat

Synopsis	Enable the nat context
Context	configure router <i>string</i> nat
Tree	nat
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside

Synopsis	Enter the inside context
Context	configure router <i>string</i> nat inside
Tree	inside
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-aware

Synopsis	Enter the I2-aware context
Context	configure router string nat inside I2-aware
Tree	I2-aware
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force-unique-ip-addresses *boolean*

Synopsis	Enforce unique IPv4 addresses for L2-aware subscribers
Context	configure router string nat inside I2-aware force-unique-ip-addresses <i>boolean</i>
Tree	force-unique-ip-addresses
Description	When configured to true , the system enforces the uniqueness of IPv4 addresses of L2-aware subscribers in an inside routing context. This functionality is required if multicast sourced from the inside routing context is enabled for L2-aware subscribers.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscribers [[prefix](#)] *string*

Synopsis	Add a list entry for subscribers
Context	configure router string nat inside I2-aware subscribers <i>string</i>
Tree	subscribers
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[prefix](#)] *string*

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	configure router string nat inside I2-aware subscribers <i>string</i>
Tree	subscribers
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis Enter the **large-scale** context
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#)
Tree [large-scale](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis Enter the **dnat-only** context
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dnat-only](#)
Tree [dnat-only](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-prefix-list *reference*

Synopsis NAT prefix list that contains source IP addresses
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dnat-only](#) [source-prefix-list](#) *reference*
Tree [source-prefix-list](#)
Reference **configure** [service](#) [nat](#) [prefix-list](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite

Synopsis Enter the **dual-stack-lite** context
Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#)
Tree [dual-stack-lite](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	configure router string nat inside large-scale dual-stack-lite admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the deterministic context
Context	configure router string nat inside large-scale dual-stack-lite deterministic
Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [[source-prefix](#)] *string* [nat-policy](#) *reference*

Synopsis	Enter the prefix-map list instance
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy <i>reference</i>
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*

Synopsis	List containing source IP addresses on the private side
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy <i>reference</i>
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference
Tree	prefix-map
Reference	configure service nat nat-policy string
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [[from](#)] [string](#) [to](#) [string](#)

Synopsis	Enter the map list instance
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] [string](#)

Synopsis	Beginning of the range for IPv6 addresses
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string

Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to string

Synopsis	End of the range for IPv6 addresses
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure router string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string first-outside-address string
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

endpoint [address] string

Synopsis	Enter the endpoint list instance
Context	configure router string nat inside large-scale dual-stack-lite endpoint string
Tree	endpoint
Max. Instances	128

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[address] *string*

Synopsis	Dual Stack Lite IPv6 address
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite endpoint <i>string</i>
Tree	endpoint
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*

Synopsis	Fragmentation control of the AFTR originated downstream IPv6 traffic
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite endpoint <i>string</i> ip-fragmentation <i>keyword</i>
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

min-first-fragment-size-rx *number*

Synopsis	Minimum MTU size for upstream packets
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite endpoint <i>string</i> min-first-fragment-size-rx <i>number</i>
Tree	min-first-fragment-size-rx
Description	This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.
Range	512 to 1280
Default	1280
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reassemble *boolean*

Synopsis Reassembly of IPv6 payload datagrams

Context **configure** *router string nat inside large-scale dual-stack-lite endpoint string reassemble boolean*

Tree [reassemble](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-mtu *number*

Synopsis DS-Lite tunnel MTU for this address

Context **configure** *router string nat inside large-scale dual-stack-lite endpoint string tunnel-mtu number*

Tree [tunnel-mtu](#)

Description This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.

Range 464 to 9212

Default 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Largest value for all subscriber limits in each deterministic pool

Context **configure** *router string nat inside large-scale dual-stack-lite max-subscriber-limit number*

Tree [max-subscriber-limit](#)

Range 1 | 2 | 4 | 8 | 16 | 32 | 64 | 128 | 256 | 512 | 1024 | 2048 | 4096 | 8192 | 16384 | 32768

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length of the Dual Stack Lite subscribers
Context	configure router <i>string</i> nat inside large-scale dual-stack-lite subscriber-prefix-length <i>number</i>
Tree	subscriber-prefix-length
Range	32 to 64 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	configure router <i>string</i> nat inside large-scale nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis	Enter the nat44 context
Context	configure router <i>string</i> nat inside large-scale nat44
Tree	nat44
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-prefix [[ip-prefix-length](#)] *string*

Synopsis	Enter the destination-prefix list instance
Context	configure router <i>string</i> nat inside large-scale nat44 destination-prefix <i>string</i>
Tree	destination-prefix
Max. Instances	6144
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[ip-prefix-length] *string*

Synopsis	Traffic sent to destinations within this prefix will be NATed
Context	configure router <i>string</i> nat inside large-scale nat44 destination-prefix <i>string</i>
Tree	destination-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	configure router <i>string</i> nat inside large-scale nat44 destination-prefix <i>string</i> nat-policy <i>reference</i>
Tree	nat-policy
Reference	configure service nat nat-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis	Enter the deterministic context
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic

Tree	deterministic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-map [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the prefix-map list instance
Context	configure router <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i>
Tree	prefix-map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[source-prefix] *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	configure router <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i>
Tree	prefix-map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

Synopsis	NAT policy
Context	configure router <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i>
Tree	prefix-map
Reference	configure service nat nat-policy <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the prefix
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map [**from**] *string to string*

Synopsis	Enter the map list instance
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i> map <i>string to string</i>
Tree	map
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[from] *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i> map <i>string to string</i>
Tree	map
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to *string*

Synopsis	End of the range for IPv4 addresses
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy <i>reference</i> map <i>string to string</i>
Tree	map
Notes	This element is part of a list key.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

first-outside-address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	configure router <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference map <i>string to string</i> first-outside-address <i>string</i>
Tree	first-outside-address
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	configure router <i>string</i> nat inside large-scale nat44 max-subscriber-limit <i>number</i>
Tree	max-subscriber-limit
Range	1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-import *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	configure router <i>string</i> nat inside large-scale nat44 nat-import <i>reference</i>
Tree	nat-import
Description	This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.

A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.

All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat64

Synopsis	Enable the nat64 context
Context	configure router <i>string</i> nat inside large-scale nat64
Tree	nat64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of NAT64
Context	configure router <i>string</i> nat inside large-scale nat64 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-zero-ipv4-checksum *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop UDP datagrams with zero IPv4 checksum
Context	configure router string nat inside large-scale nat64 drop-zero-ipv4-checksum <i>boolean</i>
Tree	drop-zero-ipv4-checksum
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

insert-ipv6-fragment-header *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	configure router string nat inside large-scale nat64 insert-ipv6-fragment-header <i>boolean</i>
Tree	insert-ipv6-fragment-header
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-fragmentation *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	configure router string nat inside large-scale nat64 ip-fragmentation <i>keyword</i>
Tree	ip-fragmentation
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	configure router string nat inside large-scale nat64 <i>ipv6-mtu number</i>
Tree	ipv6-mtu
Range	1280 to 9212
Default	1520
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix to derive the IPv6 address from the IPv4 address
Context	configure router string nat inside large-scale nat64 <i>prefix string</i>
Tree	prefix
Default	64:ff9b::/96
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-prefix-length *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length for the NAT64 subscribers
Context	configure <i>router string nat inside large-scale nat64 subscriber-prefix-length number</i>
Tree	subscriber-prefix-length
Range	32 to 64 128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tos



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the tos context
Context	configure <i>router string nat inside large-scale nat64 tos</i>
Tree	tos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the downstream context
Context	configure <i>router string nat inside large-scale nat64 tos downstream</i>
Tree	downstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

use-ipv4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	configure <i>router string nat inside large-scale nat64 tos downstream use-ipv4 boolean</i>
Tree	use-ipv4
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the upstream context
Context	configure <i>router string nat inside large-scale nat64 tos upstream</i>
Tree	upstream
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

set-tos (*keyword | number*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	configure <i>router string nat inside large-scale nat64 tos upstream set-tos (keyword number)</i>
Tree	set-tos
Range	0 to 255
Default	use-ipv6
Options	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure router string nat inside large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer string

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	configure router string nat inside large-scale redundancy peer string
Tree	peer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer6 string

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	configure router string nat inside large-scale redundancy peer6 string
Tree	peer6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

steering-route string

Synopsis	IP address and prefix length of the steering route
Context	configure router string nat inside large-scale redundancy steering-route string
Tree	steering-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-identification

Synopsis	Enter the subscriber-identification context
Context	configure router string nat inside large-scale subscriber-identification

Tree	subscriber-identification
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of subscriber identification
Context	configure router <i>string</i> nat inside large-scale subscriber-identification admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

attribute

Synopsis	Enter the attribute context
Context	configure router <i>string</i> nat inside large-scale subscriber-identification attribute
Tree	attribute
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	configure router <i>string</i> nat inside large-scale subscriber-identification attribute type <i>keyword</i>
Tree	type
Default	alc-sub-string
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vendor keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The RADIUS Vendor

Context **configure** router string nat inside large-scale subscriber-identification attribute vendor keyword

Tree vendor

Default nokia

Options standard, nokia, 3gpp

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure** router string nat inside large-scale subscriber-identification description string

Tree description

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drop-unidentified-traffic boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Drop traffic from unidentified flows

Context **configure** router string nat inside large-scale subscriber-identification drop-unidentified-traffic boolean

Tree drop-unidentified-traffic

Default false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

radius-proxy-server

Synopsis	Enable the radius-proxy-server context
Context	configure router string nat inside large-scale subscriber-identification radius-proxy-server
Tree	radius-proxy-server
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	configure router string nat inside large-scale subscriber-identification radius-proxy-server router-instance string
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	configure router string nat inside large-scale subscriber-identification radius-proxy-server server string
Tree	server
String Length	1 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

map

Synopsis	Enter the map context
Context	configure router string nat map
Tree	map
Introduced	16.0.R1
Platforms	VSR

map-domain [[domain-name](#)] *reference*

Synopsis	Add a list entry for map-domain
Context	configure router string nat map map-domain reference
Tree	map-domain
Introduced	16.0.R1
Platforms	VSR

[[domain-name](#)] *reference*

Synopsis	MAP domain template name
Context	configure router string nat map map-domain reference
Tree	map-domain
Reference	configure service nat map-t domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

outside

Synopsis	Enter the outside context
Context	configure router string nat outside
Tree	outside

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dnat-only

Synopsis	Enter the dnat-only context
Context	configure router string nat outside dnat-only
Tree	dnat-only
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

route-limit *number*

Synopsis	Number that is used to limit internal routes for downstream traffic
Context	configure router string nat outside dnat-only route-limit <i>number</i>
Tree	route-limit
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filters

Synopsis	Enter the filters context
Context	configure router string nat outside filters
Tree	filters
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

downstream

Synopsis	Enter the downstream context
Context	configure router string nat outside filters downstream
Tree	downstream
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis IPv4 filter policy name
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#) [downstream](#) [ipv4](#) *reference*
Tree [ipv4](#)
Reference **configure** [filter](#) [ip-filter](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#) [downstream](#) [ipv6](#) *reference*
Tree [ipv6](#)
Reference **configure** [filter](#) [ipv6-filter](#) *string*
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upstream

Synopsis Enter the **upstream** context
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#) [upstream](#)
Tree [upstream](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis IPv4 filter policy name
Context **configure** [router](#) *string* [nat](#) [outside](#) [filters](#) [upstream](#) [ipv4](#) *reference*
Tree [ipv4](#)
Reference **configure** [filter](#) [ip-filter](#) *string*
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6 *reference*

Synopsis IPv6 filter policy name
 Context **configure** *router string nat outside filters upstream ipv6 reference*
 Tree [ipv6](#)
 Reference **configure** *filter ipv6-filter string*
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mtu *number*

Synopsis MTU for downstream traffic
 Context **configure** *router string nat outside mtu number*
 Tree [mtu](#)
 Range 512 to 9000
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool [[name](#)] *string*

Synopsis Enter the **pool** list instance
 Context **configure** *router string nat outside pool string*
 Tree [pool](#)
 Max. Instances 4096
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[name](#)] *string*

Synopsis NAT pool name
 Context **configure** *router string nat outside pool string*
 Tree [pool](#)

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-pooling *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Outside IP address allocation mode for a NAT subscriber
Context	configure router <i>string</i> nat outside pool <i>string</i> address-pooling <i>keyword</i>
Tree	address-pooling
Description	<p>This command configures address pooling which defines a relationship between the NAT subscriber and its outside IP address(es).</p> <p>The behavior in NAT, as defined in RFC 7857, strongly recommends that the NAT subscribers be mapped to a single outside IP address. If this outside IP address runs out of ports, no new ports for the subscriber are allocated. This behavior is called paired address pooling.</p> <p>The alternative behavior is arbitrary address pooling, where a NAT subscriber is mapped to multiple IP addresses when the current outside IP address runs out of ports. This way, the subscriber becomes associated with multiple outside IP addresses. While this results in better resource utilization in NAT, it may negatively affect the behavior of some applications.</p>
Default	paired
Options	paired, arbitrary
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-range [*start*] *string* *end* *string*

Synopsis	Enter the address-range list instance
Context	configure router <i>string</i> nat outside pool <i>string</i> address-range <i>string</i> <i>end</i> <i>string</i>
Tree	address-range
Max. Instances	4096
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[start] *string*

Synopsis Lower bound of the NAT address range
 Context **configure** *router string nat outside pool string address-range string end string*
 Tree [address-range](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end *string*

Synopsis Upper bound of the NAT address range
 Context **configure** *router string nat outside pool string address-range string end string*
 Tree [address-range](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** *router string nat outside pool string address-range string end string description string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

drain *boolean*

Synopsis Start or stop draining this NAT address range
 Context **configure** *router string nat outside pool string address-range string end string drain boolean*
 Tree [drain](#)

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	configure router <i>string</i> nat outside pool <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis	Enter the applications context
Context	configure router <i>string</i> nat outside pool <i>string</i> applications
Tree	applications
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

agnostic *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
Context	configure router <i>string</i> nat outside pool <i>string</i> applications agnostic <i>boolean</i>
Tree	agnostic
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** *router string nat outside pool string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis Allow NAT pool IP addresses to respond to ICMP PINGs

Context **configure** *router string nat outside pool string icmp-echo-reply boolean*

Tree [icmp-echo-reply](#)

Description This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.

In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.

In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.

In LSN, the reply from an outside IP address is generated regardless if a binding is present.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2-aware

Synopsis Enter the **l2-aware** context

Context **configure** *router string nat outside pool string l2-aware*

Tree [l2-aware](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host inside-router-instance <i>string</i>
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host ip-address <i>string</i>
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware default-host rate-limit <i>number</i>
Tree	rate-limit
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host. Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Default	10
Units	megabps
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

external-assignment *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware external-assignment <i>boolean</i>
Tree	external-assignment
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-block-extension**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the port-block-extension context
Context	configure <i>router string nat outside pool string l2-aware port-block-extension</i>
Tree	port-block-extension
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	configure <i>router string nat outside pool string l2-aware port-block-extension ports number</i>
Tree	ports
Description	<p>For Carrier Grade NAT (CGN), this command represents the size of all port blocks for NAT subscribers in the NAT pool.</p> <p>For L2-Aware NAT, this command represents only the size of the initial port block of a subscriber in the L2-aware NAT pool. Additional port-blocks (extended port blocks) for the L2-Aware subscriber must be explicitly enabled under the l2-aware port-block-extension hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port-blocks.</p>
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber

Synopsis	Enter the subscriber context
Context	configure <i>router string nat outside pool string l2-aware port-block-extension subscriber</i>
Tree	subscriber
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	configure router string nat outside pool string l2-aware port-block-extension subscriber-limit <i>number</i>
Tree	subscriber-limit
Description	<p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none"> • well-known port (this is a fixed and permanently allocated block of ports for all NAT types) • static port-forwarding range (if enabled by configuration) • port range allocated for initial port blocks of each L2-Aware subscriber • port range allocated for extended port blocks for the remainder after the three previous port ranges <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p>
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router string nat outside pool string l2-aware port-block-extension watermarks
Tree	watermarks
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
Context	configure router <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

large-scale

Synopsis	Enter the large-scale context
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale
Tree	large-scale
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis	Enable the default-host context
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale default-host
Tree	default-host
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale default-host inside-router-instance <i>string</i>
Tree	inside-router-instance
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis	IP address of the default DMZ host
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale default-host ip-address <i>string</i>
Tree	ip-address
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure** *router string nat outside pool string large-scale default-host rate-limit number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Default 10

Units megabps

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

deterministic

Synopsis Enter the **deterministic** context

Context **configure** *router string nat outside pool string large-scale deterministic*

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block

Context **configure** *router string nat outside pool string large-scale deterministic port-reservation number*

Tree	port-reservation
Range	1 to 65536
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router string nat outside pool string large-scale deterministic watermarks
Tree	watermarks
Description	<p>Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.</p> <p>High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.</p> <p>For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.</p>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis	High watermark percentage
Context	configure router string nat outside pool string large-scale deterministic watermarks high number
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis	Low watermark percentage
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Context	configure router string nat outside pool string large-scale deterministic watermarks low number
Tree	low
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis	Enter the redundancy context
Context	configure router string nat outside pool string large-scale redundancy
Tree	redundancy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis	Administrative state of NAT pool redundancy
Context	configure router string nat outside pool string large-scale redundancy admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export-route string

Synopsis	Route to export to the peer
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Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy export-route <i>string</i>
Tree	export-route
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

follow

Synopsis	Enter the follow context
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow
Tree	follow
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis	Name of the pool where activity is shared
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow name <i>string</i>
Tree	name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis	Router instance where the lead pool resides
Context	configure router <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow router-instance <i>string</i>
Tree	router-instance
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-route *string*

Synopsis	Monitor the peer route
Context	configure <i>router string nat outside pool string large-scale redundancy monitor-route string</i>
Tree	monitor-route
Notes	The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	configure <i>router string nat outside pool string large-scale subscriber-limit number</i>
Tree	subscriber-limit
Range	1 to 65535 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	configure <i>router string nat outside pool string mode keyword</i>
Tree	mode
Options	auto, napt, one-to-one
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Create a NAT group

Context **configure** *router* *string* *nat* *outside* *pool* *string* *nat-group* *reference*

Tree [nat-group](#)

Reference **configure** *isa* *nat-group* *number*

Notes The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-forwarding

Synopsis Enter the **port-forwarding** context

Context **configure** *router* *string* *nat* *outside* *pool* *string* *port-forwarding*

Tree [port-forwarding](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic-block-reservation *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Reserve dynamic block for subscriber

Context **configure** *router* *string* *nat* *outside* *pool* *string* *port-forwarding* *dynamic-block-reservation* *boolean*

Tree [dynamic-block-reservation](#)

Description When configured to **true**, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if

the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.

The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.

Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.

When configured to **false**, dynamic port blocks are not reserved when the first port forward for the subscriber is created.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-end *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	configure router <i>string</i> nat outside pool <i>string</i> port-forwarding range-end <i>number</i>
Tree	range-end
Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-start command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-end implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0 1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

range-start *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	configure <i>router string nat outside pool string port-forwarding range-start number</i>
Tree	range-start
Description	<p>This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-end command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-start implicit value is set to 1. Port 0 is always excluded from the port forwarding range.</p> <p>Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.</p>
Range	0 1 1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-reservation

Synopsis	Enter the port-reservation context
Context	configure <i>router string nat outside pool string port-reservation</i>
Tree	port-reservation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-blocks *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
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Context	configure <i>router string nat outside pool string port-reservation port-blocks number</i>
Tree	port-blocks
Description	<p>In CGN, this specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the l2-aware port-block-extension hierarchy in the NAT pool.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	configure <i>router string nat outside pool string port-reservation ports number</i>
Tree	ports
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the l2-aware port-block-extension hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port blocks.</p>
Range	1 to 64512
Notes	The following elements are part of a choice: port-blocks or ports .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	configure router <i>string nat outside pool string type keyword</i>
Tree	type
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis	Enable the watermarks context
Context	configure router <i>string nat outside pool string watermarks</i>
Tree	watermarks
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high *number*

Synopsis	High watermark percentage
Context	configure router <i>string nat outside pool string watermarks high number</i>
Tree	high
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Low watermark percentage

Context **configure** *router string nat outside pool string watermarks low number*

Tree *low*

Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group reference



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Create a WLAN GW group for NAT

Context **configure** *router string nat outside pool string wlan-gw-group reference*

Tree *wlan-gw-group*

Reference **configure** *isa wlan-gw-group number*

Notes The following elements are part of a mandatory choice: **nat-group** or **wlan-gw-group**.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

network-domains

Synopsis Enter the **network-domains** context

Context **configure** *router string network-domains*

Tree	network-domains
Introduced	16.0.R4
Platforms	All

network-domain [[domain-name](#)] *string*

Synopsis	Enter the network-domain list instance
Context	configure router <i>string</i> network-domains network-domain <i>string</i>
Tree	network-domain
Max. Instances	5
Introduced	16.0.R4
Platforms	All

[domain-name] *string*

Synopsis	Network domain name
Context	configure router <i>string</i> network-domains network-domain <i>string</i>
Tree	network-domain
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> network-domains network-domain <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

origin-validation

Synopsis	Enter the origin-validation context
Context	configure router <i>string</i> origin-validation
Tree	origin-validation
Introduced	19.5.R1
Platforms	All

rpki-session [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the rpki-session list instance
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	rpki-session
Introduced	19.5.R1
Platforms	All

[*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address for the RPKI local cache server
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	rpki-session
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RPKI session
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.5.R1
Platforms	All

connect-retry *number*

Synopsis	RPKI Connect Retry timer value
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) connect-retry <i>number</i>
Tree	connect-retry
Range	1 to 65535
Default	120
Units	seconds
Introduced	19.5.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local address for the TCP connection setup
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	local-address
Introduced	19.5.R1
Platforms	All

port number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port number used to contact cache server
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port number
Tree	port
Range	0 to 65535
Default	323
Introduced	19.5.R1
Platforms	All

refresh-time

Synopsis	Enter the refresh-time context
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time
Tree	refresh-time
Introduced	19.5.R1
Platforms	All

hold-time number

Synopsis	Length of time that the session is to be considered UP
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time hold-time number
Tree	hold-time
Range	60 to 65535
Default	600
Units	seconds
Introduced	19.5.R1
Platforms	All

value *number*

Synopsis	Periodic Serial Query PDUs sent for liveness detection
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) refresh-time value <i>number</i>
Tree	value
Range	30 to 32767
Default	300
Units	seconds
Introduced	19.5.R1
Platforms	All

stale-time *number*

Synopsis	Maximum time prefix origin validation remains usable
Context	configure router <i>string</i> origin-validation rpki-session (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) stale-time <i>number</i>
Tree	stale-time
Range	60 to 3600
Default	3600
Units	seconds
Introduced	19.5.R1
Platforms	All

static-entry [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **upto** *number* **origin-as** *number*

Synopsis	Enter the static-entry list instance
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto <i>number</i> origin-as <i>number</i>
Tree	static-entry
Introduced	19.5.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 address with the minimum prefix and length
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Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto number origin-as number
Tree	static-entry
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

upto number

Synopsis	Maximum prefix length
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto number origin-as number
Tree	static-entry
Range	1 to 128
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

origin-as number

Synopsis	Origin AS number
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto number origin-as number
Tree	static-entry
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

valid boolean

Synopsis	Designate mix of origin AS and prefix range as valid
Context	configure router <i>string</i> origin-validation static-entry (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) upto number origin-as number valid boolean
Tree	valid
Default	true

Introduced	19.5.R1
Platforms	All

ospf [*ospf-instance*] *number*

Synopsis	Enter the ospf list instance
Context	configure router <i>string ospf number</i>
Tree	ospf
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[ospf-instance] *number*

Synopsis	Value for the integrated OSPF instance
Context	configure router <i>string ospf number</i>
Tree	ospf
Range	0 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF instance
Context	configure router <i>string ospf number admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *keyword*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> ospf <i>number</i> advertise-router-capability <i>keyword</i>
Tree	advertise-router-capability
Default	false
Options	false, link, area, as
Introduced	16.0.R1
Platforms	All

advertise-tunnel-link *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> ospf <i>number</i> advertise-tunnel-link <i>boolean</i>
Tree	advertise-tunnel-link
Default	false
Introduced	16.0.R1
Platforms	All

area [[area-id](#)] *string*

Synopsis	Enter the area list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i>
Tree	area
Introduced	16.0.R1
Platforms	All

[area-id] *string*

Synopsis	Area-ID attribute
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i>
Tree	area
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

area-range [[ip-prefix-mask](#)] *string*

Synopsis	Enter the area-range list instance
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> area-range <i>string</i>
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> area-range <i>string</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> area-range <i>string</i> advertise <i>boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

bier

Synopsis	Enter the bier context
Context	configure router string ospf number area string bier
Tree	bier
Description	Commands in this context configure the administrative state of BIER and the BIER template assigned to the OSPF area.
Introduced	20.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of BIER
Context	configure router string ospf number area string bier admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	20.5.R1
Platforms	All

template *reference*

Synopsis	BIER template name
Context	configure router string ospf number area string bier template reference
Tree	template
Reference	configure router string bier template string
Introduced	20.5.R1
Platforms	All

blackhole-aggregate *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	configure router string ospf number area string blackhole-aggregate boolean
Tree	blackhole-aggregate
Default	true

Introduced 16.0.R1
 Platforms All

database-export-exclude *boolean*

Synopsis Exclude IGP link-state OSPF area info into TE-DB
 Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **database-export-exclude** *boolean*
 Tree [database-export-exclude](#)
 Default false
 Introduced 16.0.R1
 Platforms All

export-policy *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
 Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **export-policy** *reference*
 Tree [export-policy](#)
 Reference **configure** [policy-options](#) [policy-statement](#) *string*
 Max. Instances 5
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms All

import-policy *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA
 Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* **import-policy** *reference*
 Tree [import-policy](#)
 Reference **configure** [policy-options](#) [policy-statement](#) *string*
 Max. Instances 5
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms All

interface [*interface-name*] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string ospf number area string interface string</i>
Tree	<i>interface</i>
Description	Commands in this context configure the attributes of the OSPF area interface. Unless they are explicitly configured, interfaces are not activated by default in any interior gateway protocol such as OSPF.
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string ospf number area string interface string</i>
Tree	<i>interface</i>
Description	This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for configure router interface and configure service ies interface commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area it is moved to this area.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-set [*id*] *reference*

Synopsis	Add a list entry for adjacency-set
Context	configure router <i>string ospf number area string interface string adjacency-set reference</i>
Tree	<i>adjacency-set</i>
Max. Instances	1024

Introduced	16.0.R1
Platforms	All

[id] reference

Synopsis	Adjacency set identity
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> adjacency-set <i>reference</i>
Tree	adjacency-set
Reference	configure router <i>string</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

adjacency-sid

Synopsis	Enable the adjacency-sid context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> adjacency-sid
Tree	adjacency-sid
Introduced	16.0.R1
Platforms	All

label number

Synopsis	
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> adjacency-sid label <i>number</i>
Tree	label
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> admin-state <i>keyword</i>

Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-router-capability <i>boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1
Platforms	All

advertise-subnet *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-subnet <i>boolean</i>
Tree	advertise-subnet
Default	true
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enable the bfd-liveness context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

strict *boolean*

Synopsis	Enable BFD strict mode
Context	configure <i>router string ospf number area string interface string bfd-liveness strict boolean</i>
Tree	<i>strict</i>
Description	<p>When configured to true, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	23.3.R1
Platforms	All

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	configure <i>router string ospf number area string interface string bfd-liveness strict-mode-holddown number</i>
Tree	<i>strict-mode-holddown</i>
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure <i>router string ospf number area string interface string dead-interval number</i>
Tree	<i>dead-interval</i>

Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

flex-algo [*flex-algo-id*] *number*

Synopsis	Enter the flex-algo list instance
Context	configure <i>router string ospf number area string interface string flex-algo number</i>
Tree	<i>flex-algo</i>
Description	Commands in this context configure the attributes of OSPFv2 flexible algorithms interface.
Max. Instances	7
Introduced	21.7.R1
Platforms	All

[flex-algo-id] *number*

Synopsis	Flexible algorithm ID
Context	configure <i>router string ospf number area string interface string flex-algo number</i>
Tree	<i>flex-algo</i>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

node-sid

Synopsis	Enable the node-sid context
Context	configure <i>router string ospf number area string interface string flex-algo number node-sid</i>
Tree	<i>node-sid</i>
Introduced	21.7.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> flex-algo <i>number</i> node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	21.7.R1
Platforms	All

label *number*

Synopsis	Label value for the node SID
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> flex-algo <i>number</i> node-sid label <i>number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	21.7.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

interface-type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	configure <i>router string ospf number area string interface string interface-type keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.</p> <p>If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.</p> <p>Configuring the interface type to secondary, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF interface
Context	configure <i>router string ospf number area string interface string load-balancing-weight number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure <i>router string ospf number area string interface string loopfree-alternate</i>

Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> lsa-filter-out <i>keyword</i>
Tree	lsa-filter-out
Default	none
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Introduced	16.0.R1
Platforms	All

message-digest-key [**key-id**] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Message digest index
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> message-digest-key <i>number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> message-digest-key <i>number</i> md5 <i>string</i>
Tree	md5
String Length	1 to 51

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

metric number

Synopsis	Explicit route cost metric that is applied to the interface
Context	configure router string ospf number area string interface string metric number
Tree	metric
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

mtu number

Synopsis	MTU for the OSPF to use on the interface
Context	configure router string ospf number area string interface string mtu number
Tree	mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

neighbor [address] string

Synopsis	Add a list entry for neighbor
Context	configure router string ospf number area string interface string neighbor string
Tree	neighbor
Introduced	16.0.R1
Platforms	All

[address] string

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	configure router string ospf number area string interface string neighbor string
Tree	neighbor

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

node-sid

Synopsis	Enable the node-sid context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> node-sid
Tree	node-sid
Description	<p>Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.</p> <p>In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.</p> <p>This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.</p> <p>The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.</p> <p>The clear-n-flag option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p> <p>The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.</p>
Introduced	16.0.R1
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the N-flag in an OSPF prefix
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Context	configure <i>router string ospf number area string interface string node-sid clear-n-flag boolean</i>
Tree	clear-n-flag
Description	<p>When configured to true, this command allows the user to clear the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system.</p> <p>When configured to false, the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.</p> <p>When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p>
Default	false
Introduced	16.0.R1
Platforms	All

index number

Synopsis	Node SID index for this interface
Context	configure <i>router string ospf number area string interface string node-sid index number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

label number

Synopsis	Label value for the node SID
Context	configure <i>router string ospf number area string interface string node-sid label number</i>
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

passive *boolean*

Synopsis	Allow interface to be advertised as an OSPF interface without running the OSPF protocol
Context	configure <i>router string ospf number area string interface string passive boolean</i>
Tree	<i>passive</i>
Introduced	16.0.R1
Platforms	All

poll-interval *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	configure <i>router string ospf number area string interface string poll-interval number</i>
Tree	<i>poll-interval</i>
Max. Range	0 to 4294967295
Default	120
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure <i>router string ospf number area string interface string priority number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure <i>router string ospf number area string interface string retransmit-interval number</i>
Tree	<i>retransmit-interval</i>

Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> rib-priority <i>keyword</i>
Tree	rib-priority
Options	high
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> sid-protection <i>boolean</i>
Tree	sid-protection
Default	true
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure <i>router string ospf number area string loopfree-alternate-exclude boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the nssa context
Context	configure <i>router string ospf number area string nssa</i>
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [[ip-prefix-mask](#)] *string*

Synopsis	Enter the area-range list instance
Context	configure <i>router string ospf number area string nssa area-range string</i>
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	configure <i>router string ospf number area string nssa area-range string</i>
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	configure <i>router string ospf number area string nssa area-range string advertise boolean</i>
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

originate-default-route

Synopsis	Enable the originate-default-route context
Context	configure <i>router string ospf number area string nssa originate-default-route</i>
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	configure <i>router string ospf number area string nssa originate-default-route adjacency-check boolean</i>
Tree	adjacency-check
Default	true
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	configure <i>router string ospf number area string nssa originate-default-route type-nssa boolean</i>
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> nssa redistribute-external <i>boolean</i>
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> nssa summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the stub context
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> stub
Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by the ABR for the default route into the stub area
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> stub default-metric <i>number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> stub summaries <i>boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [**router-id**] *string* **transit-area** *reference*

Synopsis	Enter the virtual-link list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[router-id] *string*

Synopsis	Router identity of the virtual link neighbor
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transit-area *reference*

Synopsis	Transit area linking the backbone to not-connected area
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i>
Tree	virtual-link
Reference	configure router <i>string</i> ospf <i>number</i> area <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key *string*

Synopsis	Authentication key
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-key <i>string</i>
Tree	authentication-key
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-keychain <i>reference</i>
Tree	authentication-keychain
Reference	configure system security keychains keychain <i>string</i>
Introduced	16.0.R3
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used on OSPF interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> authentication-type <i>keyword</i>

Tree	authentication-type
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

message-digest-key [[key-id](#)] *number*

Synopsis	Enter the message-digest-key list instance
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i>
Tree	message-digest-key
Introduced	16.0.R1
Platforms	All

[key-id] *number*

Synopsis	Message digest index
Context	configure router <i>string ospf number area string virtual-link string transit-area reference message-digest-key number</i>
Tree	message-digest-key
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

md5 *string*

Synopsis	MD5 hash key
Context	configure router <i>string ospf number area string virtual-link string transit-area reference message-digest-key number md5 string</i>
Tree	md5
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>string ospf number area string virtual-link string transit-area reference retransmit-interval number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

asbr

Synopsis	Enable the asbr context
Context	configure router <i>string</i> ospf <i>number</i> asbr
Tree	asbr
Introduced	16.0.R1
Platforms	All

trace-path (*number* | *keyword*)

Synopsis	Domain identity
Context	configure router <i>string</i> ospf <i>number</i> asbr trace-path (<i>number</i> <i>keyword</i>)
Tree	trace-path
Range	0 to 31
Default	none
Options	none
Introduced	16.0.R1
Platforms	All

compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	configure router <i>string</i> ospf <i>number</i> compatible-rfc1583 <i>boolean</i>
Tree	compatible-rfc1583

Default	true
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the database-export context
Context	configure router <i>string</i> ospf <i>number</i> database-export
Tree	database-export
Introduced	16.0.R1
Platforms	All

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure router <i>string</i> ospf <i>number</i> database-export bgp-ls-identifier
Tree	bgp-ls-identifier
Introduced	16.0.R1
Platforms	All

value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	configure router <i>string</i> ospf <i>number</i> database-export bgp-ls-identifier value <i>number</i>
Tree	value
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	configure router <i>string</i> ospf <i>number</i> database-export igp-identifier <i>number</i>
Tree	igp-identifier

Max. Range 0 to 18446744073709551615
Introduced 16.0.R1
Platforms All

entropy-label

Synopsis Enter the **entropy-label** context
Context **configure** *router string ospf number entropy-label*
Tree [entropy-label](#)
Introduced 16.0.R1
Platforms All

override-tunnel-elc *boolean*

Synopsis Enable override of received ELC advertisements
Context **configure** *router string ospf number entropy-label override-tunnel-elc boolean*
Tree [override-tunnel-elc](#)
Default false
Introduced 16.0.R1
Platforms All

export-limit

Synopsis Enable the **export-limit** context
Context **configure** *router string ospf number export-limit*
Tree [export-limit](#)
Introduced 16.0.R1
Platforms All

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent
Context **configure** *router string ospf number export-limit log-percent number*
Tree [log-percent](#)
Range 1 to 100

Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure <i>router string ospf number export-limit number number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure <i>router string ospf number export-policy reference</i>
Tree	<i>export-policy</i>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure <i>policy-options policy-statement string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure <i>router string ospf number external-db-overflow</i>
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Time during which the router operates in overload
Context	configure <i>router string ospf number external-db-overflow interval number</i>
Tree	interval
Range	0 to 2147483647
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	configure <i>router string ospf number external-db-overflow limit number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

external-preference *number*

Synopsis	Preference for OSPF external routes
Context	configure <i>router string ospf number external-preference number</i>
Tree	external-preference
Range	1 to 255
Default	150

Introduced	16.0.R1
Platforms	All

flexible-algorithms

Synopsis	Enter the flexible-algorithms context
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms
Tree	flexible-algorithms
Description	Commands in this context configure the OSPFv2 parameters for flexible algorithm participation.
Introduced	21.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms admin-state <i>keyword</i>
Tree	admin-state
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Default	disable
Options	enable, disable
Introduced	21.7.R1
Platforms	All

advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	configure router <i>string</i> ospf <i>number</i> flexible-algorithms advertise-admin-group <i>keyword</i>
Tree	advertise-admin-group
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Default	prefer-ag
Options	prefer-ag, eag-only, ag-eag
Introduced	23.3.R1

Platforms All

flex-algo [**flex-algo-id**] *number*

Synopsis Enter the **flex-algo** list instance

Context **configure** *router string ospf number flexible-algorithms flex-algo number*

Tree [flex-algo](#)

Description Commands in this context configure the attributes of the OSPFv2 flexible algorithm.

The maximum unique flexible algorithms can be configured on a router across all configured OSPFv2 instances. In each OSPF flexible algorithm configuration context, the OSPFv2 instance participation can be either enabled or disabled, and it configures the advertising of a locally-configured flexible algorithm definition.

When flexible algorithm is enabled in an OSPF instance, it is enabled for all areas within the OSPF instance.

Max. Instances 7

Introduced 21.7.R1

Platforms All

[flex-algo-id] *number*

Synopsis Flexible algorithm ID

Context **configure** *router string ospf number flexible-algorithms flex-algo number*

Tree [flex-algo](#)

Range 128 to 255

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms All

advertise *reference*

Synopsis Flexible Algorithm Definition advertisement

Context **configure** *router string ospf number flexible-algorithms flex-algo number advertise reference*

Tree [advertise](#)

Description This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).

The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.

Reference	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i>
Introduced	21.7.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure router <i>string ospf number flexible-algorithms flex-algo number loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	21.7.R1
Platforms	All

participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	configure router <i>string ospf number flexible-algorithms flex-algo number participate boolean</i>
Tree	participate
Description	When configured to true , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support. When configured to false , flexible algorithm participation is not enabled.
Default	false
Introduced	21.7.R1
Platforms	All

graceful-restart

Synopsis	Enable the graceful-restart context
Context	configure router <i>string ospf number graceful-restart</i>
Tree	graceful-restart
Introduced	16.0.R1

Platforms All

helper-mode *boolean*

Synopsis Enable graceful restart helper for OSPF
Context **configure** [router](#) *string* [ospf](#) *number* [graceful-restart](#) [helper-mode](#) *boolean*
Tree [helper-mode](#)
Default true
Introduced 16.0.R1
Platforms All

strict-lsa-checking *boolean*

Synopsis Perform strict LSA checking during graceful restart helper
Context **configure** [router](#) *string* [ospf](#) *number* [graceful-restart](#) [strict-lsa-checking](#) *boolean*
Tree [strict-lsa-checking](#)
Default true
Introduced 16.0.R1
Platforms All

igp-shortcut

Synopsis Enter the **igp-shortcut** context
Context **configure** [router](#) *string* [ospf](#) *number* [igp-shortcut](#)
Tree [igp-shortcut](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the IGP shortcuts
Context **configure** [router](#) *string* [ospf](#) *number* [igp-shortcut](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable

Introduced	16.0.R1
Platforms	All

allow-sr-over-srte *boolean*

Synopsis	Enable SR over SR-TE LSPs
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut allow-sr-over-srte <i>boolean</i>
Tree	allow-sr-over-srte
Description	<p>When configured to true, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with allow-sr-over-srte explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit allow-sr-over-srte configuration.</p> <p>Under ECMP, when this command is configured to true, preference is given to the SR-TE LSPs with allow-sr-over-srte explicitly configured over the LSPs that do not have allow-sr-over-srte configured.</p>
Default	false
Introduced	23.3.R1
Platforms	All

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

family [*family-type*] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Introduced	16.0.R1
Platforms	All

[family-type] keyword

Synopsis	Address family type for tunnel next-hop
Context	configure router <i>string</i> <i>ospf</i> <i>number</i> <i>igp-shortcut</i> <i>tunnel-next-hop</i> <i>family</i> <i>keyword</i>
Tree	family
Options	ipv4, srv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

resolution keyword

Synopsis	Resolution state for IGP shortcut tunnels
Context	configure router <i>string</i> <i>ospf</i> <i>number</i> <i>igp-shortcut</i> <i>tunnel-next-hop</i> <i>family</i> <i>keyword</i> resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any, match-family-ip
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string</i> <i>ospf</i> <i>number</i> <i>igp-shortcut</i> <i>tunnel-next-hop</i> <i>family</i> <i>keyword</i> resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

rsvp boolean

Synopsis	Use RSVP tunneling for next-hop resolution
Context	configure router <i>string</i> <i>ospf</i> <i>number</i> <i>igp-shortcut</i> <i>tunnel-next-hop</i> <i>family</i> <i>keyword</i> resolution-filter <i>rsvp</i> <i>boolean</i>
Tree	rsvp
Default	false

Introduced	16.0.R1
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure router <i>string</i> ospf <i>number</i> igp-shortcut tunnel-next-hop <i>family</i> <i>keyword</i> resolution-filter sr-te <i>boolean</i>
Tree	sr-te
Default	false
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure router <i>string</i> ospf <i>number</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ldp-over-rsvp *boolean*

Synopsis	Allow LSP over RSVP in this OSPF instance
Context	configure router <i>string</i> ospf <i>number</i> ldp-over-rsvp <i>boolean</i>
Tree	ldp-over-rsvp
Default	false
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	configure <i>router string ospf number ldp-sync boolean</i>
Tree	ldp-sync
Default	true
Introduced	16.0.R1
Platforms	All

loopfree-alternate

Synopsis	Enable the loopfree-alternate context
Context	configure <i>router string ospf number loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	16.0.R1
Platforms	All

augment-route-table *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	configure <i>router string ospf number loopfree-alternate augment-route-table boolean</i>
Tree	augment-route-table
Description	When configured to true , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to false , rLFA-specific information is not added to RTM entries.
Default	false
Introduced	21.10.R1
Platforms	All

exclude

Synopsis	Enter the exclude context
Context	configure <i>router string ospf number loopfree-alternate exclude</i>
Tree	exclude
Introduced	16.0.R3
Platforms	All

prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i>
Tree	prefix-policy
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation. An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

multi-homed-prefix

Synopsis	Enable the multi-homed-prefix context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate multi-homed-prefix
Tree	multi-homed-prefix
Description	Commands in this context configure a multihomed prefix LFA for both RTM routes (IP FRR) and SR-OSPF tunnels. SR-OSPF tunnels enable multihomed prefix extension in both algorithm 0 and flexible-algorithm numbers. This feature makes use of the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes. This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of local anycast prefixes. The computed IP next-hop based backup path is added to OSPF routes of external /32 prefixes (OSPFv2 routes types 3, 4, 5, and 7) and local /32 anycast prefixes in the RTM if the prefix is not protected by base LFA or if the user set leaf preference value to all. The user must enable the ip-fast-reroute leaf to have these backup paths programmed into the FIB in datapath. The computed IP next hop or repair tunnel based backup path is also programmed for SR-OSPF node SID tunnels of external /32 prefixes and to /32 prefixes in same area as the computing node S and which are advertised by multiple routers (anycast prefix) in both algorithm 0 and flexible-algorithm numbers.

Introduced	22.2.R1
Platforms	All

preference *keyword*

Synopsis	Multi-homed prefix LFA backup path preference
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate multi-homed-prefix preference <i>keyword</i>
Tree	preference
Default	none
Options	none, all
Introduced	22.2.R1
Platforms	All

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	16.0.R1
Platforms	All

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate remote-lfa max-pq-cost <i>number</i>
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate remote-lfa node-protect

Tree	node-protect
Introduced	16.0.R4
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate remote-lfa node-protect max-pq-nodes <i>number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate ti-lfa
Tree	ti-lfa
Description	Commands in this context configure the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPF instance.
Introduced	16.0.R1
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate ti-lfa max-sr-frr-labels <i>number</i>
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2

Introduced	16.0.R1
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>string</i> ospf <i>number</i> loopfree-alternate ti-lfa node-protect
Tree	node-protect
Introduced	16.0.R5
Platforms	All

multi-instance *boolean*

Synopsis	Enable OSPF Multi Instance Extensions
Context	configure router <i>string</i> ospf <i>number</i> multi-instance <i>boolean</i>
Tree	multi-instance
Description	When configured to true , the Base router supports RFC 6549, OSPFv2 Multi-Instance Extensions. This support is enabled per instance and allows flexibility when migrating a particular instance from classic OSPFv2 to a multi-instance OSPFv2.
Default	false
Introduced	19.10.R1
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	configure router <i>string</i> ospf <i>number</i> multicast-import <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
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Context	configure <i>router string ospf number overload boolean</i>
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure <i>router string ospf number overload-include-ext-1 boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure <i>router string ospf number overload-include-ext-2 boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure <i>router string ospf number overload-include-stub boolean</i>
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure <i>router string ospf number</i> overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Time during which the router operates in overload state
Context	configure <i>router string ospf number</i> overload-on-boot <i>timeout number</i>
Tree	timeout
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure <i>router string ospf number</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference the default costing of interfaces
Context	configure <i>router string ospf number</i> reference-bandwidth <i>number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Default	100000000
Units	kilobps

Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure router <i>string</i> ospf <i>number</i> rib-priority
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure router <i>string</i> ospf <i>number</i> rib-priority high
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list reference

Synopsis	Higher priority list used during OSPF route calculation
Context	configure router <i>string</i> ospf <i>number</i> rib-priority high prefix-list <i>reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure router <i>string</i> ospf <i>number</i> router-id <i>string</i>

Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure router <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure router <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure router <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
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Context	configure router <i>string</i> ospf number rtr-adv-lsa-limit overload-timeout (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Default	forever
Units	seconds
Options	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure router <i>string</i> ospf number rtr-adv-lsa-limit warning-threshold <i>number</i>
Tree	warning-threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>string</i> ospf number segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	configure router <i>string</i> ospf number segment-routing adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold
Description	This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 1800
Default	15
Units	seconds
Options	none
Introduced	16.0.R1
Platforms	All

adjacency-set [*id*] *number*

Synopsis	Enter the adjacency-set list instance
Context	configure router <i>string</i> ospf <i>number</i> segment-routing adjacency-set <i>number</i>
Tree	adjacency-set
Introduced	16.0.R1
Platforms	All

[id] number

Synopsis	Non-zero identifier for a given adjacency set
Context	configure router string ospf number segment-routing adjacency-set number
Tree	adjacency-set
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise boolean

Synopsis	Advertise adjacency for links terminating on same node
Context	configure router string ospf number segment-routing adjacency-set number advertise boolean
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

parallel boolean

Synopsis	Require adjacency members to terminate on same neighbor
Context	configure router string ospf number segment-routing adjacency-set number parallel boolean
Tree	parallel
Default	true
Introduced	16.0.R1
Platforms	All

sid

Synopsis	Enable the sid context
Context	configure router string ospf number segment-routing adjacency-set number sid
Tree	sid
Introduced	16.0.R1

Platforms All

label number

Synopsis

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [adjacency-set](#) *number* [sid](#) [label](#) *number*

Tree [label](#)

Range 1 to 1048575

Introduced 16.0.R1

Platforms All

adjacency-sid

Synopsis Enter the **adjacency-sid** context

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [adjacency-sid](#)

Tree [adjacency-sid](#)

Introduced 22.7.R1

Platforms All

allocate-dual-sids boolean

Synopsis Allocate dual adjacency SIDs per interface

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [adjacency-sid](#) [allocate-dual-sids](#) *boolean*

Tree [allocate-dual-sids](#)

Description When configured to **true**, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.

When configured to **false**, the router disables the support of two SR-MPLS adjacency SIDs per interface.

Default false

Introduced 22.7.R1

Platforms All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>string</i> ospf <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-node-sid

Synopsis	Enable the backup-node-sid context
Context	configure router <i>string</i> ospf <i>number</i> segment-routing backup-node-sid
Tree	backup-node-sid
Introduced	16.0.R1
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> ospf <i>number</i> segment-routing backup-node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

ip-prefix *string*

Synopsis	IP prefix and prefix length for the backup node SID
Context	configure router <i>string</i> ospf <i>number</i> segment-routing backup-node-sid ip-prefix <i>string</i>
Tree	ip-prefix
Introduced	16.0.R1
Platforms	All

label number

Synopsis	Label value for the node SID
Context	configure router string ospf number segment-routing backup-node-sid label number
Tree	label
Range	1 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	16.0.R1
Platforms	All

class-forwarding boolean

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context	configure router string ospf number segment-routing class-forwarding boolean
Tree	class-forwarding
Description	<p>When configured to true, this command enables Class-Based Forwarding (CBF) with ECMP for SR-OSPF resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to false, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.5.R1
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
Context	configure router string ospf number segment-routing egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-set boolean

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure router string ospf number segment-routing egress-statistics adj-set boolean

Tree	adj-set
Description	When configured to true , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router <i>string</i> ospf <i>number</i> segment-routing egress-statistics adj-sid <i>boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string</i> ospf <i>number</i> segment-routing egress-statistics node-sid <i>boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

entropy-label *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	configure router <i>string</i> ospf <i>number</i> segment-routing entropy-label <i>boolean</i>

Tree	entropy-label
Introduced	16.0.R1
Platforms	All

export-tunnel-table *keyword*

Synopsis	Export tunnel table
Context	configure router <i>string</i> ospf <i>number</i> segment-routing export-tunnel-table <i>keyword</i>
Tree	export-tunnel-table
Options	ldp
Introduced	16.0.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure router <i>string</i> ospf <i>number</i> segment-routing ingress-statistics
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	configure router <i>string</i> ospf <i>number</i> segment-routing ingress-statistics adj-set <i>boolean</i>
Tree	adj-set
Description	When configured to true , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router string ospf number segment-routing ingress-statistics adj-sid <i>boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router string ospf number segment-routing ingress-statistics node-sid <i>boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

mapping-server

Synopsis	Enter the mapping-server context
Context	configure router string ospf number segment-routing mapping-server
Tree	mapping-server
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF mapping server
Context	configure router string ospf number segment-routing mapping-server admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

node-sid-map [[sid-index](#)] *number*

Synopsis	Enter the node-sid-map list instance
Context	configure router <i>string</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Introduced	16.0.R1
Platforms	All

[sid-index] *number*

Synopsis	Start SID index for the node SID mapping
Context	configure router <i>string</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i>
Tree	node-sid-map
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

ip-prefix *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starting prefix of the mapping
Context	configure router <i>string</i> ospf <i>number</i> segment-routing mapping-server node-sid-map <i>number</i> ip-prefix <i>string</i>
Tree	ip-prefix
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

range number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of prefixes to be mapped by the Extended Range Prefix TLV

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [mapping-server](#) [node-sid-map](#)
number [range](#) *number*

Tree [range](#)

Range 1 to 65535

Default 1

Introduced 16.0.R1

Platforms All

scope

Synopsis Enter the **scope** context

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [mapping-server](#) [node-sid-map](#)
number [scope](#)

Tree [scope](#)

Introduced 16.0.R1

Platforms All

area reference

Synopsis Area ID in which the advertise Extended Range TLV is advertised

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [mapping-server](#) [node-sid-map](#)
number [scope](#) [area](#) *reference*

Tree [area](#)

Reference **configure** [router](#) *string* [ospf](#) *number* [area](#) *string*

Notes The following elements are part of a choice: **area** or **as**.

Introduced 16.0.R1

Platforms All

as

Synopsis	Advertise Extended Range TLV in whole autonomous system
Context	configure <i>router string ospf number segment-routing mapping-server node-sid-map number scope as</i>
Tree	<i>as</i>
Notes	The following elements are part of a choice: area or as .
Introduced	16.0.R1
Platforms	All

maximum-sid-depth

Synopsis	Enter the maximum-sid-depth context
Context	configure <i>router string ospf number segment-routing maximum-sid-depth</i>
Tree	<i>maximum-sid-depth</i>
Introduced	20.2.R1
Platforms	All

override-bmi *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	configure <i>router string ospf number segment-routing maximum-sid-depth override-bmi number</i>
Tree	<i>override-bmi</i>
Description	<p>This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.</p> <p>When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.</p>
Range	0 to 12
Introduced	20.2.R1
Platforms	All

override-erld *number*

Synopsis	Value to override the announced node MSD-ERLD value
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Context	configure <i>router string ospf number segment-routing maximum-sid-depth override-erld number</i>
Tree	override-erld
Description	This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing. When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.
Range	0 to 15
Introduced	20.2.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure <i>router string ospf number segment-routing prefix-sid-range</i>
Tree	prefix-sid-range
Introduced	16.0.R1
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	configure <i>router string ospf number segment-routing prefix-sid-range global</i>
Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

max-index *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	configure <i>router string ospf number segment-routing prefix-sid-range max-index number</i>
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

start-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	configure <i>router string ospf number segment-routing prefix-sid-range start-label number</i>
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R1
Platforms	All

srlb *reference*

Synopsis	Segment routing local block
Context	configure <i>router string ospf number segment-routing srlb reference</i>
Tree	srlb
Reference	configure <i>router string mpls-labels reserved-label-block string</i>
Introduced	16.0.R1
Platforms	All

tunnel-mtu *number*

Synopsis	Tunnel MTU size
Context	configure router <i>string</i> ospf <i>number</i> segment-routing tunnel-mtu <i>number</i>
Tree	tunnel-mtu
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

tunnel-table-pref *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	configure router <i>string</i> ospf <i>number</i> segment-routing tunnel-table-pref <i>number</i>
Tree	tunnel-table-pref

Description This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9
- ROUTE_PREF_OSPF_TTM 10
- ROUTE_PREF_ISIS_TTM 11
- ROUTE_PREF_BGP_TTM 12

- `ROUTE_PREF_GRE 255`

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure router string ospf number timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure router string ospf number timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure router string ospf number timers lsa-accumulate <i>number</i>

Tree	lsa-accumulate
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure router <i>string</i> ospf <i>number</i> timers lsa-arrival <i>number</i>
Tree	lsa-arrival
Range	0 to 600000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-generate

Synopsis	Enter the lsa-generate context
Context	configure router <i>string</i> ospf <i>number</i> timers lsa-generate
Tree	lsa-generate
Introduced	16.0.R1
Platforms	All

lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure router <i>string</i> ospf <i>number</i> timers lsa-generate lsa-initial-wait <i>number</i>
Tree	lsa-initial-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1

Platforms All

lsa-second-wait *number*

Synopsis Hold time between the first and second LSA generation

Context **configure** **router** *string* **ospf** *number* **timers** **lsa-generate** **lsa-second-wait** *number*

Tree [lsa-second-wait](#)

Range 10 to 600000

Default 5000

Units milliseconds

Introduced 16.0.R1

Platforms All

max-lsa-wait *number*

Synopsis Max time between two LSAs being generated

Context **configure** **router** *string* **ospf** *number* **timers** **lsa-generate** **max-lsa-wait** *number*

Tree [max-lsa-wait](#)

Range 10 to 600000

Default 5000

Units milliseconds

Introduced 16.0.R1

Platforms All

redistribute-delay *number*

Synopsis Hold down timer for external routes into OSPF

Context **configure** **router** *string* **ospf** *number* **timers** **redistribute-delay** *number*

Tree [redistribute-delay](#)

Range 0 to 1000

Default 1000

Units milliseconds

Introduced 16.0.R1

Platforms All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router string ospf number timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router string ospf number timers spf-wait spf-initial-wait number
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure router string ospf number timers spf-wait spf-max-wait number
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure router string ospf number timers spf-wait spf-second-wait number
Tree	spf-second-wait

Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

traffic-engineering *boolean*

Synopsis	Calculate traffic engineering route
Context	configure <i>router string ospf number traffic-engineering boolean</i>
Tree	traffic-engineering
Default	false
Introduced	16.0.R1
Platforms	All

traffic-engineering-options

Synopsis	Enter the traffic-engineering-options context
Context	configure <i>router string ospf number traffic-engineering-options</i>
Tree	traffic-engineering-options
Introduced	20.7.R1
Platforms	All

advertise-delay *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	configure <i>router string ospf number traffic-engineering-options advertise-delay boolean</i>
Tree	advertise-delay
Description	<p>When configured to true, the router advertises link delay in the IGP LSDB within the OSPF-TE TLV attribute or when the Application-Specific Link Attribute (ASLA) is enabled within SR-TE ASLA.</p> <p>When the router is configured under the configure router ospf traffic-engineering-options sr-te application-specific-link-attributes command to generate SR-TE ASLA attributes, link delay is advertised as a legacy RFC 3630 TLV when RSVP-TE is enabled and as an ASLA RFC 8920 TLV for SR-TE when MPLS is enabled for an interface.</p> <p>SR OS accepts and handles both legacy RSVP-TE TLVs and ASLAs for the RSVP application. However, SR OS only advertises RFC 3630 legacy RSVP-TE TLVs (as recommended by RFC 8920) to avoid compatibility issues.</p>

When configured to **false**, the router disables link delay advertisement.

Default	false
Introduced	22.10.R1
Platforms	All

sr-te *keyword*

Synopsis	Advertisement of link attributes for SR-TE
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>traffic-engineering-options</i> <i>sr-te</i> <i>keyword</i>
Tree	<i>sr-te</i>
Description	This command specifies the advertisement of TE attributes of each link on a per-application basis for RSVP-TE and SR-TE applications.
Default	false
Options	false, legacy, application-specific-link-attributes
Introduced	20.7.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>unicast-import</i> <i>boolean</i>
Tree	<i>unicast-import</i>
Default	true
Introduced	16.0.R1
Platforms	All

ospf3 [*ospf-instance*] *number*

Synopsis	Enter the ospf3 list instance
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i>
Tree	<i>ospf3</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[ospf-instance] number

Synopsis	Value for the integrated OSPF instance
Context	configure router string ospf3 number
Tree	ospf3
Range	0 to 31 64 to 95
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the OSPF instance
Context	configure router string ospf3 number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability keyword

Synopsis	Allow router advertisement capabilities
Context	configure router string ospf3 number advertise-router-capability keyword
Tree	advertise-router-capability
Default	false
Options	false, link, area, as
Introduced	16.0.R1
Platforms	All

area [area-id] string

Synopsis	Enter the area list instance
Context	configure router string ospf3 number area string
Tree	area

Introduced 16.0.R1
 Platforms All

[area-id] *string*

Synopsis Area-ID attribute
 Context **configure** *router string ospf3 number area string*
 Tree [area](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities
 Context **configure** *router string ospf3 number area string advertise-router-capability boolean*
 Tree [advertise-router-capability](#)
 Default true
 Introduced 16.0.R1
 Platforms All

area-range [*ip-prefix-mask*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **area-range** list instance
 Context **configure** *router string ospf3 number area string area-range (ipv4-prefix | ipv6-prefix)*
 Tree [area-range](#)
 Introduced 16.0.R1
 Platforms All

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Address ranges to create on an ABR for route summarization or suppression
 Context **configure** *router string ospf3 number area string area-range (ipv4-prefix | ipv6-prefix)*
 Tree [area-range](#)
 Notes This element is part of a list key.

Introduced 16.0.R1
Platforms All

advertise *boolean*

Synopsis Advertise summarized range of addresses to other areas
Context **configure** **router** *string* **ospf3** *number* **area** *string* **area-range** (*ipv4-prefix* | *ipv6-prefix*)
advertise *boolean*
Tree **advertise**
Default true
Introduced 16.0.R1
Platforms All

blackhole-aggregate *boolean*

Synopsis Install a low priority blackhole route to avoid loops
Context **configure** **router** *string* **ospf3** *number* **area** *string* **blackhole-aggregate** *boolean*
Tree **blackhole-aggregate**
Default true
Introduced 16.0.R1
Platforms All

database-export-exclude *boolean*

Synopsis Exclude IGP link-state OSPF area info into TE-DB
Context **configure** **router** *string* **ospf3** *number* **area** *string* **database-export-exclude** *boolean*
Tree **database-export-exclude**
Default false
Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context **configure** **router** *string* **ospf3** *number* **area** *string* **export-policy** *reference*
Tree **export-policy**

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-lsa *keyword*

Synopsis	Extended LSA format in an OSPFv3 area
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> extended-lsa <i>keyword</i>
Tree	extended-lsa
Options	only
Introduced	16.0.R1
Platforms	All

import-policy *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string ospf3 number area string interface string</i>
Tree	interface
Description	<p>This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for configure router interface and configure service ies interface commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>If the IP interface name does not exist or does not have an IP address configured, an error message is returned.</p> <p>If the IP interface exists in a different area it is moved to this area.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure router <i>string ospf3 number area string interface string admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
Context	configure router <i>string ospf3 number area string interface string advertise-router-capability boolean</i>
Tree	advertise-router-capability
Default	true
Introduced	16.0.R1

Platforms All

authentication

Synopsis Enable the **authentication** context

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* [authentication](#)

Tree [authentication](#)

Introduced 16.0.R6

Platforms All

inbound reference

Synopsis sa-name

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* [authentication](#) [inbound](#) [reference](#)

Tree [inbound](#)

Reference **configure** [ipsec](#) [static-sa](#) *string*

Notes This element is mandatory.

Introduced 16.0.R6

Platforms All

outbound reference

Synopsis sa-name

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* [authentication](#) [outbound](#) [reference](#)

Tree [outbound](#)

Reference **configure** [ipsec](#) [static-sa](#) *string*

Notes This element is mandatory.

Introduced 16.0.R6

Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context

Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

remain-down-on-failure *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness remain-down-on-failure <i>boolean</i>
Tree	remain-down-on-failure
Default	false
Introduced	16.0.R1
Platforms	All

strict *boolean*

Synopsis	Enable BFD strict mode
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness strict <i>boolean</i>
Tree	strict
Description	<p>When configured to true, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	23.3.R1
Platforms	All

strict-mode-holddown *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness strict-mode-holddown <i>number</i>

Tree	strict-mode-holddown
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	configure router <i>string ospf3 number area string interface string interface-type keyword</i>
Tree	interface-type
Description	<p>This command specifies the interface type.</p> <p>Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.</p> <p>If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.</p> <p>Configuring the interface type to secondary, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF3 interface
Context	configure router <i>string ospf3 number area string interface string load-balancing-weight number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

loopfree-alternate

Synopsis	Enter the loopfree-alternate context
Context	configure router <i>string ospf3 number area string interface string loopfree-alternate</i>
Tree	loopfree-alternate
Introduced	16.0.R3
Platforms	All

exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	configure router <i>string ospf3 number area string interface string loopfree-alternate exclude boolean</i>
Tree	exclude
Default	false
Introduced	16.0.R3
Platforms	All

policy-map

Synopsis	Enable the policy-map context
Context	configure router <i>string ospf3 number area string interface string loopfree-alternate policy-map</i>
Tree	policy-map
Introduced	16.0.R3
Platforms	All

route-nh-template *reference*

Synopsis	Route next hop policy template that is applied to interface
Context	configure router <i>string ospf3 number area string interface string loopfree-alternate policy-map route-nh-template reference</i>
Tree	route-nh-template
Reference	configure routing-options route-next-hop-policy template <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

lsa-filter-out *keyword*

Synopsis	LSA flooding reduction
Context	configure router <i>string ospf3 number area string interface string lsa-filter-out keyword</i>
Tree	lsa-filter-out
Default	none
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults

Introduced 16.0.R1
 Platforms All

metric *number*

Synopsis Explicit route cost metric that is applied to the interface
 Context **configure** **router** *string ospf3 number area string interface string metric number*
 Tree **metric**
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

mtu *number*

Synopsis MTU for the OSPF to use on the interface
 Context **configure** **router** *string ospf3 number area string interface string mtu number*
 Tree **mtu**
 Range 512 to 9786
 Introduced 16.0.R1
 Platforms All

neighbor [**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Add a list entry for **neighbor**
 Context **configure** **router** *string ospf3 number area string interface string neighbor (ipv4-address-no-zone | ipv6-address-no-zone)*
 Tree **neighbor**
 Introduced 16.0.R1
 Platforms All

[**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Neighbor link local address
 Context **configure** **router** *string ospf3 number area string interface string neighbor (ipv4-address-no-zone | ipv6-address-no-zone)*
 Tree **neighbor**

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

node-sid

Synopsis	Enable the node-sid context
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> node-sid
Tree	node-sid
Introduced	16.0.R4
Platforms	All

clear-n-flag *boolean*

Synopsis	Clear the N-flag in an OSPF3 prefix
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> node-sid clear-n-flag <i>boolean</i>
Tree	clear-n-flag
Description	<p>When configured to true, this command allows the user to clear the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system.</p> <p>When configured to false, the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.</p> <p>When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p>
Default	false
Introduced	16.0.R5
Platforms	All

index *number*

Synopsis	Node SID index for this interface
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> node-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .

Introduced 16.0.R4
 Platforms All

label *number*

Synopsis Label value for the node SID
 Context **configure** **router** *string ospf3 number area string interface string node-sid label number*
 Tree **label**
 Range 1 to 4294967295
 Notes The following elements are part of a choice: **index** or **label**.
 Introduced 16.0.R4
 Platforms All

passive *boolean*

Synopsis Allow interface to be advertised as an OSPF interface without running the OSPF protocol
 Context **configure** **router** *string ospf3 number area string interface string passive boolean*
 Tree **passive**
 Introduced 16.0.R1
 Platforms All

poll-interval *number*

Synopsis Interval for Hellos to non-adjacent OSPF NBMA neighbor
 Context **configure** **router** *string ospf3 number area string interface string poll-interval number*
 Tree **poll-interval**
 Max. Range 0 to 4294967295
 Default 120
 Units seconds
 Introduced 16.0.R1
 Platforms All

priority *number*

Synopsis	Interface priority in the DR election on the subnet
Context	configure router <i>string ospf3 number area string interface string priority number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>string ospf3 number area string interface string retransmit-interval number</i>
Tree	<i>retransmit-interval</i>
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

rib-priority *keyword*

Synopsis	RIB priority for OSPF
Context	configure router <i>string ospf3 number area string interface string rib-priority keyword</i>
Tree	<i>rib-priority</i>
Options	high
Introduced	16.0.R1
Platforms	All

sid-protection *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	configure router <i>string ospf3 number area string interface string sid-protection boolean</i>
Tree	<i>sid-protection</i>

Default	true
Introduced	16.0.R4
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> transit-delay <i>number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

key-rollover-interval *number*

Synopsis	Key rollover interval
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> key-rollover-interval <i>number</i>
Tree	key-rollover-interval
Range	10 to 300
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

loopfree-alternate-exclude *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	configure router <i>string</i> ospf3 <i>number</i> area <i>string</i> loopfree-alternate-exclude <i>boolean</i>
Tree	loopfree-alternate-exclude
Default	false
Introduced	16.0.R1
Platforms	All

nssa

Synopsis	Enable the nssa context
Context	configure router string ospf3 number area string nssa
Tree	nssa
Introduced	16.0.R1
Platforms	All

area-range [ip-prefix-mask] (ipv4-prefix | ipv6-prefix)

Synopsis	Enter the area-range list instance
Context	configure router string ospf3 number area string nssa area-range (ipv4-prefix ipv6-prefix)
Tree	area-range
Introduced	16.0.R1
Platforms	All

[ip-prefix-mask] (ipv4-prefix | ipv6-prefix)

Synopsis	Addresses on ABR for route summarization or suppression
Context	configure router string ospf3 number area string nssa area-range (ipv4-prefix ipv6-prefix)
Tree	area-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

advertise boolean

Synopsis	Advertise summarized range of addresses to other areas
Context	configure router string ospf3 number area string nssa area-range (ipv4-prefix ipv6-prefix) advertise boolean
Tree	advertise
Default	true
Introduced	16.0.R1
Platforms	All

originate-default-route

Synopsis	Enable the originate-default-route context
Context	configure router string ospf3 number area string nssa originate-default-route
Tree	originate-default-route
Introduced	16.0.R1
Platforms	All

adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	configure router string ospf3 number area string nssa originate-default-route adjacency-check boolean
Tree	adjacency-check
Default	true
Introduced	16.0.R1
Platforms	All

type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	configure router string ospf3 number area string nssa originate-default-route type-nssa boolean
Tree	type-nssa
Default	false
Introduced	16.0.R1
Platforms	All

redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	configure router string ospf3 number area string nssa redistribute-external boolean
Tree	redistribute-external
Default	true
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	configure router <i>string ospf3 number area string nssa summaries boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

stub

Synopsis	Enable the stub context
Context	configure router <i>string ospf3 number area string stub</i>
Tree	stub
Introduced	16.0.R1
Platforms	All

default-metric *number*

Synopsis	Metric used by the ABR for the default route into the stub area
Context	configure router <i>string ospf3 number area string stub default-metric number</i>
Tree	default-metric
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

summaries *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	configure router <i>string ospf3 number area string stub summaries boolean</i>
Tree	summaries
Default	true
Introduced	16.0.R1
Platforms	All

virtual-link [*router-id*] *string* *transit-area* *reference*

Synopsis	Enter the virtual-link list instance
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> virtual-link <i>string</i> <i>transit-area</i> <i>reference</i>
Tree	virtual-link
Introduced	16.0.R1
Platforms	All

[router-id] *string*

Synopsis	Router ID of the virtual link neighbor
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> virtual-link <i>string</i> <i>transit-area</i> <i>reference</i>
Tree	virtual-link
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

transit-area *reference*

Synopsis	Transit area linking backbone and non-connected area
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> virtual-link <i>string</i> <i>transit-area</i> <i>reference</i>
Tree	virtual-link
Reference	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> virtual-link <i>string</i> <i>transit-area</i> <i>reference</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced 16.0.R1
Platforms All

authentication

Synopsis Enable the **authentication** context
Context **configure** [router](#) *string ospf3 number area string virtual-link string transit-area reference authentication*
Tree [authentication](#)
Introduced 16.0.R6
Platforms All

inbound reference

Synopsis sa-name
Context **configure** [router](#) *string ospf3 number area string virtual-link string transit-area reference authentication inbound reference*
Tree [inbound](#)
Reference **configure** [ipsec static-sa](#) *string*
Notes This element is mandatory.
Introduced 16.0.R6
Platforms All

outbound reference

Synopsis sa-name
Context **configure** [router](#) *string ospf3 number area string virtual-link string transit-area reference authentication outbound reference*
Tree [outbound](#)
Reference **configure** [ipsec static-sa](#) *string*
Notes This element is mandatory.
Introduced 16.0.R6
Platforms All

dead-interval *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference</i> dead-interval <i>number</i>
Tree	dead-interval
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Time between OSPF Hellos of this interface
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference</i> hello-interval <i>number</i>
Tree	hello-interval
Range	1 to 65535
Default	10
Units	seconds
Introduced	16.0.R1
Platforms	All

retransmit-interval *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference</i> retransmit-interval <i>number</i>
Tree	retransmit-interval
Range	1 to 1800
Default	5
Units	seconds
Introduced	16.0.R1
Platforms	All

transit-delay *number*

Synopsis	Required LSA transmit time
Context	configure router <i>string ospf3 number area string virtual-link string transit-area reference transit-delay number</i>
Tree	transit-delay
Range	1 to 1800
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

asbr

Synopsis	Enable the asbr context
Context	configure router <i>string ospf3 number asbr</i>
Tree	asbr
Introduced	16.0.R1
Platforms	All

database-export

Synopsis	Enable the database-export context
Context	configure router <i>string ospf3 number database-export</i>
Tree	database-export
Introduced	16.0.R4
Platforms	All

bgp-ls-identifier

Synopsis	Enable the bgp-ls-identifier context
Context	configure router <i>string ospf3 number database-export bgp-ls-identifier</i>
Tree	bgp-ls-identifier
Introduced	16.0.R4
Platforms	All

value *number*

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	configure router <i>string ospf3 number database-export bgp-ls-identifier value number</i>
Tree	value
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	All

igp-identifier *number*

Synopsis	IGP instance in the BGP-LS NLRI
Context	configure router <i>string ospf3 number database-export igp-identifier number</i>
Tree	igp-identifier
Max. Range	0 to 18446744073709551615
Introduced	16.0.R4
Platforms	All

export-limit

Synopsis	Enable the export-limit context
Context	configure router <i>string ospf3 number export-limit</i>
Tree	export-limit
Introduced	16.0.R1
Platforms	All

log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	configure router <i>string ospf3 number export-limit log-percent number</i>
Tree	log-percent
Range	1 to 100
Introduced	16.0.R1
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>string</i> ospf3 <i>number</i> export-limit <i>number</i> <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

export-policy *reference*

Synopsis	Export policies that determine exported routes
Context	configure router <i>string</i> ospf3 <i>number</i> export-policy <i>reference</i>
Tree	export-policy
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p>
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

extended-isa *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended LSA format in an OSPFv3 area
Context	configure <i>router string ospf3 number extended-lsa keyword</i>
Tree	extended-lsa
Default	sparse
Options	sparse, only
Introduced	16.0.R1
Platforms	All

external-db-overflow

Synopsis	Enable the external-db-overflow context
Context	configure <i>router string ospf3 number external-db-overflow</i>
Tree	external-db-overflow
Introduced	16.0.R1
Platforms	All

interval number

Synopsis	Time during which the router operates in overload
Context	configure <i>router string ospf3 number external-db-overflow interval number</i>
Tree	interval
Range	0 to 2147483647
Default	0
Units	seconds
Introduced	16.0.R1
Platforms	All

limit number

Synopsis	Number of external LSA at which overload is triggered
Context	configure <i>router string ospf3 number external-db-overflow limit number</i>
Tree	limit
Range	0 to 2147483647
Default	0
Introduced	16.0.R1

Platforms All

external-preference *number*

Synopsis Preference for OSPF external routes

Context **configure** [router](#) *string* [ospf3](#) *number* [external-preference](#) *number*

Tree [external-preference](#)

Range 1 to 255

Default 150

Introduced 16.0.R1

Platforms All

graceful-restart

Synopsis Enable the **graceful-restart** context

Context **configure** [router](#) *string* [ospf3](#) *number* [graceful-restart](#)

Tree [graceful-restart](#)

Introduced 16.0.R1

Platforms All

helper-mode *boolean*

Synopsis Enable graceful restart helper for OSPF

Context **configure** [router](#) *string* [ospf3](#) *number* [graceful-restart](#) [helper-mode](#) *boolean*

Tree [helper-mode](#)

Default true

Introduced 16.0.R1

Platforms All

strict-lsa-checking *boolean*

Synopsis Perform strict LSA checking during graceful restart helper

Context **configure** [router](#) *string* [ospf3](#) *number* [graceful-restart](#) [strict-lsa-checking](#) *boolean*

Tree [strict-lsa-checking](#)

Default true

Introduced	16.0.R1
Platforms	All

igp-shortcut

Synopsis	Enter the igp-shortcut context
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut
Tree	igp-shortcut
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R4
Platforms	All

family [[family-type](#)] *keyword*

Synopsis	Enter the family list instance
Context	configure router <i>string</i> ospf3 <i>number</i> igp-shortcut tunnel-next-hop family <i>keyword</i>
Tree	family
Introduced	16.0.R4

Platforms All

[family-type] *keyword*

Synopsis Address family type for the tunnel next hop

Context **configure** **router** *string* **ospf3** *number* **igp-shortcut** **tunnel-next-hop** **family** *keyword*

Tree **family**

Options ipv4, ipv6, srv4, srv6

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

resolution *keyword*

Synopsis Resolution state for IGP shortcut tunnels

Context **configure** **router** *string* **ospf3** *number* **igp-shortcut** **tunnel-next-hop** **family** *keyword* **resolution** *keyword*

Tree **resolution**

Default none

Options none, filter, any, match-family-ip

Introduced 16.0.R4

Platforms All

resolution-filter

Synopsis Enter the **resolution-filter** context

Context **configure** **router** *string* **ospf3** *number* **igp-shortcut** **tunnel-next-hop** **family** *keyword* **resolution-filter**

Tree **resolution-filter**

Introduced 16.0.R4

Platforms All

rsvp *boolean*

Synopsis Use RSVP tunneling for next-hop resolution

Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>igp-shortcut</i> <i>tunnel-next-hop</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>rsvp</i> <i>boolean</i>
Tree	rsvp
Default	false
Introduced	16.0.R4
Platforms	All

sr-te *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>igp-shortcut</i> <i>tunnel-next-hop</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>sr-te</i> <i>boolean</i>
Tree	sr-te
Default	false
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>import-policy</i> <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ldp-sync *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>ldp-sync</i> <i>boolean</i>
Tree	ldp-sync
Default	true
Introduced	16.0.R1

Platforms All

loopfree-alternate

Synopsis Enable the **loopfree-alternate** context

Context **configure** [router](#) *string* [ospf3](#) *number* [loopfree-alternate](#)

Tree [loopfree-alternate](#)

Introduced 16.0.R1

Platforms All

exclude

Synopsis Enter the **exclude** context

Context **configure** [router](#) *string* [ospf3](#) *number* [loopfree-alternate](#) [exclude](#)

Tree [exclude](#)

Introduced 16.0.R3

Platforms All

prefix-policy *reference*

Synopsis Policy to exclude prefixes from LFA SPF calculation

Context **configure** [router](#) *string* [ospf3](#) *number* [loopfree-alternate](#) [exclude](#) [prefix-policy](#) *reference*

Tree [prefix-policy](#)

Description This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.

An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R3

Platforms All

remote-lfa

Synopsis	Enable the remote-lfa context
Context	configure router <i>string</i> ospf3 <i>number</i> loopfree-alternate remote-lfa
Tree	remote-lfa
Introduced	16.0.R4
Platforms	All

max-pq-cost *number*

Synopsis	Destination max cost for reverse SPF calculation
Context	configure router <i>string</i> ospf3 <i>number</i> loopfree-alternate remote-lfa max-pq-cost <i>number</i>
Tree	max-pq-cost
Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R4
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>string</i> ospf3 <i>number</i> loopfree-alternate remote-lfa node-protect
Tree	node-protect
Introduced	16.0.R6
Platforms	All

max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	configure router <i>string</i> ospf3 <i>number</i> loopfree-alternate remote-lfa node-protect max-pq-nodes <i>number</i>
Tree	max-pq-nodes
Range	1 to 32
Default	16
Introduced	16.0.R6
Platforms	All

ti-lfa

Synopsis	Enable the ti-lfa context
Context	configure router <i>string ospf3 number loopfree-alternate ti-lfa</i>
Tree	ti-lfa
Description	Commands in this context configure the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPFv3 instance.
Introduced	16.0.R5
Platforms	All

max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	configure router <i>string ospf3 number loopfree-alternate ti-lfa max-sr-frr-labels number</i>
Tree	max-sr-frr-labels
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R5
Platforms	All

node-protect

Synopsis	Enable the node-protect context
Context	configure router <i>string ospf3 number loopfree-alternate ti-lfa node-protect</i>
Tree	node-protect
Introduced	16.0.R6
Platforms	All

multicast-import *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
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Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>multicast-import</i> <i>boolean</i>
Tree	multicast-import
Default	false
Introduced	16.0.R1
Platforms	All

overload *boolean*

Synopsis	Change local router state to appear overloaded
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>overload</i> <i>boolean</i>
Tree	overload
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-ext-1 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>overload-include-ext-1</i> <i>boolean</i>
Tree	overload-include-ext-1
Default	false
Introduced	19.7.R1
Platforms	All

overload-include-ext-2 *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	configure <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>overload-include-ext-2</i> <i>boolean</i>
Tree	overload-include-ext-2
Default	false
Introduced	16.0.R1
Platforms	All

overload-include-stub *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	configure router <i>string ospf3 number</i> overload-include-stub <i>boolean</i>
Tree	overload-include-stub
Default	false
Introduced	16.0.R1
Platforms	All

overload-on-boot

Synopsis	Enable the overload-on-boot context
Context	configure router <i>string ospf3 number</i> overload-on-boot
Tree	overload-on-boot
Introduced	16.0.R1
Platforms	All

timeout *number*

Synopsis	Router interval in overload before normal operations
Context	configure router <i>string ospf3 number</i> overload-on-boot timeout <i>number</i>
Tree	timeout
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference for OSPF internal routes
Context	configure router <i>string ospf3 number</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

reference-bandwidth *number*

Synopsis	Bandwidth to reference the default costing of interfaces
Context	configure <i>router string ospf3 number reference-bandwidth number</i>
Tree	reference-bandwidth
Range	1 to 18446744073709551615
Default	100000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

rib-priority

Synopsis	Enter the rib-priority context
Context	configure <i>router string ospf3 number rib-priority</i>
Tree	rib-priority
Introduced	16.0.R1
Platforms	All

high

Synopsis	Enter the high context
Context	configure <i>router string ospf3 number rib-priority high</i>
Tree	high
Introduced	16.0.R1
Platforms	All

prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	configure <i>router string ospf3 number rib-priority high prefix-list reference</i>
Tree	prefix-list
Reference	configure policy-options prefix-list string
Introduced	16.0.R1
Platforms	All

router-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	configure router <i>string</i> ospf3 <i>number</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rtr-adv-lsa-limit

Synopsis	Enable the rtr-adv-lsa-limit context
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit
Tree	rtr-adv-lsa-limit
Introduced	16.0.R1
Platforms	All

log-only *boolean*

Synopsis	Log the event without triggering overload
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit log-only <i>boolean</i>
Tree	log-only
Default	false
Introduced	16.0.R1
Platforms	All

max-lsa-count *number*

Synopsis	Max number of LSAs one router can advertise
Context	configure router <i>string</i> ospf3 <i>number</i> rtr-adv-lsa-limit max-lsa-count <i>number</i>
Tree	max-lsa-count
Range	1 to 4294967295
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

overload-timeout (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	configure router <i>string ospf3 number rtr-adv-lsa-limit overload-timeout</i> (<i>number</i> <i>keyword</i>)
Tree	overload-timeout
Range	1 to 1800
Default	forever
Units	seconds
Options	forever
Introduced	16.0.R1
Platforms	All

warning-threshold *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	configure router <i>string ospf3 number rtr-adv-lsa-limit warning-threshold</i> <i>number</i>
Tree	warning-threshold
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>string ospf3 number segment-routing</i>
Tree	segment-routing
Introduced	16.0.R4
Platforms	All

adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing adj-sid-hold (<i>number</i> <i>keyword</i>)
Tree	adj-sid-hold
Description	<p>This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.</p> <p>When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.</p> <ul style="list-style-type: none"> • IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV. • The adjacency SID hold timer starts. • The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges. • If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value. • If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value. • A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.
Range	1 to 1800
Default	15
Units	seconds
Options	none
Introduced	16.0.R4
Platforms	All

adjacency-sid

Synopsis	Enter the adjacency-sid context
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing adjacency-sid
Tree	adjacency-sid
Introduced	22.7.R1
Platforms	All

allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing adjacency-sid allocate-dual-sids <i>boolean</i>
Tree	allocate-dual-sids
Description	<p>When configured to true, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to false, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	configure router <i>string</i> ospf3 <i>number</i> segment-routing admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

egress-statistics

Synopsis	Enter the egress-statistics context
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Context	configure router <i>string ospf3 number segment-routing egress-statistics</i>
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure router <i>string ospf3 number segment-routing egress-statistics adj-sid boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure router <i>string ospf3 number segment-routing egress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

ingress-statistics

Synopsis	Enter the ingress-statistics context
Context	configure router <i>string ospf3 number segment-routing ingress-statistics</i>
Tree	ingress-statistics
Introduced	19.10.R1
Platforms	All

adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	configure <i>router string ospf3 number segment-routing ingress-statistics adj-sid boolean</i>
Tree	adj-sid
Description	When configured to true , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	configure <i>router string ospf3 number segment-routing ingress-statistics node-sid boolean</i>
Tree	node-sid
Default	false
Introduced	19.10.R1
Platforms	All

prefix-sid-range

Synopsis	Enable the prefix-sid-range context
Context	configure <i>router string ospf3 number segment-routing prefix-sid-range</i>
Tree	prefix-sid-range
Introduced	16.0.R4
Platforms	All

global

Synopsis	BGP global SR range allocation
Context	configure <i>router string ospf3 number segment-routing prefix-sid-range global</i>

Tree	global
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the configure router mpls-labels sr-labels context.
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R4
Platforms	All

max-index *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	configure router string ospf3 number segment-routing prefix-sid-range max-index number
Tree	max-index
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R4
Platforms	All

start-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	configure router string ospf3 number segment-routing prefix-sid-range start-label number
Tree	start-label
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: global or (max-index and start-label).
Introduced	16.0.R4

Platforms All

tunnel-mtu *number*

Synopsis Tunnel MTU size

Context **configure** *router string ospf3 number segment-routing tunnel-mtu number*

Tree [tunnel-mtu](#)

Range 512 to 9786

Introduced 16.0.R4

Platforms All

tunnel-table-pref *number*

Synopsis Preference of SR tunnels created by the IGP instance

Context **configure** *router string ospf3 number segment-routing tunnel-table-pref number*

Tree [tunnel-table-pref](#)

Description This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

Note: The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE_PREF_RSVP 7
- ROUTE_PREF_SR_TE 8
- ROUTE_PREF_LDP 9

- `ROUTE_PREF_OSPF_TTM 10`
- `ROUTE_PREF_ISIS_TTM 11`
- `ROUTE_PREF_BGP_TTM 12`
- `ROUTE_PREF_GRE 255`

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enter the timers context
Context	configure router <i>string</i> ospf3 <i>number</i> timers
Tree	timers
Introduced	16.0.R1
Platforms	All

incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	configure router <i>string</i> ospf3 <i>number</i> timers incremental-spf-wait <i>number</i>
Tree	incremental-spf-wait
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	configure router <i>string ospf3 number timers</i> Isa-accumulate <i>number</i>
Tree	Isa-accumulate
Range	0 to 1000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isa-arrival *number*

Synopsis	Min delay between receipt of same LSAs from neighbors
Context	configure router <i>string ospf3 number timers</i> Isa-arrival <i>number</i>
Tree	Isa-arrival
Range	0 to 600000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

Isa-generate

Synopsis	Enter the Isa-generate context
Context	configure router <i>string ospf3 number timers</i> Isa-generate
Tree	Isa-generate
Introduced	16.0.R1
Platforms	All

Isa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	configure router <i>string ospf3 number timers</i> Isa-generate Isa-initial-wait <i>number</i>
Tree	Isa-initial-wait
Range	10 to 600000

Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	configure router <i>string</i> ospf3 <i>number</i> timers lsa-generate lsa-second-wait <i>number</i>
Tree	lsa-second-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	configure router <i>string</i> ospf3 <i>number</i> timers lsa-generate max-lsa-wait <i>number</i>
Tree	max-lsa-wait
Range	10 to 600000
Default	5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

redistribute-delay *number*

Synopsis	Hold down timer for external routes into OSPF
Context	configure router <i>string</i> ospf3 <i>number</i> timers redistribute-delay <i>number</i>
Tree	redistribute-delay
Range	0 to 1000
Default	1000
Units	milliseconds

Introduced	16.0.R1
Platforms	All

spf-wait

Synopsis	Enter the spf-wait context
Context	configure router string ospf3 number timers spf-wait
Tree	spf-wait
Introduced	16.0.R1
Platforms	All

spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	configure router string ospf3 number timers spf-wait spf-initial-wait <i>number</i>
Tree	spf-initial-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-max-wait *number*

Synopsis	Max interval between two consecutive SPF calculations
Context	configure router string ospf3 number timers spf-wait spf-max-wait <i>number</i>
Tree	spf-max-wait
Range	10 to 120000
Default	10000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

spf-second-wait *number*

Synopsis	Hold time between the first and second SPF calculation
Context	configure router <i>string</i> ospf3 <i>number</i> timers spf-wait spf-second-wait <i>number</i>
Tree	spf-second-wait
Range	10 to 100000
Default	1000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

unicast-import *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	configure router <i>string</i> ospf3 <i>number</i> unicast-import <i>boolean</i>
Tree	unicast-import
Default	true
Introduced	16.0.R1
Platforms	All

p2mp-sr-tree

Synopsis	Enable the p2mp-sr-tree context
Context	configure router <i>string</i> p2mp-sr-tree
Tree	p2mp-sr-tree
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	configure router <i>string</i> p2mp-sr-tree admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1

Platforms All

bfd-liveness *keyword*

Synopsis BFD-liveness for P2MP SR tree status entry
 Context **configure** **router** *string* **p2mp-sr-tree** **bfd-liveness** *keyword*
 Tree **bfd-liveness**
 Options ipv4, ipv6
 Max. Instances 2
 Introduced 21.5.R1
 Platforms All

p2mp-policy [**p2mp-policy-name**] *string*

Synopsis Enter the **p2mp-policy** list instance
 Context **configure** **router** *string* **p2mp-sr-tree** **p2mp-policy** *string*
 Tree **p2mp-policy**
 Introduced 21.5.R1
 Platforms All

[**p2mp-policy-name**] *string*

Synopsis P2MP policy name
 Context **configure** **router** *string* **p2mp-sr-tree** **p2mp-policy** *string*
 Tree **p2mp-policy**
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 21.5.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the P2MP policy
 Context **configure** **router** *string* **p2mp-sr-tree** **p2mp-policy** *string* **admin-state** *keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

candidate-path [[candidate-path-name](#)] *string*

Synopsis	Enter the candidate-path list instance
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i>
Tree	candidate-path
Introduced	21.5.R1
Platforms	All

[candidate-path-name] *string*

Synopsis	Candidate path name
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i>
Tree	candidate-path
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

active-instance *reference*

Synopsis	Candidate path active instance
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> active-instance <i>reference</i>
Tree	active-instance
Reference	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i>
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

path-instances [*index*] *number*

Synopsis	Enter the path-instances list instance
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i>
Tree	path-instances
Introduced	21.5.R1
Platforms	All

[index] *number*

Synopsis	Instance index
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i>
Tree	path-instances
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

instance-id *number*

Synopsis	Instance value
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> path-instances <i>number</i> instance-id <i>number</i>
Tree	instance-id

Max. Range	0 to 4294967295
Introduced	21.5.R1
Platforms	All

preference number

Synopsis	Candidate-path preference
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> candidate-path <i>string</i> preference <i>number</i>
Tree	preference
Range	0 to 1024
Default	100
Introduced	21.5.R1
Platforms	All

root-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Root address for the P2MP policy
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> root-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	root-address
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

tree-id number

Synopsis	Tree ID for the P2MP policy
Context	configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> tree-id <i>number</i>
Tree	tree-id
Range	0 8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

replication-segment [*policy-name*] *string*

Synopsis	Enter the replication-segment list instance
Context	configure <i>router string p2mp-sr-tree replication-segment string</i>
Tree	replication-segment
Introduced	21.5.R1
Platforms	All

[policy-name] *string*

Synopsis	P2MP policy name
Context	configure <i>router string p2mp-sr-tree replication-segment string</i>
Tree	replication-segment
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the replication segment
Context	configure <i>router string p2mp-sr-tree replication-segment string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

downstream-nodes [*downstream-index*] *number*

Synopsis	Enter the downstream-nodes list instance
Context	configure <i>router string p2mp-sr-tree replication-segment string downstream-nodes number</i>
Tree	downstream-nodes
Introduced	21.5.R1
Platforms	All

[downstream-index] number

Synopsis	Downstream index
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i>
Tree	downstream-nodes
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of next-hop entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	All

label

Synopsis	Enter the label context
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label
Tree	label
Introduced	21.5.R1
Platforms	All

sid-list [index] number

Synopsis	Enter the sid-list list instance
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label sid-list <i>number</i>

Tree	sid-list
Introduced	21.5.R1
Platforms	All

[index] number

Synopsis	SID list index
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label sid-list <i>number</i>
Tree	sid-list
Range	1 to 11
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

replication-sid number

Synopsis	Segment ID for the SID list entry
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> label sid-list <i>number</i> replication-sid <i>number</i>
Tree	replication-sid
Range	3 16 to 1048575 4294967295
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	All

next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)

Synopsis	Next-hop address for replication segment next hops
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> next-hop-address (ipv4-address-with-zone ipv6-address-with-zone)
Tree	next-hop-address
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

next-hop-interface-name *string*

Synopsis	Interface name for replication segment next-hops
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> next-hop-interface-name <i>string</i>
Tree	next-hop-interface-name
String Length	1 to 32
Introduced	21.5.R1
Platforms	All

protect-nexthop-id *reference*

Synopsis	ID of the protection next hop used for FRR
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i> protect-nexthop-id <i>reference</i>
Tree	protect-nexthop-id
Reference	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> downstream-nodes <i>number</i>
Introduced	21.5.R1
Platforms	All

instance-id *number*

Synopsis	Instance ID for replication segment entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> instance-id <i>number</i>
Tree	instance-id
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

replication-sid *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID of the replication segment
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> replication-sid <i>number</i>
Tree	replication-sid
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

root-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Root address for replication segment entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> root-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	root-address
Introduced	21.5.R1
Platforms	All

sid-action *keyword*

Synopsis	SID action for replication segment entries
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> sid-action <i>keyword</i>
Tree	sid-action
Default	none
Options	none, push, pop, swap
Introduced	21.5.R1
Platforms	All

tree-id *number*

Synopsis	Tree ID for the replication segment of the P2MP SR tree
Context	configure router <i>string</i> p2mp-sr-tree replication-segment <i>string</i> tree-id <i>number</i>
Tree	tree-id
Range	0 8193 to 16286
Default	0
Introduced	21.5.R1

Platforms All

reserved-label-block *reference*

Synopsis Reserved label block name for the P2MP SR tree
 Context **configure** *router* *string* *p2mp-sr-tree* *reserved-label-block* *reference*
 Tree [reserved-label-block](#)
 Reference **configure** *router* *string* *mpls-labels* *reserved-label-block* *string*
 Introduced 21.5.R1
 Platforms All

pcep

Synopsis Enter the **pcep** context
 Context **configure** *router* *string* *pcep*
 Tree [pcep](#)
 Introduced 16.0.R4
 Platforms All

pcc

Synopsis Enable the **pcc** context
 Context **configure** *router* *string* *pcep* *pcc*
 Tree [pcc](#)
 Introduced 16.0.R4
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the PCEP session element
 Context **configure** *router* *string* *pcep* *pcc* *admin-state* *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R4

Platforms All

dead-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure dead timer
Context	configure <i>router string pcep pcc dead-timer number</i>
Tree	<i>dead-timer</i>
Range	1 to 255
Default	120
Units	seconds
Introduced	16.0.R4
Platforms	All

keepalive *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	configure <i>router string pcep pcc keepalive number</i>
Tree	<i>keepalive</i>
Range	1 to 255
Default	30
Units	seconds
Introduced	16.0.R4
Platforms	All

local-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	configure <i>router string pcep pcc local-address string</i>
Tree	local-address
Description	This command configures the local IPv4 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv4 address to establish a PCEP session.
Introduced	16.0.R4
Platforms	All

local-address-ipv6 *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	configure <i>router string pcep pcc local-address-ipv6 string</i>
Tree	local-address-ipv6
Description	This command configures the local IPv6 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv6 address to establish a PCEP session.
Introduced	20.2.R1
Platforms	All

max-srte-pce-init-lsps *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure max sr te pce init LSP
Context	configure <i>router string pcep pcc max-srte-pce-init-lsps number</i>
Tree	max-srte-pce-init-lsps
Range	0 to 8191
Default	8191
Introduced	16.0.R5

Platforms All

pce-associations

Synopsis Enter the **pce-associations** context
 Context **configure router** *string* [pcep pcc pce-associations](#)
 Tree [pce-associations](#)
 Description Commands in this context configure PCE association groups.
 Introduced 22.5.R1
 Platforms All

diversity [[assoc-name](#)] *string*

Synopsis Enter the **diversity** list instance
 Context **configure router** *string* [pcep pcc pce-associations diversity](#) *string*
 Tree [diversity](#)
 Description Commands in this context create a named diversity association from which the parameters for the specified diversity association are configured.
 Introduced 22.5.R1
 Platforms All

[assoc-name] *string*

Synopsis Name of the association group
 Context **configure router** *string* [pcep pcc pce-associations diversity](#) *string*
 Tree [diversity](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 22.5.R1
 Platforms All

association-id *number*

Synopsis Association ID for the diversity association group
 Context **configure router** *string* [pcep pcc pce-associations diversity](#) *string* [association-id](#) *number*

Tree	association-id
Description	This command configures the diversity association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

association-source (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> association-source (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	association-source
Description	This command configures the source IP address of the diversity association.
Introduced	22.5.R1
Platforms	All

disjointness-reference *boolean*

Synopsis	Configure P-flag in the disjointness configuration TLV
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> disjointness-reference <i>boolean</i>
Tree	disjointness-reference
Description	<p>When configured to true, the router sets the P-flag in the disjointness configuration TLV. When the P-flag is set, it indicates that this LSP path is the reference path for the disjoint set of paths. The PCE must first compute the path of this LSP and then apply the requested disjointness type to compute the path of all other paths in the same diversity association ID.</p> <p>When configured to false, the router does not set the P-flag in the disjointness configuration TLV.</p>
Default	false
Introduced	22.5.R1
Platforms	All

disjointness-type *keyword*

Synopsis	Disjointness type for the association group
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> disjointness-type <i>keyword</i>
Tree	disjointness-type
Description	This command configures the disjointness type for the association group.
Default	loose
Options	strict, loose
Introduced	22.5.R1
Platforms	All

diversity-type *keyword*

Synopsis	Diversity type for the association group
Context	configure router <i>string</i> pcep pcc pce-associations diversity <i>string</i> diversity-type <i>keyword</i>
Tree	diversity-type
Description	This command configures the diversity type for the association group.
Default	none
Options	none, link, node, srlg-link, srlg-node
Introduced	22.5.R1
Platforms	All

policy [**assoc-name**] *string*

Synopsis	Enter the policy list instance
Context	configure router <i>string</i> pcep pcc pce-associations policy <i>string</i>
Tree	policy
Description	Commands in this context create a named policy association from which the parameters for the specified policy association are configured.
Introduced	22.5.R1
Platforms	All

[assoc-name] *string*

Synopsis	Name of the association group
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Context	configure <i>router</i> <i>string</i> <i>pcep</i> <i>pcc</i> <i>pce-associations</i> <i>policy</i> <i>string</i>
Tree	policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

association-id *number*

Synopsis	Association ID for the policy association group
Context	configure <i>router</i> <i>string</i> <i>pcep</i> <i>pcc</i> <i>pce-associations</i> <i>policy</i> <i>string</i> <i>association-id</i> <i>number</i>
Tree	association-id
Description	This command configures the policy association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

association-source (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	configure <i>router</i> <i>string</i> <i>pcep</i> <i>pcc</i> <i>pce-associations</i> <i>policy</i> <i>string</i> <i>association-source</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	association-source
Description	This command configures the source IP address of the policy association.
Introduced	22.5.R1
Platforms	All

peer [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the peer list instance
Context	configure <i>router</i> <i>string</i> <i>pcep</i> <i>pcc</i> <i>peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	peer
Max. Instances	2

Introduced 16.0.R4
 Platforms All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Destination IP address of a PCE peer in a PCEP session
 Context **configure** *router string pcep pcc peer (ipv4-address-no-zone | ipv6-address-no-zone)*
 Tree *peer*
 Notes This element is part of a list key.
 Introduced 16.0.R4
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the PCC peer
 Context **configure** *router string pcep pcc peer (ipv4-address-no-zone | ipv6-address-no-zone) admin-state keyword*
 Tree *admin-state*
 Default *disable*
 Options *enable, disable*
 Introduced 16.0.R4
 Platforms All

preference *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Preference value of the peer
 Context **configure** *router string pcep pcc peer (ipv4-address-no-zone | ipv6-address-no-zone) preference number*
 Tree *preference*
 Range 0 to 100
 Default 0
 Introduced 16.0.R4

Platforms All

route-preference *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route preference to reach the PCE server
Context	configure router <i>string</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) route-preference <i>keyword</i>
Tree	route-preference
Description	This command specifies the routing preference to reach the PCE server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the management routing instance are used to reach the PCE server before the in-band routes in the Base routing instance.
Default	both
Options	inband, outband, both
Introduced	21.10.R1
Platforms	All

tls-client-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS client profile name assigned to this PCC peer
Context	configure router <i>string</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-client-profile <i>reference</i>
Tree	tls-client-profile
Reference	configure system security tls client-tls-profile <i>string</i>
Introduced	21.10.R1
Platforms	All

tls-wait-timer *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time the PCC waits until declaring handshake failure
Context	configure router <i>string</i> pcep pcc peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tls-wait-timer <i>number</i>
Tree	tls-wait-timer
Range	60 to 255
Default	60
Units	seconds
Introduced	21.10.R1
Platforms	All

redelegation-timer *number*

Synopsis	Configure redelegation-timer
Context	configure router <i>string</i> pcep pcc redelegation-timer <i>number</i>
Tree	redelegation-timer
Range	1 to 3600
Default	90
Units	seconds
Introduced	16.0.R4
Platforms	All

report-path-constraints *boolean*

Synopsis	Include LSP path constraints in PCE report messages
Context	configure router <i>string</i> pcep pcc report-path-constraints <i>boolean</i>
Tree	report-path-constraints
Default	true
Introduced	16.0.R4
Platforms	All

state-timer

Synopsis	Enter the state-timer context
Context	configure <i>router string</i> <i>pcep pcc state-timer</i>
Tree	<i>state-timer</i>
Introduced	16.0.R4
Platforms	All

timer number

Synopsis	Configure state-timer
Context	configure <i>router string pcep pcc state-timer timer number</i>
Tree	<i>timer</i>
Range	1 to 3600
Default	180
Units	seconds
Introduced	16.0.R4
Platforms	All

timer-action keyword

Synopsis	State timer action remove/none
Context	configure <i>router string pcep pcc state-timer timer-action keyword</i>
Tree	<i>timer-action</i>
Default	remove
Options	none, remove
Introduced	16.0.R4
Platforms	All

unknown-message-rate number

Synopsis	Configure unknown message rate
Context	configure <i>router string pcep pcc unknown-message-rate number</i>
Tree	<i>unknown-message-rate</i>
Range	1 to 255
Default	10

Introduced 16.0.R4
 Platforms All

pcp

Synopsis Enter the **pcp** context
 Context **configure** *router string* **pcp**
 Tree **pcp**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [*name*] *string*

Synopsis Enter the **server** list instance
 Context **configure** *router string* **pcp server string**
 Tree **server**
 Max. Instances 8
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis PCP server name
 Context **configure** *router string* **pcp server string**
 Tree **server**
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the PCP server
 Context **configure** *router string* **pcp server string** *admin-state keyword*

Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> pcp server <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite-address *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	configure router <i>string</i> pcp server <i>string</i> dual-stack-lite-address <i>string</i>
Tree	dual-stack-lite-address
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-inside-router *string*

Synopsis	PCP forwarding inside virtual router instance
Context	configure router <i>string</i> pcp server <i>string</i> fwd-inside-router <i>string</i>
Tree	fwd-inside-router
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [[name](#)] *reference*

Synopsis	Add a list entry for interface
Context	configure router <i>string</i> pcp server <i>string</i> interface <i>reference</i>

Tree	interface
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *reference*

Synopsis	Interface name
Context	configure router <i>string</i> pcp server <i>string</i> interface <i>reference</i>
Tree	interface
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis	PCP server policy
Context	configure router <i>string</i> pcp server <i>string</i> policy <i>reference</i>
Tree	policy
Reference	configure service nat pcp-server-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim

Synopsis	Enable the pim context
Context	configure router <i>string</i> pim
Tree	pim
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM
Context	configure router <i>string</i> pim admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

apply-to *keyword*

Synopsis	IES and non-IES interfaces to create in PIM
Context	configure router <i>string</i> pim apply-to <i>keyword</i>
Tree	apply-to
Default	none
Options	ies, non-ies, all, none
Introduced	16.0.R1
Platforms	All

import

Synopsis	Enter the import context
Context	configure router <i>string</i> pim import
Tree	import
Introduced	16.0.R1
Platforms	All

join-policy *reference*

Synopsis	Character limit for policy name
Context	configure router <i>string</i> pim import join-policy <i>reference</i>
Tree	join-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

register-policy *reference*

Synopsis	Character limit for policy name
Context	configure router <i>string</i> pim import register-policy <i>reference</i>
Tree	register-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> pim interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> pim interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the PIM interface
Context	configure router <i>string</i> pim interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

assert-period *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	configure router <i>string</i> pim interface <i>string</i> assert-period <i>number</i>
Tree	assert-period
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

bfd-liveness

Synopsis	Enter the bfd-liveness context
Context	configure router <i>string</i> pim interface <i>string</i> bfd-liveness
Tree	bfd-liveness
Introduced	16.0.R1
Platforms	All

ipv4 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	configure router <i>string</i> pim interface <i>string</i> bfd-liveness ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	All

ipv6 *boolean*

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	configure router <i>string</i> pim interface <i>string</i> bfd-liveness ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	All

bier-signaling-type

Synopsis	Enter the bier-signaling-type context
Context	configure router <i>string</i> pim interface <i>string</i> bier-signaling-type
Tree	bier-signaling-type
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Enable PIM IPv4 signaling through a BIER domain
Context	configure router <i>string</i> pim interface <i>string</i> bier-signaling-type ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 *boolean*

Synopsis	Enable PIM IPv6 signaling through a BIER domain
Context	configure router <i>string</i> pim interface <i>string</i> bier-signaling-type ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bsm-check-rtr-alert *boolean*

Synopsis	Check router alert option in bootstrap messages received
Context	configure router <i>string</i> pim interface <i>string</i> bsm-check-rtr-alert <i>boolean</i>
Tree	bsm-check-rtr-alert
Default	false
Introduced	16.0.R1
Platforms	All

hello-interval *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	configure router <i>string</i> pim interface <i>string</i> hello-interval <i>number</i>
Tree	hello-interval
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

hello-multiplier *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	configure router <i>string</i> pim interface <i>string</i> hello-multiplier <i>number</i>
Tree	hello-multiplier
Range	20 to 100
Default	35
Introduced	16.0.R1
Platforms	All

improved-assert *boolean*

Synopsis	Allow improved assert processing on interface
Context	configure router <i>string</i> pim interface <i>string</i> improved-assert <i>boolean</i>
Tree	improved-assert
Default	true

Introduced 16.0.R1
 Platforms All

instant-prune-echo *boolean*

Synopsis Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface

Context **configure** [router](#) *string* [pim interface](#) *string* [instant-prune-echo](#) *boolean*

Tree [instant-prune-echo](#)

Default false

Introduced 16.0.R1

Platforms All

ipv4

Synopsis Enter the **ipv4** context

Context **configure** [router](#) *string* [pim interface](#) *string* [ipv4](#)

Tree [ipv4](#)

Introduced 16.0.R1

Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context

Context **configure** [router](#) *string* [pim interface](#) *string* [ipv4](#) [monitor-oper-group](#)

Tree [monitor-oper-group](#)

Introduced 16.0.R1

Platforms All

name *reference*

Synopsis Operational group identifier

Context **configure** [router](#) *string* [pim interface](#) *string* [ipv4](#) [monitor-oper-group](#) [name](#) *reference*

Tree [name](#)

Reference **configure** [service oper-group](#) *string*

Introduced 16.0.R1
 Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active
 Context **configure** *router string pim interface string ipv4 monitor-oper-group operation keyword*
 Tree [operation](#)
 Options add, subtract, set
 Introduced 16.0.R1
 Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active
 Context **configure** *router string pim interface string ipv4 monitor-oper-group priority-delta number*
 Tree [priority-delta](#)
 Range 1 to 4294967295
 Introduced 16.0.R1
 Platforms All

multicast *boolean*

Synopsis Enable PIM interface operation
 Context **configure** *router string pim interface string ipv4 multicast boolean*
 Tree [multicast](#)
 Default true
 Introduced 16.0.R1
 Platforms All

ipv6

Synopsis Enter the **ipv6** context
 Context **configure** *router string pim interface string ipv6*
 Tree [ipv6](#)

Introduced 16.0.R1
 Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context
 Context **configure** [router](#) *string* [pim interface](#) *string* [ipv6 monitor-oper-group](#)
 Tree [monitor-oper-group](#)
 Introduced 16.0.R1
 Platforms All

name *reference*

Synopsis Operational group identifier
 Context **configure** [router](#) *string* [pim interface](#) *string* [ipv6 monitor-oper-group name](#) *reference*
 Tree [name](#)
 Reference **configure** [service oper-group](#) *string*
 Introduced 16.0.R1
 Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active
 Context **configure** [router](#) *string* [pim interface](#) *string* [ipv6 monitor-oper-group operation](#) *keyword*
 Tree [operation](#)
 Options add, subtract, set
 Introduced 16.0.R1
 Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active
 Context **configure** [router](#) *string* [pim interface](#) *string* [ipv6 monitor-oper-group priority-delta](#) *number*
 Tree [priority-delta](#)

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

multicast *boolean*

Synopsis	Enable PIM interface operation
Context	configure <i>router string pim interface string ipv6 multicast boolean</i>
Tree	<i>multicast</i>
Default	true
Introduced	16.0.R1
Platforms	All

max-groups *number*

Synopsis	Maximum number of groups for the interface
Context	configure <i>router string pim interface string max-groups number</i>
Tree	<i>max-groups</i>
Range	0 1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

mcac

Synopsis	Enter the mcac context
Context	configure <i>router string pim interface string mcac</i>
Tree	<i>mcac</i>
Introduced	16.0.R1
Platforms	All

bandwidth

Synopsis	Enter the bandwidth context
Context	configure <i>router string pim interface string mcac bandwidth</i>

Tree	bandwidth
Introduced	16.0.R1
Platforms	All

mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	configure router <i>string</i> pim interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>)
Tree	mandatory
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	configure router <i>string</i> pim interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>)
Tree	total
Range	0 to 2147483647
Default	unlimited
Options	unlimited
Introduced	16.0.R1
Platforms	All

interface-policy *reference*

Synopsis	Name of multicast CAC interface policy
Context	configure router <i>string</i> pim interface <i>string</i> mcac interface-policy <i>reference</i>
Tree	interface-policy
Reference	configure mcac interface-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

mc-constraints

Synopsis	Enter the mc-constraints context
Context	configure <i>router string pim interface string mcac mc-constraints</i>
Tree	mc-constraints
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	configure <i>router string pim interface string mcac mc-constraints admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

level [[level-id](#)] *number*

Synopsis	Enter the level list instance
Context	configure <i>router string pim interface string mcac mc-constraints level number</i>
Tree	level
Introduced	16.0.R1
Platforms	All

[level-id] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	configure <i>router string pim interface string mcac mc-constraints level number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bandwidth *number*

Synopsis	Bandwidth available for this level
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i>
Tree	bandwidth
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

number-down [**number-lag-port-down**] *number*

Synopsis	Enter the number-down list instance
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Introduced	16.0.R1
Platforms	All

[number-lag-port-down] *number*

Synopsis	Number of ports that are down in this LAG link
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i>
Tree	number-down
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

level *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i>

Tree	level
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

use-lag-port-weight *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	configure router <i>string</i> pim interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i>
Tree	use-lag-port-weight
Description	When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

policy *reference*

Synopsis	Multicast CAC policy name
Context	configure router <i>string</i> pim interface <i>string</i> mcac <i>policy reference</i>
Tree	policy
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	configure mcac policy <i>string</i>
Introduced	16.0.R1
Platforms	All

multicast-senders *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	configure router <i>string</i> pim interface <i>string</i> multicast-senders <i>keyword</i>
Tree	multicast-senders
Default	auto
Options	auto, always, never
Introduced	16.0.R1
Platforms	All

p2mp-ldp-tree-join

Synopsis	Enter the p2mp-ldp-tree-join context
Context	configure router <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join
Tree	p2mp-ldp-tree-join
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv4 *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	configure router <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv4 <i>boolean</i>
Tree	ipv4
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6 boolean

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	configure router <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv6 <i>boolean</i>
Tree	ipv6
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority number

Synopsis	DR election priority for this interface
Context	configure router <i>string</i> pim interface <i>string</i> priority <i>number</i>
Tree	priority
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

sticky-dr

Synopsis	Enable the sticky-dr context
Context	configure router <i>string</i> pim interface <i>string</i> sticky-dr
Tree	sticky-dr
Introduced	16.0.R1
Platforms	All

priority number

Synopsis	DR election priority for this interface
Context	configure router <i>string</i> pim interface <i>string</i> sticky-dr priority <i>number</i>
Tree	priority
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

three-way-hello *boolean*

Synopsis	Allow three-way hello compatibility mode
Context	configure <i>router string pim interface string three-way-hello boolean</i>
Tree	three-way-hello
Default	false
Introduced	16.0.R1
Platforms	All

tracking-support *boolean*

Synopsis	Allow upstream routers to explicitly track join membership
Context	configure <i>router string pim interface string tracking-support boolean</i>
Tree	tracking-support
Default	false
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure <i>router string pim ipv4</i>
Tree	ipv4
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	configure <i>router string pim ipv4 admin-state keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

gtm

Synopsis	Enter the gtm context
Context	configure router <i>string</i> pim ipv4 gtm
Tree	gtm
Introduced	16.0.R1
Platforms	All

auto-discovery *keyword*

Synopsis	Method for multicast VPN membership auto-discovery
Context	configure router <i>string</i> pim ipv4 gtm auto-discovery <i>keyword</i>
Tree	auto-discovery
Options	bgp
Introduced	16.0.R1
Platforms	All

multicast-fast-failover *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	configure router <i>string</i> pim ipv4 multicast-fast-failover <i>boolean</i>
Tree	multicast-fast-failover
Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
Context	configure router <i>string</i> pim ipv4 rpf-table <i>keyword</i>
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure router <i>string</i> pim ipv4 source-address
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

register-message *string*

Synopsis	Source IPv4 address for PIM register messages
Context	configure router <i>string</i> pim ipv4 source-address register-message <i>string</i>
Tree	register-message
Description	<p>This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
Introduced	23.3.R1
Platforms	All

ssm-assert-compatible-mode *boolean*

Synopsis	Enable SSM assert compatible mode
Context	configure router <i>string</i> pim ipv4 ssm-assert-compatible-mode <i>boolean</i>
Tree	ssm-assert-compatible-mode
Default	false
Introduced	16.0.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure router <i>string</i> pim ipv4 ssm-default-range <i>boolean</i>

Tree	ssm-default-range
Default	true
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> pim ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	configure router <i>string</i> pim ipv6 admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

multicast-fast-failover *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	configure router <i>string</i> pim ipv6 multicast-fast-failover <i>boolean</i>
Tree	multicast-fast-failover
Default	false
Introduced	16.0.R1
Platforms	All

rpf-table *keyword*

Synopsis	Route tables for RPF lookup
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Context	configure <i>router</i> <i>string</i> <i>pim ipv6 rpf-table</i> <i>keyword</i>
Tree	rpf-table
Default	rtable-u
Options	rtable-m, rtable-u, both
Introduced	16.0.R1
Platforms	All

source-address

Synopsis	Enter the source-address context
Context	configure <i>router</i> <i>string</i> <i>pim ipv6 source-address</i>
Tree	source-address
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

register-message *string*

Synopsis	Source IPv6 address for PIM register messages
Context	configure <i>router</i> <i>string</i> <i>pim ipv6 source-address register-message</i> <i>string</i>
Tree	register-message
Description	<p>This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
Introduced	23.3.R1
Platforms	All

ssm-default-range *boolean*

Synopsis	SSM default range
Context	configure <i>router</i> <i>string</i> <i>pim ipv6 ssm-default-range</i> <i>boolean</i>
Tree	ssm-default-range
Default	true

Introduced 16.0.R1
Platforms All

lag-usage-optimization *boolean*

Synopsis Optimize LAG usage
Context **configure** *router* *string* *pim* *lag-usage-optimization* *boolean*
Tree [lag-usage-optimization](#)
Default false
Introduced 16.0.R1
Platforms All

mc-ecmp-balance *boolean*

Synopsis Enable multicast balancing of traffic over ECMP links
Context **configure** *router* *string* *pim* *mc-ecmp-balance* *boolean*
Tree [mc-ecmp-balance](#)
Default true
Introduced 16.0.R1
Platforms All

mc-ecmp-balance-hold *number*

Synopsis Hold time for multicast balancing over ECMP links
Context **configure** *router* *string* *pim* *mc-ecmp-balance-hold* *number*
Tree [mc-ecmp-balance-hold](#)
Range 2 to 600
Units minutes
Introduced 16.0.R1
Platforms All

mc-ecmp-hashing

Synopsis Enable the **mc-ecmp-hashing** context
Context **configure** *router* *string* *pim* *mc-ecmp-hashing*

Tree	mc-ecmp-hashing
Introduced	16.0.R1
Platforms	All

rebalance *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	configure router <i>string</i> pim mc-ecmp-hashing rebalance <i>boolean</i>
Tree	rebalance
Default	false
Introduced	16.0.R1
Platforms	All

mdt-spt *boolean*

Synopsis	Use SPT switchover for default MDT
Context	configure router <i>string</i> pim mdt-spt <i>boolean</i>
Tree	mdt-spt
Default	false
Introduced	16.0.R1
Platforms	All

non-dr-attract-traffic *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	configure router <i>string</i> pim non-dr-attract-traffic <i>boolean</i>
Tree	non-dr-attract-traffic
Default	false
Introduced	16.0.R1
Platforms	All

pim-ssm-scaling *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PIM-SSM scaling
Context	configure <i>router</i> <i>string</i> pim pim-ssm-scaling <i>boolean</i>
Tree	pim-ssm-scaling
Description	<p>When configured to true, this command enables an increase of PIM SSM (S,G) scaling to a maximum of 256000 per system. The total maximum multicast capacity is, however, constrained by the lowest-performance FP.</p> <p>When the maximum link capacity from the fabric to the lowest-performance FP is reached, the link to that FP is overloaded, resulting in packet loss for all FPs. This capacity constraint is independent of whether the lowest-performance FP has a receiver on it or not. If the multicast management chassis per-plane total capacity is configured to an explicit value larger than that supported by the lowest-performance FP, then IMPM believes that there is more plane capacity available than there actually is and the result is (S,G) packet loss instead of blackholing. By setting the multicast management chassis per-plane total capacity to dynamic, the system automatically sets the switch fabric multicast plane capacity to the minimum value supported by the fabric and all line cards in the system.</p> <p>When PIM SSM scaling is enabled, the following multicast features are disabled:• DM• MoFRR• JP policy• SSM groups• InBand features (BIER and MLDP)• Extranet• ASM</p> <p>When configured to false, there is no increase of PIM SSM (S,G) scaling.</p>
Default	false
Introduced	19.7.R1
Platforms	All

rp

Synopsis	Enter the rp context
Context	configure <i>router</i> <i>string</i> pim rp
Tree	rp
Introduced	16.0.R1
Platforms	All

bootstrap

Synopsis	Enter the bootstrap context
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Context	configure router <i>string</i> pim rp bootstrap
Tree	bootstrap
Introduced	16.0.R1
Platforms	All

export *reference*

Synopsis	Character limit for policy name
Context	configure router <i>string</i> pim rp bootstrap export <i>reference</i>
Tree	export
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

import *reference*

Synopsis	Character limit for policy name
Context	configure router <i>string</i> pim rp bootstrap import <i>reference</i>
Tree	import
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

ipv4

Synopsis	Enter the ipv4 context
Context	configure router <i>string</i> pim rp ipv4
Tree	ipv4
Introduced	16.0.R1

Platforms All

anycast [[ipv4-address](#)] *string rp-set-peer string*

Synopsis Add a list entry for **anycast**
 Context **configure** [router string pim rp ipv4 anycast string rp-set-peer string](#)
 Tree [anycast](#)
 Introduced 16.0.R1
 Platforms All

[ipv4-address] *string*

Synopsis Loopback IP address shared by routes in RP set
 Context **configure** [router string pim rp ipv4 anycast string rp-set-peer string](#)
 Tree [anycast](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

rp-set-peer *string*

Synopsis Configure a peer in the anycast rp-set.
 Context **configure** [router string pim rp ipv4 anycast string rp-set-peer string](#)
 Tree [anycast](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

auto-rp-discovery *boolean*

Synopsis Enable auto RP discovery
 Context **configure** [router string pim rp ipv4 auto-rp-discovery boolean](#)
 Tree [auto-rp-discovery](#)
 Default false
 Introduced 16.0.R1

Platforms All

bsr-candidate

Synopsis Enter the **bsr-candidate** context

Context **configure** [router](#) *string* [pim rp ipv4](#) [bsr-candidate](#)

Tree [bsr-candidate](#)

Introduced 16.0.R1

Platforms All

address *string*

Synopsis Candidate BSR IP address for Bootstrap Router election

Context **configure** [router](#) *string* [pim rp ipv4](#) [bsr-candidate](#) [address](#) *string*

Tree [address](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the Candidate BSR

Context **configure** [router](#) *string* [pim rp ipv4](#) [bsr-candidate](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

hash-mask-len *number*

Synopsis Length for bootstrap hash mask

Context **configure** [router](#) *string* [pim rp ipv4](#) [bsr-candidate](#) [hash-mask-len](#) *number*

Tree [hash-mask-len](#)

Range 0 to 32

Default 30

Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure <i>router string pim rp ipv4 bsr-candidate priority number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

candidate *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	configure <i>router string pim rp ipv4 candidate boolean</i>
Tree	<i>candidate</i>
Description	When configured to true , the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery. When configured to false , the candidate RP information is not specified.
Default	false
Introduced	20.10.R1
Platforms	All

mapping-agent *boolean*

Synopsis	Enable the mapping agent on the node
Context	configure <i>router string pim rp ipv4 mapping-agent boolean</i>
Tree	<i>mapping-agent</i>
Description	When configured to true , the mapping agent is enabled on the node. The auto-RP MA observes the auto-rp-announcement messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false

Introduced	20.10.R1
Platforms	All

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure router <i>string</i> pim rp ipv4 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Local RP address
Context	configure router <i>string</i> pim rp ipv4 rp-candidate address <i>string</i>
Tree	address
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate RP
Context	configure router <i>string</i> pim rp ipv4 rp-candidate admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [[ipv4-prefix](#)] *string*

Synopsis	Add a list entry for group-range
Context	configure router <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i>

Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv4-prefix] *string*

Synopsis	IPv4 address and prefix length
Context	configure router <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure router <i>string</i> pim rp ipv4 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Default	150
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	configure router <i>string</i> pim rp ipv4 rp-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 static</i>
Tree	<i>static</i>
Introduced	16.0.R1
Platforms	All

address [*ipv4-address*] *string*

Synopsis	Enter the address list instance
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 static address</i> <i>string</i>
Tree	<i>address</i>
Introduced	16.0.R1
Platforms	All

[ipv4-address] *string*

Synopsis	IPv4 address for the static RP
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 static address</i> <i>string</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [*ipv4-prefix*] *string*

Synopsis	Add a list entry for group-prefix
Context	configure <i>router</i> <i>string</i> <i>pim rp ipv4 static address</i> <i>string</i> <i>group-prefix</i> <i>string</i>
Tree	<i>group-prefix</i>
Introduced	16.0.R1
Platforms	All

[ipv4-prefix] *string*

Synopsis	IPv4 address and prefix length
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Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i> group-prefix <i>string</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure router <i>string</i> pim rp ipv4 static address <i>string</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

ipv6

Synopsis	Enter the ipv6 context
Context	configure router <i>string</i> pim rp ipv6
Tree	ipv6
Introduced	16.0.R1
Platforms	All

anycast [*ipv6-address*] *string* **rp-set-peer** *string*

Synopsis	Add a list entry for anycast
Context	configure router <i>string</i> pim rp ipv6 anycast <i>string</i> rp-set-peer <i>string</i>
Tree	anycast
Introduced	16.0.R1
Platforms	All

[*ipv6-address*] *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	configure router <i>string</i> pim rp ipv6 anycast <i>string</i> rp-set-peer <i>string</i>

Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-set-peer *string*

Synopsis	Peer in the anycast RP set
Context	configure router <i>string</i> pim rp ipv6 anycast <i>string</i> rp-set-peer <i>string</i>
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

bsr-candidate

Synopsis	Enter the bsr-candidate context
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

address *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

hash-mask-len *number*

Synopsis	Length for bootstrap hash mask
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate hash-mask-len <i>number</i>
Tree	hash-mask-len
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Bootstrap priority of the router
Context	configure router <i>string</i> pim rp ipv6 bsr-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

embedded-rp

Synopsis	Enable the embedded-rp context
Context	configure router <i>string</i> pim rp ipv6 embedded-rp
Tree	embedded-rp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of embedded RP
Context	configure router <i>string</i> pim rp ipv6 embedded-rp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [**ipv6-prefix**] *string*

Synopsis	Add a list entry for group-range
Context	configure router <i>string</i> pim rp ipv6 embedded-rp group-range <i>string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address and prefix length
Context	configure router <i>string</i> pim rp ipv6 embedded-rp group-range <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

rp-candidate

Synopsis	Enter the rp-candidate context
Context	configure router <i>string</i> pim rp ipv6 rp-candidate
Tree	rp-candidate
Introduced	16.0.R1
Platforms	All

address string

Synopsis	Local RP address
Context	configure router <i>string</i> pim rp ipv6 rp-candidate address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of the Candidate RP
Context	configure router <i>string</i> pim rp ipv6 rp-candidate admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

group-range [ipv6-prefix] string

Synopsis	Add a list entry for group-range
Context	configure router <i>string</i> pim rp ipv6 rp-candidate group-range <i>string</i>
Tree	group-range
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] string

Synopsis	IPv6 address and prefix length
Context	configure router <i>string</i> pim rp ipv6 rp-candidate group-range <i>string</i>
Tree	group-range
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

holdtime *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	configure router <i>string</i> pim rp ipv6 rp-candidate holdtime <i>number</i>
Tree	holdtime
Range	5 to 255
Default	150
Units	seconds
Introduced	16.0.R1
Platforms	All

priority *number*

Synopsis	Candidate RP priority
Context	configure router <i>string</i> pim rp ipv6 rp-candidate priority <i>number</i>
Tree	priority
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

static

Synopsis	Enter the static context
Context	configure router <i>string</i> pim rp ipv6 static
Tree	static
Introduced	16.0.R1
Platforms	All

address [*ipv6-address*] *string*

Synopsis	Enter the address list instance
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i>
Tree	address
Introduced	16.0.R1
Platforms	All

[ipv6-address] *string*

Synopsis	Static IP address of the RP
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i>
Tree	address
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

group-prefix [**ipv6-prefix**] *string*

Synopsis	Add a list entry for group-prefix
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i> group-prefix <i>string</i>
Tree	group-prefix
Introduced	16.0.R1
Platforms	All

[ipv6-prefix] *string*

Synopsis	IPv6 address and prefix length
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i> group-prefix <i>string</i>
Tree	group-prefix
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

override *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	configure router <i>string</i> pim rp ipv6 static address <i>string</i> override <i>boolean</i>
Tree	override
Default	false
Introduced	16.0.R1
Platforms	All

rpfv

Synopsis	Enter the rpfv context
Context	configure router <i>string</i> pim rpfv
Tree	rpfv
Introduced	16.0.R1
Platforms	All

core *boolean*

Synopsis	Include proxy RPF vector for core
Context	configure router <i>string</i> pim rpfv core <i>boolean</i>
Tree	core
Default	false
Introduced	16.0.R1
Platforms	All

mvpn *boolean*

Synopsis	Include proxy RPF vector for Inter-AS Rosen MVPN
Context	configure router <i>string</i> pim rpfv mvpn <i>boolean</i>
Tree	mvpn
Default	false
Introduced	16.0.R1
Platforms	All

spt-switchover [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the spt-switchover list instance
Context	configure router <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	spt-switchover
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	configure router <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	spt-switchover
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

threshold (*number* | *keyword*)

Synopsis	SPT switchover threshold
Context	configure router <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold (<i>number</i> <i>keyword</i>)
Tree	threshold
Range	1 to 4294967294
Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ssm-groups

Synopsis	Enter the ssm-groups context
Context	configure router <i>string</i> pim ssm-groups
Tree	ssm-groups
Introduced	16.0.R1
Platforms	All

group-range [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for group-range
Context	configure router <i>string</i> pim ssm-groups group-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	group-range
Introduced	16.0.R1

Platforms All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address and mask length
 Context **configure** *router string pim ssm-groups group-range* (*ipv4-prefix* | *ipv6-prefix*)
 Tree *group-range*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

radius

Synopsis Enter the **radius** context
 Context **configure** *router string radius*
 Tree *radius*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy [*name*] *string*

Synopsis Enter the **proxy** list instance
 Context **configure** *router string radius proxy string*
 Tree *proxy*
 Max. Instances 8
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis RADIUS proxy name
 Context **configure** *router string radius proxy string*
 Tree *proxy*
 String Length 1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	configure router <i>string</i> radius proxy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-matching

Synopsis	Enter the attribute-matching context
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching
Tree	attribute-matching
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [*index*] *number*

Synopsis	Enter the entry list instance
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i>
Tree	entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[*index*] *number*

Synopsis	Index of this entry
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i>
Tree	entry

Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis	Accounting server policy
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> accounting-server-policy <i>string</i>
Tree	accounting-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis	Authentication server policy
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> authentication-server-policy <i>string</i>
Tree	authentication-server-policy
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis	Prefix string
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> prefix-string <i>string</i>
Tree	prefix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix-string *string*

Synopsis	Prefix string
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> suffix-string <i>string</i>
Tree	suffix-string
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Matching attribute type to RADIUS server policy
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Matching Vendor ID to RADIUS server policy
Context	configure router <i>string</i> radius proxy <i>string</i> attribute-matching vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cache

Synopsis	Enter the cache context
Context	configure router <i>string</i> radius proxy <i>string</i> cache
Tree	cache
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	configure router <i>string</i> radius proxy <i>string</i> cache admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

key

Synopsis	Enable the key context
Context	configure router <i>string</i> radius proxy <i>string</i> cache key
Tree	key
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-type *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> cache key attribute-type <i>number</i>
Tree	attribute-type
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

packet-type *keyword*

Synopsis	Packet type of the RADIUS messages
Context	configure router <i>string</i> radius proxy <i>string</i> cache key packet-type <i>keyword</i>
Tree	packet-type
Options	access-request, access-accept
Notes	This element is mandatory.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis RADIUS Vendor ID
 Context **configure** *router string radius proxy string cache key vendor* (*number* | *keyword*)
 Tree [vendor](#)
 Range 1 to 16777215
 Options nokia
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis Idle timeout value
 Context **configure** *router string radius proxy string cache timeout number*
 Tree [timeout](#)
 Range 60 to 3600
 Default 300
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-accounting

Synopsis Enter the **track-accounting** context
 Context **configure** *router string radius proxy string cache track-accounting*
 Tree [track-accounting](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-off *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client

Context	configure <i>router string radius proxy string cache track-accounting accounting-off boolean</i>
Tree	accounting-off
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-on *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	configure <i>router string radius proxy string cache track-accounting accounting-on boolean</i>
Tree	accounting-on
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis	Update the ESM host with the RADIUS client that generated the interim update
Context	configure <i>router string radius proxy string cache track-accounting interim-update boolean</i>
Tree	interim-update
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start *boolean*

Synopsis	Update host with client that generated accounting-start
Context	configure <i>router string radius proxy string cache track-accounting start boolean</i>
Tree	start
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

stop *boolean*

Synopsis	Remove ESM host and forward accounting-stop packet
Context	configure <i>router string radius proxy string cache track-accounting stop boolean</i>
Tree	stop
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-authentication

Synopsis	Enter the track-authentication context
Context	configure <i>router string radius proxy string cache track-authentication</i>
Tree	track-authentication
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept *boolean*

Synopsis	Track Access-Accept message for mobility
Context	configure <i>router string radius proxy string cache track-authentication accept boolean</i>
Tree	accept
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-delete-hold-time *number*

Synopsis	Delete hold time
Context	configure <i>router string radius proxy string cache track-delete-hold-time number</i>
Tree	track-delete-hold-time
Range	0 to 6000
Default	0
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis Enter the **defaults** context

Context **configure** [router string radius proxy string defaults](#)

Tree [defaults](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-server-policy *string*

Synopsis Default accounting RADIUS server policy

Context **configure** [router string radius proxy string defaults accounting-server-policy string](#)

Tree [accounting-server-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-server-policy *string*

Synopsis Default authentication RADIUS server policy

Context **configure** [router string radius proxy string defaults authentication-server-policy string](#)

Tree [authentication-server-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [router string radius proxy string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface [interface-name] string

Synopsis Add a list entry for **interface**

Context **configure** router string radius proxy string interface string

Tree interface

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] string

Synopsis IP interface name

Context **configure** router string radius proxy string interface string

Tree interface

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

load-balance-key

Synopsis Enter the **load-balance-key** context

Context **configure** router string radius proxy string load-balance-key

Tree load-balance-key

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-1

Synopsis Enter the **attribute-1** context

Context **configure** router string radius proxy string load-balance-key attribute-1

Tree attribute-1

Notes The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Attribute type to cache for this RADIUS Proxy server
 Context **configure** *router string radius proxy string load-balance-key attribute-1 type number*
 Tree *type*
 Range 1 to 255
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number | keyword*)

Synopsis Vendor-Id attribute
 Context **configure** *router string radius proxy string load-balance-key attribute-1 vendor (number | keyword)*
 Tree *vendor*
 Range 1 to 16777215
 Options nokia
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-2

Synopsis Enter the **attribute-2** context
 Context **configure** *router string radius proxy string load-balance-key attribute-2*
 Tree *attribute-2*
 Notes The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Attribute type to cache for this RADIUS Proxy server

Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-3

Synopsis	Enter the attribute-3 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3
Tree	attribute-3
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-4

Synopsis	Enter the attribute-4 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4
Tree	attribute-4
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4 type <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4 vendor (<i>number</i> <i>keyword</i>)
Tree	vendor

Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

attribute-5

Synopsis	Enter the attribute-5 context
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5
Tree	attribute-5
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5 <i>type</i> <i>number</i>
Tree	type
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5 <i>vendor</i> (<i>number</i> <i>keyword</i>)
Tree	vendor
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-ip-udp

Synopsis	Key to consist of the source IP address and source UDP port of the RADIUS message
Context	configure router <i>string</i> radius proxy <i>string</i> load-balance-key source-ip-udp
Tree	source-ip-udp
Notes	The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

purpose *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Purpose of the RADIUS proxy
Context	configure router <i>string</i> radius proxy <i>string</i> purpose <i>keyword</i>
Tree	purpose
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python policy
Context	configure router <i>string</i> radius proxy <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis	Format of the secret key to access the RADIUS proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> secret <i>string</i>

Tree	secret
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-accounting-response *boolean*

Synopsis	Allow RADIUS proxy server to respond to Accounting-Response messages
Context	configure router <i>string</i> radius proxy <i>string</i> send-accounting-response <i>boolean</i>
Tree	send-accounting-response
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis	Enter the wlan-gw context
Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis	IPv4 address of the distributed RADIUS proxy server
Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw address <i>string</i>
Tree	address
Description	This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis	IPv6 address of the distributed RADIUS proxy server
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Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw ipv6-address <i>string</i>
Tree	ipv6-address
Description	This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN gateway group
Context	configure router <i>string</i> radius proxy <i>string</i> wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

server [**name**] *string*

Synopsis	Enter the server list instance
Context	configure router <i>string</i> radius server <i>string</i>
Tree	server
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[**name**] *string*

Synopsis	External RADIUS server name
Context	configure router <i>string</i> radius server <i>string</i>
Tree	server
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept-coa *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	configure router <i>string</i> radius server <i>string</i> accept-coa <i>boolean</i>
Tree	accept-coa
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-port *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	configure router <i>string</i> radius server <i>string</i> acct-port <i>number</i>
Tree	acct-port
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	configure router <i>string</i> radius server <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auth-port *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	configure router <i>string</i> radius server <i>string</i> auth-port <i>number</i>
Tree	auth-port
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis	Text description
Context	configure router <i>string</i> radius server <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pending-requests-limit *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	configure router <i>string</i> radius server <i>string</i> pending-requests-limit <i>number</i>
Tree	pending-requests-limit
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis	Python script policy to modify CoA messages
Context	configure router <i>string</i> radius server <i>string</i> python-policy <i>reference</i>
Tree	python-policy
Reference	configure python python-policy <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis Secret key associated with this RADIUS server
 Context **configure** *router string radius server string secret string*
 Tree [secret](#)
 String Length 1 to 115
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reassembly

Synopsis Enable the **reassembly** context
 Context **configure** *router string reassembly*
 Tree [reassembly](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis NAT group (including WLAN Gateway group) that executes the reassembly
 Context **configure** *router string reassembly nat-group number*
 Tree [nat-group](#)
 Max. Range 0 to 4294967295
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

to-base-network *boolean*

Synopsis Allow reassembled traffic sent to network interface

Context	configure router <i>string</i> reassembly to-base-network <i>boolean</i>
Tree	to-base-network
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rib-api

Synopsis	Enter the rib-api context
Context	configure router <i>string</i> rib-api
Tree	rib-api
Introduced	16.0.R4
Platforms	All

mpls

Synopsis	Enter the mpls context
Context	configure router <i>string</i> rib-api mpls
Tree	mpls
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of MPLS for RIB-API gRPC service
Context	configure router <i>string</i> rib-api mpls admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

label-name *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure reserved label block.
Context	configure router string rib-api mpls label-name reference
Tree	label-name
Reference	configure router string mpls-labels reserved-label-block string
Introduced	16.0.R4
Platforms	All

rip

Synopsis	Enable the rip context
Context	configure router string rip
Tree	rip
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP instance
Context	configure router string rip admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router string rip authentication-key string
Tree	authentication-key

Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	configure router <i>string</i> rip authentication-type <i>keyword</i>
Tree	authentication-type
Description	<p>This command sets the type of authentication to be used between RIP neighbors.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Default	none
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>string</i> rip bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	<p>When configured to true, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to false, this command removes BFD from the associated protocol adjacency.</p>
Default	false
Introduced	16.0.R4

Platforms All

check-zero *boolean*

Synopsis Enable checking of mandatory zero fields

Context **configure** [router](#) *string* [rip](#) **check-zero** *boolean*

Tree [check-zero](#)

Description When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.

When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.

Default false

Introduced 16.0.R4

Platforms All

description *string*

Synopsis Text description

Context **configure** [router](#) *string* [rip](#) **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R4

Platforms All

export-limit

Synopsis Enable the **export-limit** context

Context **configure** [router](#) *string* [rip](#) **export-limit**

Tree [export-limit](#)

Introduced 16.0.R4

Platforms All

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent

Context **configure** [router](#) *string* [rip](#) **export-limit** **log-percent** *number*

Tree	log-percent
Range	1 to 100
Introduced	16.0.R4
Platforms	All

number *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	configure router <i>string</i> rip export-limit <i>number</i> <i>number</i>
Tree	number
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies to determine exported routes
Context	configure router <i>string</i> rip export-policy <i>reference</i>
Tree	export-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

group [[group-name](#)] *string*

Synopsis	Enter the group list instance
Context	configure router <i>string</i> rip group <i>string</i>
Tree	group
Introduced	16.0.R4
Platforms	All

[group-name] *string*

Synopsis	RIP group name
Context	configure router <i>string</i> rip group <i>string</i>
Tree	group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	configure router <i>string</i> rip group <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

authentication-type *keyword*

Synopsis	Authentication type
Context	configure <i>router</i> <i>string</i> <i>rip</i> <i>group</i> <i>string</i> authentication-type <i>keyword</i>
Tree	authentication-type
Description	This command configures the type of authentication to be used. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure <i>router</i> <i>string</i> <i>rip</i> <i>group</i> <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure <i>router</i> <i>string</i> <i>rip</i> <i>group</i> <i>string</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4

Platforms All

description *string*

Synopsis Text description

Context **configure** [router](#) *string* [rip group](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R4

Platforms All

export-policy *reference*

Synopsis Policies used to rule which routes are exported to RIP

Context **configure** [router](#) *string* [rip group](#) *string* [export-policy](#) *reference*

Tree [export-policy](#)

Description This command specifies the export route policies used to determine which routes are exported to RIP.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R4

Platforms All

import-policy *reference*

Synopsis Policies to decide routes accepted from RIP neighbors

Context **configure** [router](#) *string* [rip group](#) *string* [import-policy](#) *reference*

Tree [import-policy](#)

Description This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure router <i>string</i> rip group <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>string</i> rip group <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
Context	configure router <i>string</i> rip group <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor *[interface-name] string*

Synopsis	Enter the neighbor list instance
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[interface-name] *string*

Synopsis	Neighbor added through the interface to the RIP group
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

authentication-key *string*

Synopsis	Authentication password passed between RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-key <i>string</i>
Tree	authentication-key
Description	This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication password from the configuration and disables authentication.

String Length 1 to 51

Introduced 16.0.R4

Platforms All

authentication-type *keyword*

Synopsis Authentication type

Context **configure** *router string rip group string neighbor string authentication-type keyword*

Tree [authentication-type](#)

Description This command configures the type of authentication to be used.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.

Options none, password, md5, md20

Introduced 16.0.R4

Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD to control the state of protocol adjacency

Context **configure** *router string rip group string neighbor string bfd-liveness boolean*

Tree [bfd-liveness](#)

Description When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency.

When configured to **false**, this command removes BFD from the associated protocol adjacency.

Introduced 16.0.R4

Platforms All

check-zero *boolean*

Synopsis Enable checking of mandatory zero fields

Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes per RIP update message
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIP
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Context	configure <i>router string rip group string neighbor string metric-out number</i>
Tree	<i>metric-out</i>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure <i>router string rip group string neighbor string preference number</i>
Tree	<i>preference</i>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure <i>router string rip group string neighbor string receive keyword</i>
Tree	<i>receive</i>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure <i>router string rip group string neighbor string send keyword</i>
Tree	<i>send</i>
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router string rip group string neighbor string split-horizon boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string rip group string neighbor string timers</i>
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure <i>router string rip group string neighbor string timers flush number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>router string rip group string neighbor string timers timeout number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure <i>router string rip group string neighbor string timers update number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

unicast-address [[address](#)] *string*

Synopsis	Add a list entry for unicast-address
Context	configure <i>router string rip group string neighbor string unicast-address string</i>
Tree	unicast-address
Introduced	16.0.R4
Platforms	All

[address] *string*

Synopsis	Unicast address for the neighbor
Context	configure router <i>string</i> rip group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i>
Tree	unicast-address
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure router <i>string</i> rip group <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>string</i> rip group <i>string</i> receive <i>keyword</i>
Tree	receive
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	configure router <i>string</i> rip group <i>string</i> send <i>keyword</i>
Tree	send
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router string rip group string split-horizon boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string rip group string timers</i>
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure <i>router string rip group string timers flush number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure router <i>string</i> rip group <i>string</i> timers timeout <i>number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>string</i> rip group <i>string</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure router <i>string</i> rip import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4

Platforms All

message-size *number*

Synopsis Maximum number of routes in the RIP message
Context **configure** *router string rip message-size number*
Tree [message-size](#)
Range 25 to 255
Default 25
Introduced 16.0.R4
Platforms All

metric-in *number*

Synopsis Metric added to routes received from a RIP neighbor
Context **configure** *router string rip metric-in number*
Tree [metric-in](#)
Range 1 to 16
Default 1
Introduced 16.0.R4
Platforms All

metric-out *number*

Synopsis Metric added to routes exported into RIP
Context **configure** *router string rip metric-out number*
Tree [metric-out](#)
Range 1 to 16
Default 1
Introduced 16.0.R4
Platforms All

preference *number*

Synopsis Route preference

Context	configure router string rip preference number
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

receive keyword

Synopsis	Accepted version on received packets
Context	configure router string rip receive keyword
Tree	receive
Default	both
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

send keyword

Synopsis	RIP version and method used to send RIP updates
Context	configure router string rip send keyword
Tree	send
Default	broadcast
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

split-horizon boolean

Synopsis	Enable split horizon and poison reverse
Context	configure router string rip split-horizon boolean
Tree	split-horizon
Description	When configured to true , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string rip timers</i>
Tree	timers
Introduced	16.0.R4
Platforms	All

flush *number*

Synopsis	RIP flush timer
Context	configure <i>router string rip timers flush number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	RIP timeout timer
Context	configure <i>router string rip timers timeout number</i>
Tree	timeout

Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>string</i> rip timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

ripng

Synopsis	Enable the ripng context
Context	configure router <i>string</i> ripng
Tree	ripng
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng instance
Context	configure router <i>string</i> ripng admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable

Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure <i>router</i> <i>string</i> <i>ripng</i> <i>bfd-liveness</i> <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure <i>router</i> <i>string</i> <i>ripng</i> <i>check-zero</i> <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router</i> <i>string</i> <i>ripng</i> <i>description</i> <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4

Platforms All

export-limit

Synopsis Enable the **export-limit** context
Context **configure** *router string ripng export-limit*
Tree [export-limit](#)
Introduced 16.0.R4
Platforms All

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent
Context **configure** *router string ripng export-limit log-percent number*
Tree [log-percent](#)
Range 1 to 100
Introduced 16.0.R4
Platforms All

number *number*

Synopsis Maximum routes or prefixes exported from route table
Context **configure** *router string ripng export-limit number number*
Tree [number](#)
Range 1 to 4294967295
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Policies to determine exported routes
Context **configure** *router string ripng export-policy reference*
Tree [export-policy](#)
Reference **configure** *policy-options policy-statement string*

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

group [group-name] *string*

Synopsis	Enter the group list instance
Context	configure <i>router string ripng group string</i>
Tree	<i>group</i>
Introduced	16.0.R4
Platforms	All

[group-name] *string*

Synopsis	RIP group name
Context	configure <i>router string ripng group string</i>
Tree	<i>group</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	configure <i>router string ripng group string admin-state keyword</i>
Tree	<i>admin-state</i>
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>string ripng group string bfd-liveness boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>string ripng group string check-zero boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string ripng group string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>string ripng group string export-policy reference</i>

Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>string</i> ripng group <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>string</i> ripng group <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>string</i> ripng group <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>string</i> ripng group <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

neighbor [*interface-name*] *string*

Synopsis	Enter the neighbor list instance
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i>
Tree	neighbor
Introduced	16.0.R4
Platforms	All

[interface-name] *string*

Synopsis	Neighbor added to the RIPng group through the interface
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

bfd-liveness *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables BFD to control the state of the associated protocol adjacency. When configured to false , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

check-zero *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> check-zero <i>boolean</i>
Tree	check-zero
Description	When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

export-policy *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> export-policy <i>reference</i>
Tree	export-policy
Description	This command specifies the export route policies used to determine which routes are exported to RIP. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> import-policy <i>reference</i>
Tree	import-policy
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors. If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> message-size <i>number</i>
Tree	message-size
Range	25 to 255
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> preference <i>number</i>

Tree	preference
Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> receive <i>keyword</i>
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> send <i>keyword</i>
Tree	send
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure router <i>string</i> ripng group <i>string</i> neighbor <i>string</i> split-horizon <i>boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4

Platforms All

timers

Synopsis Enable the **timers** context

Context **configure** *router string ripng group string neighbor string timers*

Tree *timers*

Introduced 16.0.R4

Platforms All

flush number

Synopsis RIP flush timer

Context **configure** *router string ripng group string neighbor string timers flush number*

Tree *flush*

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

timeout number

Synopsis RIP timeout timer

Context **configure** *router string ripng group string neighbor string timers timeout number*

Tree *timeout*

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** *router string ripng group string neighbor string timers update number*

Tree [update](#)

Range 1 to 600

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

unicast-address [[address](#)] *string*

Synopsis Add a list entry for **unicast-address**

Context **configure** *router string ripng group string neighbor string unicast-address string*

Tree [unicast-address](#)

Introduced 16.0.R4

Platforms All

[[address](#)] *string*

Synopsis Unicast address for the neighbour

Context **configure** *router string ripng group string neighbor string unicast-address string*

Tree [unicast-address](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

preference *number*

Synopsis Route preference

Context **configure** *router string ripng group string preference number*

Tree [preference](#)

Range	1 to 255
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure <i>router string ripng group string receive keyword</i>
Tree	receive
Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure <i>router string ripng group string send keyword</i>
Tree	send
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router string ripng group string split-horizon boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string ripng group string timers</i>
Tree	timers
Introduced	16.0.R4
Platforms	All

flush number

Synopsis	RIP flush timer
Context	configure <i>router string ripng group string timers flush number</i>
Tree	flush
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

timeout number

Synopsis	RIP timeout timer
Context	configure <i>router string ripng group string timers timeout number</i>
Tree	timeout
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

update *number*

Synopsis	Timer that controls the frequency of updates
Context	configure router <i>string</i> ripng group <i>string</i> timers update <i>number</i>
Tree	update
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

import-policy *reference*

Synopsis	Import policies to decide routes for routing table
Context	configure router <i>string</i> ripng import-policy <i>reference</i>
Tree	import-policy
Reference	configure policy-options policy-statement <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

message-size *number*

Synopsis	Maximum number of routes in the message
Context	configure router <i>string</i> ripng message-size <i>number</i>
Tree	message-size
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

metric-in *number*

Synopsis	Metric added to routes received from the neighbor
Context	configure router <i>string</i> ripng metric-in <i>number</i>
Tree	metric-in
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

metric-out *number*

Synopsis	Metric added to routes exported into RIPng
Context	configure router <i>string</i> ripng metric-out <i>number</i>
Tree	metric-out
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

preference *number*

Synopsis	Route preference
Context	configure router <i>string</i> ripng preference <i>number</i>
Tree	preference
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

receive *keyword*

Synopsis	Accepted version on received packets
Context	configure router <i>string</i> ripng receive <i>keyword</i>
Tree	receive
Default	ripng

Options	none, ripng
Introduced	16.0.R4
Platforms	All

send *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	configure <i>router string ripng send keyword</i>
Tree	send
Default	ripng
Options	none, ripng
Introduced	16.0.R4
Platforms	All

split-horizon *boolean*

Synopsis	Enable split horizon and poison reverse
Context	configure <i>router string ripng split-horizon boolean</i>
Tree	split-horizon
Description	<p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

timers

Synopsis	Enable the timers context
Context	configure <i>router string ripng timers</i>
Tree	timers
Introduced	16.0.R4

Platforms All

flush *number*

Synopsis RIP flush timer

Context **configure** *router string ripng timers flush number*

Tree [flush](#)

Description This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

timeout *number*

Synopsis RIP timeout timer

Context **configure** *router string ripng timers timeout number*

Tree [timeout](#)

Description This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range 1 to 1200

Units seconds

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

update *number*

Synopsis Timer that controls the frequency of updates

Context **configure** *router string ripng timers update number*

Tree [update](#)

Range 1 to 600

Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

router-id *string*

Synopsis	Unique router ID for the router in the AS
Context	configure router <i>string</i> router-id <i>string</i>
Tree	router-id
Introduced	16.0.R1
Platforms	All

rsvp

Synopsis	Enable the rsvp context
Context	configure router <i>string</i> rsvp
Tree	rsvp
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of RSVP
Context	configure router <i>string</i> rsvp admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-over-bypass *boolean*

Synopsis	Enable MD5 authentication over bypass LSP of PLR and MP
Context	configure router <i>string</i> rsvp authentication-over-bypass <i>boolean</i>

Tree	authentication-over-bypass
Description	<p>When configured to true, this command configures the MD5 authentication over the bypass LSP of all Point of Local Repairs (PLRs) and Merge Points (MPs) on the router. Only enable this command when the TE interfaces in the RSVP-TE network use the same MD5 authentication parameters.</p> <p>When a Point of Local Repair (PLR) activates a bypass LSP towards a Merge Point (MP), by default, the INTEGRITY object corresponding to the bypass LSP interface is not added to a transmitted RSVP message except for packets of routed RSVP messages (Resv, Srefresh, and ACK), and only when the packet is intended for a bypass LSP endpoint (PLR or MP) that is a directly connected neighbor.</p> <p>When this command is enabled, the INTEGRITY object of the interface corresponding to the bypass LSP is added to a transmitted RSVP message regardless of whether the bypass LSP endpoint (PLR or MP) is a directly connected RSVP neighbor. The INTEGRITY object is included with the following RSVP messages: Path, PathTear, PathErr, Resv, ResvTear, ResvErr, Srefresh, and ACK.</p> <p>In all cases, an RSVP message received from a PLR or a MP (sender address in the SenderTemplate or FilterSpec is different from an Extended Tunnel Id in a Session Object), and which includes the INTEGRITY object is authenticated against the bypass LSP interface. An RSVP message received from a PLR or MP without the INTEGRITY object is also accepted.</p> <p>When configured to false, the router disables MD5 authentication over bypass LSP of the PLRs and MPs.</p>
Default	false
Introduced	22.10.R1
Platforms	All

dbw-accounting

Synopsis	Enable the dbw-accounting context
Context	configure router <i>string</i> rsvp dbw-accounting
Tree	dbw-accounting
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-multiplier *number*

Synopsis	Dark Bandwidth multiplier
Context	configure router <i>string</i> rsvp dbw-accounting dbw-multiplier <i>number</i>
Tree	dbw-multiplier
Range	0 to 1000

Default	100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

down-threshold

Synopsis	Enter the down-threshold context
Context	configure <i>router string rsvp dbw-accounting down-threshold</i>
Tree	<i>down-threshold</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure <i>router string rsvp dbw-accounting down-threshold bw number</i>
Tree	<i>bw</i>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure <i>router string rsvp dbw-accounting down-threshold percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sample-interval *number*

Synopsis	Dark Bandwidth sample interval
Context	configure router <i>string</i> rsvp dbw-accounting sample-interval <i>number</i>
Tree	sample-interval
Range	10 to 600
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

sample-multiplier *number*

Synopsis	Dark Bandwidth sample multiplier
Context	configure router <i>string</i> rsvp dbw-accounting sample-multiplier <i>number</i>
Tree	sample-multiplier
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

up-threshold

Synopsis	Enter the up-threshold context
Context	configure router <i>string</i> rsvp dbw-accounting up-threshold
Tree	up-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure router <i>string</i> rsvp dbw-accounting up-threshold bw <i>number</i>
Tree	bw
Range	0 to 1000000
Units	megabps

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure router <i>string</i> rsvp dbw-accounting up-threshold percent <i>number</i>
Tree	percent
Range	0 to 100
Default	0
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

diffserv-te

Synopsis	Enable the diffserv-te context
Context	configure router <i>string</i> rsvp diffserv-te
Tree	diffserv-te
Introduced	16.0.R1
Platforms	All

admission-control-model *keyword*

Synopsis	Parameters for the DiffServ TE node
Context	configure router <i>string</i> rsvp diffserv-te admission-control-model <i>keyword</i>
Tree	admission-control-model
Options	mam, rdm
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

class-type-bw

Synopsis	Enter the class-type-bw context
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> <i>diffserv-te</i> <i>class-type-bw</i>
Tree	<i>class-type-bw</i>
Introduced	16.0.R1
Platforms	All

ct0 number

Synopsis	RSVP interface bandwidth percentage for class type 0
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> <i>diffserv-te</i> <i>class-type-bw</i> <i>ct0</i> <i>number</i>
Tree	<i>ct0</i>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct1 number

Synopsis	RSVP interface bandwidth percentage for class type 1
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> <i>diffserv-te</i> <i>class-type-bw</i> <i>ct1</i> <i>number</i>
Tree	<i>ct1</i>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct2 number

Synopsis	RSVP interface bandwidth percentage for class type 2
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> <i>diffserv-te</i> <i>class-type-bw</i> <i>ct2</i> <i>number</i>
Tree	<i>ct2</i>
Range	0 to 100
Default	0
Introduced	16.0.R1

Platforms All

ct3 number

Synopsis RSVP interface bandwidth percentage for class type 3

Context **configure router string rsvp diffserv-te class-type-bw ct3 number**

Tree [ct3](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

ct4 number

Synopsis RSVP interface bandwidth percentage for class type 4

Context **configure router string rsvp diffserv-te class-type-bw ct4 number**

Tree [ct4](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

ct5 number

Synopsis RSVP interface bandwidth percentage for class type 5

Context **configure router string rsvp diffserv-te class-type-bw ct5 number**

Tree [ct5](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

ct6 number

Synopsis RSVP interface bandwidth percentage for class type 6

Context	configure router <i>string rsvp diffserv-te class-type-bw ct6 number</i>
Tree	ct6
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

ct7 number

Synopsis	RSVP interface bandwidth percentage for class type 7
Context	configure router <i>string rsvp diffserv-te class-type-bw ct7 number</i>
Tree	ct7
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

fc [fc-name] keyword

Synopsis	Enter the fc list instance
Context	configure router <i>string rsvp diffserv-te fc keyword</i>
Tree	fc
Introduced	16.0.R1
Platforms	All

[fc-name] keyword

Synopsis	Forwarding class for this mapping
Context	configure router <i>string rsvp diffserv-te fc keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

class-type *number*

Synopsis	Diff-Serv Class Type (CT) for an LSP
Context	configure router <i>string</i> rsvp diffserv-te fc <i>keyword</i> class-type <i>number</i>
Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

te-class [**te-class-number**] *number*

Synopsis	Enter the te-class list instance
Context	configure router <i>string</i> rsvp diffserv-te te-class <i>number</i>
Tree	te-class
Introduced	16.0.R1
Platforms	All

[te-class-number] *number*

Synopsis	TE class number
Context	configure router <i>string</i> rsvp diffserv-te te-class <i>number</i>
Tree	te-class
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

class-type *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Class type (CT) associated with the TE class
Context	configure router <i>string</i> rsvp diffserv-te te-class <i>number</i> class-type <i>number</i>

Tree	class-type
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

priority *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TE class priority
Context	configure router <i>string</i> rsvp diffserv-te te-class <i>number</i> priority <i>number</i>
Tree	priority
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

entropy-label-capability *boolean*

Synopsis	Allow receiving and processing of the entropy label and ELI on incoming packets of RSVP LSPs
Context	configure router <i>string</i> rsvp entropy-label-capability <i>boolean</i>
Tree	entropy-label-capability
Default	false
Introduced	16.0.R1
Platforms	All

graceful-restart

Synopsis	Enter the graceful-restart context
Context	configure router <i>string</i> rsvp graceful-restart
Tree	graceful-restart
Introduced	16.0.R1

Platforms All

max-recovery *number*

Synopsis Maximum time to wait before a graceful helper recovers the session

Context **configure** **router** *string* **rsvp** **graceful-restart** **max-recovery** *number*

Tree [max-recovery](#)

Range 1 to 1800

Default 300

Units seconds

Introduced 16.0.R1

Platforms All

max-restart *number*

Synopsis Maximum time that a graceful helper waits for session restart after the neighbor is considered down

Context **configure** **router** *string* **rsvp** **graceful-restart** **max-restart** *number*

Tree [max-restart](#)

Range 1 to 300

Default 120

Units seconds

Introduced 16.0.R1

Platforms All

graceful-shutdown *boolean*

Synopsis Initiate a graceful shutdown of all RSVP interfaces on the node

Context **configure** **router** *string* **rsvp** **graceful-shutdown** *boolean*

Tree [graceful-shutdown](#)

Default false

Introduced 16.0.R1

Platforms All

implicit-null-label *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null option for all RSVP LSPs
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> implicit-null-label <i>boolean</i>
Tree	implicit-null-label
Default	false
Introduced	16.0.R1
Platforms	All

include-node-id-in-rro *boolean*

Synopsis	Include the node-id sub-object in the RRO (Record Route Object) on the RSVP instance
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> include-node-id-in-rro <i>boolean</i>
Tree	include-node-id-in-rro
Default	false
Introduced	16.0.R1
Platforms	All

interface [[interface-name](#)] *reference*

Synopsis	Enter the interface list instance
Context	configure <i>router</i> <i>string</i> <i>rsvp</i> interface <i>reference</i>
Tree	interface
Description	<p>Commands in this context configure the attributes of the RSVP protocol support on an IP interface. RSVP commands are not executed on an IP interface if RSVP is not enabled.</p> <p>The RSVP interface must be administratively disabled before it can be deleted.</p> <p>A corresponding MPLS interface must also be configured. The RSVP interface cannot be deleted without also deleting the MPLS interface.</p>
Introduced	16.0.R1
Platforms	All

[interface-name] reference

Synopsis	Index for router RSVP interface
Context	configure router string rsvp interface reference
Tree	interface
Reference	configure router string interface string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state keyword

Synopsis	Administrative state of RSVP on the IP interface
Context	configure router string rsvp interface reference admin-state keyword
Tree	admin-state
Default	enable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

authentication-key string

Synopsis	Authentication or hash key string
Context	configure router string rsvp interface reference authentication-key string
Tree	authentication-key

Description This command configures the authentication key for use between RSVP neighbors to authenticate RSVP messages. Authentication uses the MD5 message-based digest.

When enabled on an RSVP interface, authentication of RSVP messages operates in both directions of the interface. A router maintains a security association using one authentication key for each interface to an RSVP neighbor.

An RSVP neighbor transmits an authenticating digest of the RSVP message that is computed using the shared authentication key and a keyed-hash algorithm. The message digest is included in an INTEGRITY object, which also contains a flags field, a key identifier field, and a sequence number field. An RSVP neighbor uses the key together with the authentication algorithm to process received RSVP messages. The RSVP MD5 authentication complies to the procedures for RSVP message generation in RFC 2747, *RSVP Cryptographic Authentication*.

The MD5 implementation does not support the authentication challenge procedures in RFC 2747.

String Length 1 to 51
Introduced 16.0.R1
Platforms All

authentication-keychain *reference*

Synopsis TCP authentication keychain for the session
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [authentication-keychain](#) *reference*
Tree [authentication-keychain](#)
Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*
Introduced 16.0.R3
Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [bfd-liveness](#) *boolean*
Tree [bfd-liveness](#)
Default false
Introduced 16.0.R1
Platforms All

class-type-bw

Synopsis Enable the **class-type-bw** context
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [class-type-bw](#)
Tree [class-type-bw](#)
Introduced 16.0.R1
Platforms All

ct0 *number*

Synopsis Percentage of link bandwidth for class type (CT) 0
Context **configure** [router](#) *string* [rsvp](#) [interface](#) *reference* [class-type-bw](#) [ct0](#) *number*
Tree [ct0](#)

Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct1 number

Synopsis	Percentage of link bandwidth for class type (CT) 1
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct1 <i>number</i>
Tree	ct1
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct2 number

Synopsis	Percentage of link bandwidth for class type (CT) 2
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct2 <i>number</i>
Tree	ct2
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct3 number

Synopsis	Percentage of link bandwidth for class type (CT) 3
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct3 <i>number</i>
Tree	ct3
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct4 number

Synopsis	Percentage of link bandwidth for class type (CT) 4
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct4 <i>number</i>

Tree	ct4
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct5 number

Synopsis	Percentage of link bandwidth for class type (CT) 5
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct5 <i>number</i>
Tree	ct5
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct6 number

Synopsis	Percentage of link bandwidth for class type (CT) 6
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct6 <i>number</i>
Tree	ct6
Range	0 to 100
Introduced	16.0.R1
Platforms	All

ct7 number

Synopsis	Percentage of link bandwidth for class type (CT) 7
Context	configure router <i>string</i> rsvp interface <i>reference</i> class-type-bw ct7 <i>number</i>
Tree	ct7
Range	0 to 100
Introduced	16.0.R1
Platforms	All

dbw-down-threshold

Synopsis	Enable the dbw-down-threshold context
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Context	configure <i>router string rsvp interface reference dbw-down-threshold</i>
Tree	dbw-down-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure <i>router string rsvp interface reference dbw-down-threshold bw number</i>
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure <i>router string rsvp interface reference dbw-down-threshold percent number</i>
Tree	percent
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-multiplier number

Synopsis	Configure the Dark Bandwidth multiplier.
Context	configure <i>router string rsvp interface reference dbw-multiplier number</i>
Tree	dbw-multiplier
Range	0 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

dbw-up-threshold

Synopsis	Enable the dbw-up-threshold context
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-up-threshold
Tree	dbw-up-threshold
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

bw number

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-up-threshold bw <i>number</i>
Tree	bw
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

percent number

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	configure router <i>string</i> rsvp interface <i>reference</i> dbw-up-threshold percent <i>number</i>
Tree	percent
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

graceful-restart-helper-mode boolean

Synopsis	Enable graceful restart helper for the RSVP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> graceful-restart-helper-mode <i>boolean</i>
Tree	graceful-restart-helper-mode
Default	false

Introduced 16.0.R1
Platforms All

graceful-shutdown *boolean*

Synopsis Initiate a graceful shutdown of RSVP interface
Context **configure** *router string rsvp interface reference graceful-shutdown boolean*
Tree [graceful-shutdown](#)
Default false
Introduced 16.0.R1
Platforms All

hello-interval *number*

Synopsis Time between RSVP Hello messages
Context **configure** *router string rsvp interface reference hello-interval number*
Tree [hello-interval](#)
Range 0 to 60
Default 3
Units seconds
Introduced 16.0.R1
Platforms All

implicit-null-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Signal the implicit null label value for all LSPs
Context **configure** *router string rsvp interface reference implicit-null-label boolean*
Tree [implicit-null-label](#)
Introduced 16.0.R1
Platforms All

refresh-reduction

Synopsis	Enable the refresh-reduction context
Context	configure router <i>string</i> rsvp interface <i>reference</i> refresh-reduction
Tree	refresh-reduction
Introduced	16.0.R1
Platforms	All

reliable-delivery *boolean*

Synopsis	Reliable delivery of RSVP messages over the RSVP interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> refresh-reduction reliable-delivery <i>boolean</i>
Tree	reliable-delivery
Default	false
Introduced	16.0.R1
Platforms	All

subscription *number*

Synopsis	Percentage of the link bandwidth to use for reservation
Context	configure router <i>string</i> rsvp interface <i>reference</i> subscription <i>number</i>
Tree	subscription
Range	0 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

te-down-threshold

Synopsis	Enable the te-down-threshold context
Context	configure router <i>string</i> rsvp interface <i>reference</i> te-down-threshold
Tree	te-down-threshold
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Threshold level per interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> te-down-threshold <i>value number</i>
Tree	value
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

te-up-threshold

Synopsis	Enable the te-up-threshold context
Context	configure router <i>string</i> rsvp interface <i>reference</i> te-up-threshold
Tree	te-up-threshold
Introduced	16.0.R1
Platforms	All

value number

Synopsis	Threshold level per interface
Context	configure router <i>string</i> rsvp interface <i>reference</i> te-up-threshold <i>value number</i>
Tree	value
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

keep-multiplier *number*

Synopsis	Value for the keep-multiplier to declare a reservation or neighbor as down
Context	configure router <i>string</i> rsvp keep-multiplier <i>number</i>
Tree	keep-multiplier
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

msg-pacing

Synopsis	Enable the msg-pacing context
Context	configure router <i>string</i> rsvp msg-pacing
Tree	msg-pacing
Introduced	16.0.R1
Platforms	All

max-burst *number*

Synopsis	Maximum RSVP messages that are sent over a specified period when message pacing is enabled
Context	configure router <i>string</i> rsvp msg-pacing max-burst <i>number</i>
Tree	max-burst
Range	100 to 1000
Default	650
Introduced	16.0.R1
Platforms	All

period *number*

Synopsis	Time for RSVP message pacing
Context	configure router <i>string</i> rsvp msg-pacing period <i>number</i>
Tree	period
Range	100 to 1000
Default	100

Units	milliseconds
Introduced	16.0.R1
Platforms	All

p2mp-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for abort timer
Context	configure router <i>string</i> rsvp p2mp-merge-point-abort-timer <i>number</i>
Tree	p2mp-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

p2p-merge-point-abort-timer *number*

Synopsis	Merge pointer timer for P2P paths
Context	configure router <i>string</i> rsvp p2p-merge-point-abort-timer <i>number</i>
Tree	p2p-merge-point-abort-timer
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

preemption-timer *number*

Synopsis	Preemption timer for the MPLS instance
Context	configure router <i>string</i> rsvp preemption-timer <i>number</i>
Tree	preemption-timer
Range	0 to 1800
Default	300
Units	seconds
Introduced	16.0.R1
Platforms	All

rapid-retransmit-time *number*

Synopsis	Rapid retransmission interval to reliably deliver RSVP messages
Context	configure router <i>string</i> rsvp rapid-retransmit-time <i>number</i>
Tree	rapid-retransmit-time
Range	1 to 100
Default	5
Units	deciseconds
Introduced	16.0.R1
Platforms	All

rapid-retry-limit *number*

Synopsis	Rapid retry limit to reliably deliver RSVP messages
Context	configure router <i>string</i> rsvp rapid-retry-limit <i>number</i>
Tree	rapid-retry-limit
Range	1 to 6
Default	3
Introduced	16.0.R1
Platforms	All

refresh-reduction-over-bypass *boolean*

Synopsis	Enable refresh reduction capabilities over tunnels
Context	configure router <i>string</i> rsvp refresh-reduction-over-bypass <i>boolean</i>
Tree	refresh-reduction-over-bypass
Default	false
Introduced	16.0.R1
Platforms	All

refresh-time *number*

Synopsis	Interval between refresh messages
Context	configure router <i>string</i> rsvp refresh-time <i>number</i>
Tree	refresh-time

Range	1 to 65535
Default	30
Units	seconds
Introduced	16.0.R1
Platforms	All

te-down-threshold *number*

Synopsis	Value for the te-down-threshold
Context	configure router <i>string</i> rsvp te-down-threshold <i>number</i>
Tree	te-down-threshold
Range	0 to 100
Max.	16
Instances	
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

te-threshold-update

Synopsis	Enable the te-threshold-update context
Context	configure router <i>string</i> rsvp te-threshold-update
Tree	te-threshold-update
Introduced	16.0.R1
Platforms	All

on-cac-failure *boolean*

Synopsis	CAC (Call Admission Control) failure-triggered IGP update
Context	configure router <i>string</i> rsvp te-threshold-update on-cac-failure <i>boolean</i>
Tree	on-cac-failure
Default	false
Introduced	16.0.R1
Platforms	All

update-timer *number*

Synopsis	Timer-based IGP updates
Context	configure router <i>string</i> rsvp te-threshold-update update-timer <i>number</i>
Tree	update-timer
Range	1 to 300
Units	seconds
Introduced	16.0.R1
Platforms	All

te-up-threshold *number*

Synopsis	Value for the te-up-threshold
Context	configure router <i>string</i> rsvp te-up-threshold <i>number</i>
Tree	te-up-threshold
Range	0 to 100
Max. Instances	16
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

segment-routing

Synopsis	Enter the segment-routing context
Context	configure router <i>string</i> segment-routing
Tree	segment-routing
Introduced	16.0.R1
Platforms	All

maintenance-policy [*policy-name*] *string*

Synopsis	Enter the maintenance-policy list instance
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i>
Tree	maintenance-policy

Description	Commands in this context configure a named maintenance policy that can be applied to SR policy candidate paths that are either statically configured or imported via BGP.
Introduced	20.10.R1
Platforms	All

[policy-name] *string*

Synopsis	Maintenance policy name
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i>
Tree	maintenance-policy
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the maintenance policy
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Description	This command sets the administrative state of the maintenance policy. A maintenance policy must be administratively disabled to change any of the parameters. When a maintenance template is administratively disabled, all applicable candidate paths are removed from the data path.
Default	disable
Options	enable, disable
Introduced	20.10.R1
Platforms	All

bfd-liveness *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable seamless BFD for segment lists of candidate path
----------	---

Context	configure <i>router string segment-routing maintenance-policy string bfd-liveness boolean</i>
Tree	bfd-liveness
Description	When configured to true , this command enables seamless BFD on every segment list of an SR policy candidate path to which the maintenance policy is applied. The BFD template configures the parameters for the BFD session. When configured to false , seamless BFD is disabled.
Default	false
Introduced	20.10.R1
Platforms	All

bfd-template *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BFD template to be used by seamless BFD
Context	configure <i>router string segment-routing maintenance-policy string bfd-template reference</i>
Tree	bfd-template
Description	This command references a named BFD template to be used by seamless BFD. A BFD template must exist on the system before being referenced from a maintenance policy. The template specifies parameters that are used by the BFD session, such as the minimum transmit and receive control packet timer intervals.
Reference	configure bfd bfd-template <i>string</i>
Introduced	20.10.R1
Platforms	All

hold-down-timer *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold down timer for SR policy candidate paths
Context	configure <i>router string segment-routing maintenance-policy string hold-down-timer number</i>
Tree	hold-down-timer

Description	<p>This command configures the hold down timer for the maintenance policy. The purpose of the timer is to prevent bouncing of the SR policy path state if S-BFD sessions associated with the segment lists flap, causing the threshold to be repeatedly crossed in a short period of time.</p> <p>The timer is started when the number of up S-BFD sessions drops below the threshold. The SR policy path is not considered to be up again until the hold down timer has expired and the number of up S-BFD sessions reaches or exceeds the threshold and the internal hold timer is not running.</p> <p>If the revert timer is also configured, the revert timer is not started until after the number of up S-BFD sessions equals or exceeds the threshold and the hold down timer for the primary candidate path has expired.</p>
Range	0 to 5000
Default	0
Units	deciseconds
Introduced	20.10.R1
Platforms	All

mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Protection mode for SR policy candidate paths
Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i> mode <i>keyword</i>
Tree	mode
Description	This command specifies the data path programming and protection mechanism for SR policy candidate paths to which the maintenance policy is applied.
Default	none
Options	none, ecmp-protected, linear
Introduced	20.10.R1
Platforms	All

return-path-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	configure <i>router string</i> <i>segment-routing maintenance-policy string</i> <i>return-path-label number</i>
Tree	<i>return-path-label</i>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.10.R1
Platforms	All

revert-timer *number*

Synopsis	Revert timer for SR policy candidate paths
Context	configure <i>router string</i> <i>segment-routing maintenance-policy string</i> <i>revert-timer number</i>
Tree	<i>revert-timer</i>
Description	<p>This command configures the revert timer for SR Policy candidate paths.</p> <p>The revert timer is started when the primary path recovers (the number of S-BFD sessions that are up equals or exceeds the threshold value and the hold down timer has expired). When the timer expires, the system reverts to the primary path.</p>
Range	0 to 4320
Units	minutes
Introduced	20.10.R1
Platforms	All

threshold *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum number of up S-BFD sessions for up path status
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Context	configure router <i>string</i> segment-routing maintenance-policy <i>string</i> threshold <i>number</i>
Tree	threshold
Description	This command configures the minimum number of S-BFD sessions that must be up for the SR policy candidate path to be considered up. If the number of up sessions is below this threshold value, the policy candidate path is marked as BFD degraded by the system. This command is only valid in the ecmp-protected mode.
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

segment-routing-v6

Synopsis	Enable the segment-routing-v6 context
Context	configure router <i>string</i> segment-routing segment-routing-v6
Tree	segment-routing-v6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

base-routing-instance

Synopsis	Enter the base-routing-instance context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance
Tree	base-routing-instance
Description	Commands in this context configure SRv6 SID functions for End, End.X, and service SIDs for IPv4 and IPv6 prefixes in the base routing instance.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *reference*

Synopsis	Enter the locator list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i>
Tree	locator

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	SRv6 locator name
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i>
Tree	locator
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function
Tree	function
Description	Commands in this context configure the function value of SRv6 SIDs. The end-dt46 command is mutually exclusive with the end-dt4 and end-dt6 commands.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end [[value](#)] *number*

Synopsis	Enter the end list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end <i>number</i>
Tree	end
Description	Commands in this context configure the attributes of SRv6 End SID function. The End SID functions for each SRH mode must be statically allocated. The value is not automatically allocated by default for a locator.
Max. Instances	8
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[value] *number*

Synopsis SRv6 SID function value

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance locator reference function end number*

Tree [end](#)

Range 1 to 1048575

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis Segment Routing Header (SRH) mode

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance locator reference function end number srh-mode keyword*

Tree [srh-mode](#)

Description This command configures the popping mode for the SID.

Default psp

Options psp, usp

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt4

Synopsis Enable the **end-dt4** context

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt4*

Tree [end-dt4](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt4 value <i>number</i>
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt46

Synopsis	Enable the end-dt46 context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt46
Tree	end-dt46
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt46 value <i>number</i>
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-dt6

Synopsis	Enable the end-dt6 context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator reference function end-dt6
Tree	end-dt6
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-dt6 value <i>number</i>
Tree	value
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-x [value] number

Synopsis	Enter the end-x list instance
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x <i>number</i>
Tree	end-x
Description	<p>Commands in this context configure the attributes of the End.X SID function associated with a P2P interface.</p> <p>A static function value can be configured for each combination of SRH mode and protection type. For a specific interface, the static function value associated with the same combination of protection type and SRH mode overrides any corresponding function value that is automatically allocated (end.x-auto-allocate list configuration).</p> <p>If more than one value is configured for an interface and combination of SRH mode and protection type, they are all advertised in IS-IS.</p> <p>When used in remote TI-LFA repair tunnel programming, IS-IS uses rules to select one End.X value from the multiple values received in IS-IS link advertisements.</p> <p>Values assigned to loopback and system interfaces are not advertised in IS-IS.</p> <p>End.X SID functions for adjacencies over broadcast interfaces are always automatically allocated based on the configuration of the end.x-auto-allocate list.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[value] number

Synopsis	SRv6 SID function value
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x <i>number</i>
Tree	end-x

Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-name *reference*

Synopsis	Interface name
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function <i>end-x</i> <i>number</i> interface-name <i>reference</i>
Tree	interface-name
Reference	configure router <i>string</i> interface <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection for SID function
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function <i>end-x</i> <i>number</i> protection <i>keyword</i>
Tree	protection
Description	This command configures the adjacency protection type for the SID function.
Default	protected
Options	unprotected, protected
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function <i>end-x</i> <i>number</i> srh-mode <i>keyword</i>
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Default	psp

Options	psp, usp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

end-x-auto-allocate [*srh-mode*] *keyword* *protection* *keyword*

Synopsis	Add a list entry for end-x-auto-allocate
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>base-routing-instance</i> <i>locator</i> <i>reference</i> <i>function</i> end-x-auto-allocate <i>keyword</i> <i>protection</i> <i>keyword</i>
Tree	end-x-auto-allocate
Description	This command adds a list entry for the automatic allocation of the End.X SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces). A list entry is a combination of the protection type and the SRH mode. Any combinations in addition to the maximum supported by this command must be allocated statically under each P2P interface (end.x configuration). When no list entries are configured, no End.X function values are automatically allocated by default for a locator.
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[srh-mode] *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>base-routing-instance</i> <i>locator</i> <i>reference</i> <i>function</i> end-x-auto-allocate <i>keyword</i> <i>protection</i> <i>keyword</i>
Tree	end-x-auto-allocate
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection for automatic SID function
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Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance locator <i>reference</i> function end-x-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	end-x-auto-allocate
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *reference*

Synopsis	Enter the micro-segment-locator list instance
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis	SRv6 micro-segment locator name
Context	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i>
Tree	micro-segment-locator
Description	This command references a micro-segment locator name defined in the configure router segment-routing segment-routing-v6 context. This command assigns a micro-segment locator to BGP for use with Base router routes.
Reference	configure <i>router</i> <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis	Enter the function context
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Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i>
Tree	function
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ua [[value](#)] *number*

Synopsis	Enter the ua list instance
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua <i>number</i>
Tree	ua
Description	Commands in this context configure the attributes of the uA micro-SID function associated with a P2P interface. The uA micro-SID function encodes the behavior of an adjacency SID.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[value] *number*

Synopsis	SRv6 SID function value
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua <i>number</i>
Tree	ua
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

interface-name *reference*

Synopsis	Interface name
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> <i>function</i> ua <i>number</i> interface-name <i>reference</i>
Tree	interface-name
Reference	configure <i>router string</i> interface <i>string</i>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis Adjacency protection for SID function

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number protection keyword*

Tree [protection](#)

Description This command configures the adjacency protection type for the SID function.

Default protected

Options unprotected, protected

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*

Synopsis Segment Routing Header (SRH) mode

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua number srh-mode keyword*

Tree [srh-mode](#)

Description This command configures the popping mode for the SID.

Default psp

Options psp, usp

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ua-auto-allocate [[srh-mode](#)] *keyword protection keyword*

Synopsis Add a list entry for **ua-auto-allocate**

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua-auto-allocate keyword protection keyword*

Tree [ua-auto-allocate](#)

Description Commands in this context define a list entry for the automatic allocation of the uA micro-SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).

Max. Instances 2

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[srh-mode] *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function ua-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	ua-auto-allocate
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

protection *keyword*

Synopsis	Adjacency protection for automatic SID function
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function ua-auto-allocate <i>keyword</i> protection <i>keyword</i>
Tree	ua-auto-allocate
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt4

Synopsis	Enable the udt4 context
Context	configure router <i>string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt4
Tree	udt4
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt4 <i>value number</i>
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt46

Synopsis	Enable the udt46 context
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt46
Tree	udt46
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis	SRv6 function value
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt46 <i>value number</i>
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt6

Synopsis	Enable the udt6 context
Context	configure <i>router string</i> segment-routing segment-routing-v6 base-routing-instance micro-segment-locator <i>reference</i> function udt6
Tree	udt6
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value *number*

Synopsis SRv6 function value

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [base-routing-instance](#) [micro-segment-locator](#) *reference* [function](#) [udt6](#) **value** *number*

Tree [value](#)

Range 1 to 1048575

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *string*

Synopsis Enter the **locator** list instance

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) **locator** *string*

Tree [locator](#)

Max. Instances 16

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *string*

Synopsis SRv6 locator name

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) **locator** *string*

Tree [locator](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of the locator

Context	configure <i>router string segment-routing segment-routing-v6 locator string admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

algorithm *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	configure <i>router string segment-routing segment-routing-v6 locator string algorithm number</i>
Tree	algorithm
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator block address length
Context	configure <i>router string segment-routing segment-routing-v6 locator string block-length number</i>
Tree	block-length
Range	0 to 96
Default	0
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function-length *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Function length
Context	configure <i>router string segment-routing segment-routing-v6 locator string function-length number</i>
Tree	<i>function-length</i>
Description	This command configures the size of the function length. The sum of the function length and the locator prefix length must not exceed 128 bits. Operators can configure the locator level label-block command before they configure a function length of 16. If the function length is configured as 16, the locator level label-block must be configured rather than the static-function level label-block . The validation occurs when committed.
Range	16 20 to 96
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block name for service termination
Context	configure <i>router string segment-routing segment-routing-v6 locator string label-block reference</i>
Tree	<i>label-block</i>
Reference	configure <i>router string mpls-labels reserved-label-block string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

prefix

Synopsis	Enter the prefix context
Context	configure <i>router string segment-routing segment-routing-v6 locator string prefix</i>
Tree	<i>prefix</i>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> prefix ip-prefix <i>string</i>
Tree	ip-prefix
Description	This command configures the IPv6 prefix for the locator. For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

static-function

Synopsis	Enter the static-function context
Context	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> static-function
Tree	static-function
Description	Commands in this context configure the attributes of the function field range reserved for static End.d, End.X, and service SID assignment.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label block for the service SIDs of the SRv6 locator
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Context	configure <i>router string</i> segment-routing segment-routing-v6 <i>locator string</i> static-function label-block <i>reference</i>
Tree	label-block
Reference	configure <i>router string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

max-entries *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	configure <i>router string</i> segment-routing segment-routing-v6 <i>locator string</i> static-function max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

termination-fpe *reference*

Synopsis	List of the SRv6 termination FPE
Context	configure <i>router string</i> segment-routing segment-routing-v6 <i>locator string</i> termination-fpe <i>reference</i>
Tree	termination-fpe
Description	This command associates the Forwarding Path Extension (FPE) with the locator for terminating SRv6 in local services. Multiple locators can share the same FPE or each locator can use a different FPE. The FPE can be the same or different from the origination FPE.
Reference	configure fwd-path-ext fpe <i>number</i>
Max. Instances	1
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment

Synopsis Enable the **micro-segment** context

Context **configure** *router string segment-routing segment-routing-v6 micro-segment*

Tree [micro-segment](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block [[block-name](#)] *string*

Synopsis Enter the **block** list instance

Context **configure** *router string segment-routing segment-routing-v6 micro-segment block string*

Tree [block](#)

Max. Instances 16

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[\[block-name\]](#) *string*

Synopsis Micro-SID block name

Context **configure** *router string segment-routing segment-routing-v6 micro-segment block string*

Tree [block](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of micro-SID block

Context **configure** *router string segment-routing segment-routing-v6 micro-segment block string admin-state keyword*

Tree [admin-state](#)

Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> label-block <i>reference</i>
Tree	label-block
Description	This command associates a pre-configured reserved label block with the micro-SID block.
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

prefix

Synopsis	Enter the prefix context
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> prefix
Tree	prefix
Description	Commands in this context configure the IPv6 prefix for an SRv6 micro-segment locator.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> prefix ip-prefix <i>string</i>
Tree	ip-prefix
Description	This command configures the IPv6 prefix for the locator. For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

static-function

Synopsis	Enter the static-function context
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> static-function
Tree	static-function
Description	Commands in this context configure the function field parameters of a static uA or service micro-SID assignment.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

max-entries *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i> static-function max-entries <i>number</i>
Tree	max-entries
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

termination-fpe *reference*

Synopsis FPE ID for SRv6 termination

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **block** *string* [termination-fpe](#) *reference*

Tree [termination-fpe](#)

Description This command associates the FPE ID with the locator for SRv6 termination in local services.

Reference **configure** [fwd-path-ext](#) [fpe](#) *number*

Max. Instances 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block-length *number*

Synopsis Micro-SID block length

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **block-length** *number*

Tree [block-length](#)

Description This command configures the length of the micro-SID blocks.

Range 8 | 16 | 24 | 32 | 40 | 48 | 56 | 64

Default 32

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

global-sid-entries *number*

Synopsis Maximum number of micro-segment locators network wide

Context **configure** **router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment](#) **global-sid-entries** *number*

Tree [global-sid-entries](#)

Description This command defines the maximum number of unique micro-segment locators that can be configured network wide. The value is expressed in multiples of 1024 and must be the same on every platform network wide.

Range	4 to 60
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sid-length *number*

Synopsis	Micro-SID length
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment <i>sid-length number</i>
Tree	sid-length
Description	This command configures the length of the micro-SIDs.
Range	16
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

micro-segment-locator [[locator-name](#)] *string*

Synopsis	Enter the micro-segment-locator list instance
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Tree	micro-segment-locator
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *string*

Synopsis	SRv6 locator name
Context	configure <i>router string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i>
Tree	micro-segment-locator
String Length	1 to 64
Notes	This element is part of a list key.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis	Administrative state of the locator
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

algorithm *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> algorithm <i>number</i>
Tree	algorithm
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-defined micro-SID block
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Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> block <i>reference</i>
Tree	block
Description	This command associates a pre-defined micro-SID block with the micro-segment SRv6 locator.
Reference	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment block <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

un

Synopsis	Enter the un context
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> un
Tree	un
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

srh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment Routing Header (SRH) mode
Context	configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> un srh-mode <i>keyword</i>
Tree	srh-mode
Description	This command configures the popping mode for the SID.
Default	psp
Options	psp, usp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 function value
Context	configure router string segment-routing segment-routing-v6 micro-segment-locator string un value number
Tree	value
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

origination-fpe reference

Synopsis	List of the SRv6 origination FPEs
Context	configure router string segment-routing segment-routing-v6 origination-fpe reference
Tree	origination-fpe
Description	This command configures the origination Forwarding Path Extension (FPE) for SRv6 tunnels on local services. The origination FPE must be different from any of the SRv6 termination FPEs.
Reference	configure fwd-path-ext fpe number
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

source-address string

Synopsis	Source address used in the SRv6 packet
Context	configure router string segment-routing segment-routing-v6 source-address string
Tree	source-address
Description	This command specifies the global default source IPv6 address used in the SA field of the outerIPv6 header of the SRv6 encapsulated packet. The value is inherited in the BGP and services contexts (for example, configure router "base" bgp segment-routing-v6 source-address and configure service vprn bgp-ipvpn segment-routing-v6 source-address), but is overwritten by the value configured in those contexts.

A source IPv6 address must be configured in the global context or in the BGP or services context.

The system does not check if the entered address is a valid local address.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

sr-mpls

Synopsis	Enter the sr-mpls context
Context	configure router <i>string</i> segment-routing sr-mpls
Tree	sr-mpls
Introduced	21.10.R1
Platforms	All

prefix-sids [[interface-name](#)] *reference*

Synopsis	Enter the prefix-sids list instance
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids reference
Tree	prefix-sids
Description	Commands in this context configure the prefix SIDs for an interface.
Introduced	21.10.R1
Platforms	All

[\[interface-name\]](#) *reference*

Synopsis	Loopback interface name that owns the prefix to be advertised
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids reference
Tree	prefix-sids
Reference	configure router <i>string</i> interface <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

ipv4-sid

Synopsis	Enable the ipv4-sid context
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid
Tree	ipv4-sid
Introduced	21.10.R1
Platforms	All

index number

Synopsis	Node SID index for the interface
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid index <i>number</i>
Tree	index
Range	0 to 4294967295
Notes	The following elements are part of a choice: index or label .
Introduced	21.10.R1
Platforms	All

label number

Synopsis	Label value for the node SID
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv4-sid label <i>number</i>
Tree	label
Range	32 to 1048575
Notes	The following elements are part of a choice: index or label .
Introduced	21.10.R1
Platforms	All

ipv6-sid

Synopsis	Enable the ipv6-sid context
Context	configure router <i>string</i> segment-routing sr-mpls prefix-sids <i>reference</i> ipv6-sid
Tree	ipv6-sid
Introduced	21.10.R1

Platforms All

index number

Synopsis Node SID index for the interface

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv6-sid index number](#)

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

label number

Synopsis Label value for the node SID

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [ipv6-sid label number](#)

Tree [label](#)

Range 32 to 1048575

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

node-sid boolean

Synopsis Assign a node SID to the prefix referencing the router

Context **configure** [router](#) *string* [segment-routing sr-mpls prefix-sids](#) *reference* [node-sid boolean](#)

Tree [node-sid](#)

Default true

Introduced 21.10.R1

Platforms All

sr-policies

Synopsis Enter the **sr-policies** context

Context	configure router <i>string</i> segment-routing sr-policies
Tree	sr-policies
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing policies
Context	configure router <i>string</i> segment-routing sr-policies admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

egress-statistics

Synopsis	Enable the egress-statistics context
Context	configure router <i>string</i> segment-routing sr-policies egress-statistics
Tree	egress-statistics
Introduced	19.10.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	configure router <i>string</i> segment-routing sr-policies egress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	19.10.R1
Platforms	All

ingress-statistics

Synopsis	Enable the ingress-statistics context
Context	configure router <i>string</i> segment-routing sr-policies ingress-statistics
Tree	ingress-statistics
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the traffic statistics
Context	configure router <i>string</i> segment-routing sr-policies ingress-statistics admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

reserved-label-block *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved local block for segment routing policies
Context	configure router <i>string</i> segment-routing sr-policies reserved-label-block <i>reference</i>
Tree	reserved-label-block
Reference	configure router <i>string</i> mpls-labels reserved-label-block <i>string</i>
Introduced	16.0.R1
Platforms	All

static-policy [*name*] *string*

Synopsis	Enter the static-policy list instance
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i>
Tree	static-policy

Max. Instances	8192
Introduced	16.0.R1
Platforms	All

[name] *string*

Synopsis	Name for the segment routing static policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i>
Tree	static-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment routing static policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

binding-sid *number*

Synopsis	Segment ID that opaquely represents an SR policy to upstream routers
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> binding-sid <i>number</i>
Tree	binding-sid
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

color number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic flows to be steered by this policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> color <i>number</i>
Tree	color
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

distinguisher number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique value for a policy
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> distinguisher <i>number</i>
Tree	distinguisher
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

endpoint (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination of the source-routed path
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> endpoint (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	endpoint
Introduced	16.0.R1

Platforms All

head-end (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Head end address for this static policy

Context **configure** *router* *string* [segment-routing](#) [sr-policies](#) [static-policy](#) *string* [head-end](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)

Tree [head-end](#)

Options local

Introduced 16.0.R1

Platforms All

maintenance-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Policy name

Context **configure** *router* *string* [segment-routing](#) [sr-policies](#) [static-policy](#) *string* [maintenance-policy](#) *reference*

Tree [maintenance-policy](#)

Reference **configure** *router* *string* [segment-routing](#) [maintenance-policy](#) *string*

Introduced 20.10.R1

Platforms All

preference *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Preference value of this static policy

Context	configure <i>router</i> <i>string</i> segment-routing sr-policies static-policy <i>string</i> preference <i>number</i>
Tree	preference
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

segment-list [[seg-list-index](#)] *number*

Synopsis	Enter the segment-list list instance
Context	configure <i>router</i> <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i>
Tree	segment-list
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[seg-list-index] *number*

Synopsis	Index for identifying a particular segment list
Context	configure <i>router</i> <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i>
Tree	segment-list
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of segment list for static policy
Context	configure <i>router</i> <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> admin-state <i>keyword</i>
Tree	admin-state

Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	All

segment [[segment-index](#)] *number*

Synopsis	Enter the segment list instance
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> segment <i>number</i>
Tree	segment
Max. Instances	11
Introduced	16.0.R1
Platforms	All

[segment-index] *number*

Synopsis	Index for identifying a particular segment list
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> segment <i>number</i>
Tree	segment
Range	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

mpls-label *number*

Synopsis	Value for the MPLS label
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-list <i>number</i> segment <i>number</i> mpls-label <i>number</i>
Tree	mpls-label
Range	0 to 1048575
Introduced	16.0.R1
Platforms	All

srv6-sid *string*

Synopsis	Segment ID for segment routing IPv6
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>segment</i> <i>number</i> <i>srv6-sid</i> <i>string</i>
Tree	<i>srv6-sid</i>
Description	This command defines the 128-bit SRv6 SID for the segment.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

weight *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Weight of this segment list
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-list</i> <i>number</i> <i>weight</i> <i>number</i>
Tree	<i>weight</i>
Max. Range	0 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

segment-routing-v6**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the segment-routing-v6 context
Context	configure <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i>
Tree	<i>segment-routing-v6</i>
Description	Commands in this context configure a static SRv6 policy.
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

binding-sid [[index](#)] *number*

Synopsis Enter the **binding-sid** list instance

Context **configure router** *string* [segment-routing sr-policies static-policy](#) *string* [segment-routing-v6 binding-sid](#) *number*

Tree [binding-sid](#)

Max. Instances 1

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[\[index\]](#) *number*

Synopsis Binding SID index

Context **configure router** *string* [segment-routing sr-policies static-policy](#) *string* [segment-routing-v6 binding-sid](#) *number*

Tree [binding-sid](#)

Range 1

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

ip-address *string*

Synopsis Remote SRv6 binding SID

Context **configure router** *string* [segment-routing sr-policies static-policy](#) *string* [segment-routing-v6 binding-sid](#) *number* **ip-address** *string*

Tree [ip-address](#)

Description This command configures an SRv6 binding SID for a remote SRv6 policy. The command cannot be used with a local head end location (**configure router segment-routing sr-policies static-policy head-end local**). This command and the **configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid locator** command for a local SRv6 policy are mutually exclusive.

The format of the binding SID is a 128-bit IPv6 address.

Notes The following elements are part of a choice: **ip-address** or **locator**.

Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator

Synopsis	Enable the locator context
Context	configure <i>router string</i> <i>segment-routing sr-policies static-policy string</i> <i>segment-routing-v6 binding-sid number</i> locator
Tree	locator
Description	Commands in this context configure a binding SID locator for a local SRv6 policy. This command and the configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid ip-address command for a non-local SRv6 policy are mutually exclusive.
Notes	The following elements are part of a choice: ip-address or locator .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function keyword

Synopsis	Local SRv6 binding SID locator function
Context	configure <i>router string</i> <i>segment-routing sr-policies static-policy string</i> <i>segment-routing-v6 binding-sid number</i> locator <i>function keyword</i>
Tree	function
Description	This command configures an SRv6 binding SID function for a static SRv6 policy with a local head end location (configure router segment-routing sr-policies static-policy head-end local).
Options	end-b6-encaps-red
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function-value number

Synopsis	Local SRv6 binding SID locator function value
Context	configure <i>router string</i> <i>segment-routing sr-policies static-policy string</i> <i>segment-routing-v6 binding-sid number</i> locator <i>function-value number</i>
Tree	function-value

Description	This command configures the function value for a static SRv6 policy with a local head end location (configure router segment-routing sr-policies static-policy head-end local). If a function value is configured, the router checks whether this function value is available for the named locator. If no function value is configured, the router dynamically allocates a value.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator-name *reference*

Synopsis	Local SRv6 binding SID locator name
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-routing-v6 binding-sid <i>number</i> locator locator-name <i>reference</i>
Tree	locator-name
Description	This command configures an SRv6 binding SID locator for a static SRv6 policy with a local head end location (configure router segment-routing sr-policies static-policy head-end local). A corresponding locator must exist in the configure router segment-routing segment-routing-v6 context.
Reference	configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

return-path-bfd-sid *string*

Synopsis	BFD controlled return path for SRv6
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> segment-routing-v6 return-path-bfd-sid <i>string</i>
Tree	return-path-bfd-sid
Description	This command configures the Seamless Bidirectional Forwarding Detection (S-BFD) session to echo mode and pushes an additional SRv6 SID in the SRH on S-BFD packets only.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

type *keyword*

Synopsis	Static policy type
Context	configure router <i>string</i> segment-routing sr-policies static-policy <i>string</i> type <i>keyword</i>
Tree	type
Description	This command configures the type of static policy. Only commands relevant to the type of the static policy can be executed. The type of the static policy can only be changed to a new type if there is no configuration present for the old type, or if all configuration for the old type is deleted.
Default	sr-mpls
Options	sr-mpls, srv6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

selective-fib *boolean*

Synopsis	Enable selective FIB
Context	configure router <i>string</i> selective-fib <i>boolean</i>
Tree	selective-fib
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sfm-overload

Synopsis	Enable the sfm-overload context
Context	configure router <i>string</i> sfm-overload
Tree	sfm-overload
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	configure router <i>string</i> sfm-overload holdoff-time <i>number</i>
Tree	holdoff-time

Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

sgt-qos

Synopsis	Enter the sgt-qos context
Context	configure <i>router string</i> sgt-qos
Tree	sgt-qos
Introduced	16.0.R1
Platforms	All

dot1p

Synopsis	Enter the dot1p context
Context	configure <i>router string</i> sgt-qos dot1p
Tree	dot1p
Introduced	16.0.R1
Platforms	All

application [**dot1p-app-name**] *keyword*

Synopsis	Enter the application list instance
Context	configure <i>router string</i> sgt-qos dot1p application <i>keyword</i>
Tree	application
Introduced	16.0.R1
Platforms	All

[**dot1p-app-name**] *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	configure <i>router string</i> sgt-qos dot1p application <i>keyword</i>
Tree	application
Options	arp, isis, pppoe

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dot1p (*keyword* | *number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	configure router <i>string</i> sgt-qos dot1p application <i>keyword</i> dot1p (<i>keyword</i> <i>number</i>)
Tree	dot1p
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

dscp

Synopsis	Enter the dscp context
Context	configure router <i>string</i> sgt-qos dscp
Tree	dscp
Introduced	16.0.R1
Platforms	All

application [**dscp-app-name**] *keyword*

Synopsis	Enter the application list instance
Context	configure router <i>string</i> sgt-qos dscp application <i>keyword</i>
Tree	application
Introduced	16.0.R1
Platforms	All

[**dscp-app-name**] *keyword*

Synopsis	DSCP application identifier on the NOKIA SR OS router that generates control traffic over IP
Context	configure router <i>string</i> sgt-qos dscp application <i>keyword</i>

Tree	application
Options	bgp, cflowd, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, igmp-reporter, gtp, sflow, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, mpls-udp-return, pfc, ibcp, bfd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

dscp (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	configure router <i>string</i> sgt-qos dscp application <i>keyword</i> dscp (<i>keyword</i> <i>number</i>)
Tree	dscp
Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

dscp-map [[dscp-name](#)] *keyword*

Synopsis	Enter the dscp-map list instance
Context	configure router <i>string</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Introduced	16.0.R2
Platforms	All

[dscp-name] *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	configure router <i>string</i> sgt-qos dscp dscp-map <i>keyword</i>
Tree	dscp-map
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

fc keyword

Synopsis	Value for the forwarding class for this mapping
Context	configure router <i>string</i> sgt-qos dscp dscp-map <i>keyword</i> fc <i>keyword</i>
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

static-routes

Synopsis	Enter the static-routes context
Context	configure router <i>string</i> static-routes
Tree	static-routes
Introduced	16.0.R1
Platforms	All

hold-down

Synopsis	Enable the hold-down context
Context	configure router <i>string</i> static-routes hold-down
Tree	hold-down
Introduced	16.0.R1
Platforms	All

initial number

Synopsis	Value for the initial hold down time
Context	configure router <i>string</i> static-routes hold-down <i>initial number</i>

Tree	initial
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

max-value *number*

Synopsis	Maximum value of the hold down time
Context	configure router <i>string</i> static-routes hold-down max-value <i>number</i>
Tree	max-value
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

multiplier *number*

Synopsis	Value by which the previous hold-down time is multiplied to calculate the new one
Context	configure router <i>string</i> static-routes hold-down multiplier <i>number</i>
Tree	multiplier
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

route [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*

Synopsis	Enter the route list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Introduced	16.0.R1
Platforms	All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

route-type *keyword*

Synopsis	Static route type for unicast or multicast RPF
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i>
Tree	route
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

backup-tag *number*

Synopsis	Static route backup tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> backup-tag <i>number</i>
Tree	backup-tag
Description	<p>This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.</p> <p>The tag specified at this level of the static route causes the tag values that are configured under the next-hop, black-hole, and indirect contexts of the static route to be ignored.</p>
Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

blackhole

Synopsis	Enable the blackhole context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole
Tree	blackhole
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> blackhole description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1

Platforms All

dynamic-bgp *boolean*

Synopsis Derive static route next hop from BGP next hop value

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **dynamic-bgp** *boolean*

Tree **dynamic-bgp**

Default false

Introduced 16.0.R1

Platforms All

generate-icmp *boolean*

Synopsis Send ICMP unreachable messages when received packets match a static route with black-hole next-hop

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **generate-icmp** *boolean*

Tree **generate-icmp**

Default false

Introduced 16.0.R1

Platforms All

metric *number*

Synopsis Static route metric

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **metric** *number*

Tree **metric**

Range 0 to 65535

Default 1

Introduced 16.0.R1

Platforms All

preference *number*

Synopsis Priority of this static route over the routes from different sources

Context	configure <i>router string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword blackhole preference number
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure <i>router string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword blackhole prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure <i>router string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword blackhole prefix-list flag keyword
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name reference

Synopsis	Prefix list name
Context	configure <i>router string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword blackhole prefix-list name reference
Tree	name
Reference	configure policy-options prefix-list string
Introduced	16.0.R1

Platforms All

tag *number*

Synopsis Static route tag

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **blackhole** **tag** *number*

Tree **tag**

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

community *string*

Synopsis Community ID associated with the static route

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **community** *string*

Tree **community**

String Length 1 to 72

Max. Instances 12

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

indirect [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **indirect** list instance

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **indirect**

Introduced 16.0.R1

Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	indirect
Description	This command specifies the next-hop IP address used to reach the destination. The specified IP address can be either on the network side or the access side and is typically at least one hop away from the node.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
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Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count

Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384

Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) prefix-list name <i>reference</i>

Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos forwarding-class <i>keyword</i>
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos priority <i>keyword</i>
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-class number
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tag number
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

tunnel-next-hop

Synopsis	Enter the tunnel-next-hop context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop
Tree	tunnel-next-hop
Introduced	16.0.R1
Platforms	All

disallow-igp *boolean*

Synopsis	Do not resolve indirect static routes using IGP next-hops in RTM if no tunnel next-hops found in TTM
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop disallow-igp boolean
Tree	disallow-igp
Default	false

Introduced	16.0.R1
Platforms	All

flex-algo *number*

Synopsis	Flexible Algorithm ID
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop flex-algo <i>number</i>
Tree	flex-algo
Range	128 to 255
Introduced	20.7.R1
Platforms	All

resolution *keyword*

Synopsis	Tunnel next hop resolution to resolve indirect static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution <i>keyword</i>
Tree	resolution
Default	none
Options	none, filter, any
Introduced	16.0.R1
Platforms	All

resolution-filter

Synopsis	Enter the resolution-filter context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter
Tree	resolution-filter
Introduced	16.0.R1
Platforms	All

ldp boolean

Synopsis	Use LDP Route Forwarding Equivalence Class (FEC) tunneling for next-hop resolution
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter ldp boolean
Tree	ldp
Default	false
Introduced	16.0.R1
Platforms	All

mpls-fwd-policy boolean

Synopsis	Use MPLS forwarding policy for tunnel-next-hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter mpls-fwd-policy boolean
Tree	mpls-fwd-policy
Default	false
Introduced	16.0.R4
Platforms	All

rib-api boolean

Synopsis	Set RIB API type for use with tunnel next-hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rib-api boolean
Tree	rib-api
Default	false
Introduced	16.0.R4
Platforms	All

rsvp-te

Synopsis	Enable the rsvp-te context
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Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te
Tree	rsvp-te
Introduced	16.0.R1
Platforms	All

lsp [*lsp-name*] *string*

Synopsis	Add a list entry for lsp
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te lsp <i>string</i>
Tree	lsp
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	Labeled Switch Path name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter rsvp-te lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sr-isis *boolean*

Synopsis	Use the SR ISIS tunneling mechanism to resolve next hop for the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-isis <i>boolean</i>
Tree	sr-isis
Default	false

Introduced	16.0.R1
Platforms	All

sr-ospf boolean

Synopsis	Use SR OSPF tunneling for next-hop resolution
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-ospf boolean
Tree	sr-ospf
Default	false
Introduced	16.0.R1
Platforms	All

sr-ospf3 boolean

Synopsis	Use SR OSPFv3 tunneling mechanism to resolve next-hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-ospf3 boolean
Tree	sr-ospf3
Default	false
Introduced	16.0.R6
Platforms	All

sr-te

Synopsis	Enable the sr-te context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te
Tree	sr-te
Introduced	16.0.R1
Platforms	All

lsp [**lsp-name**] *string*

Synopsis	Add a list entry for lsp
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te lsp <i>string</i>
Tree	lsp
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	Labeled Switch Path name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) tunnel-next-hop resolution-filter sr-te lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

interface [**interface-name**] *string*

Synopsis	Enter the interface list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i>
Tree	interface
Introduced	16.0.R1
Platforms	All

[interface-name] *string*

Synopsis	Router interface name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i>
Tree	interface
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Max. Instances	1
Introduced	16.0.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log boolean
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size number
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
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Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> load-balancing-weight <i>number</i>
Tree	load-balancing-weight
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5

Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag *keyword*

Synopsis	Static route match condition from prefix list
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name *reference*

Synopsis	Prefix list name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
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Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> qos forwarding-class <i>keyword</i>
Tree	forwarding-class
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> qos priority <i>keyword</i>
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> source-class <i>number</i>
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag number

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

ipsec-tunnel [ipsec-tunnel-name] string

Synopsis	Enter the ipsec-tunnel list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
Introduced	22.7.R1
Platforms	VSR

[ipsec-tunnel-name] string

Synopsis	IPsec tunnel name.
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i>
Tree	ipsec-tunnel
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

admin-state keyword

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable

Introduced 22.7.R1
Platforms VSR

community *string*

Synopsis Community ID associated with the static route
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
ipsec-tunnel *string* **community** *string*
Tree **community**
String Length 1 to 72
Introduced 22.7.R1
Platforms VSR

description *string*

Synopsis Text description
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
ipsec-tunnel *string* **description** *string*
Tree **description**
String Length 1 to 80
Introduced 22.7.R1
Platforms VSR

metric *number*

Synopsis Static route metric
Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
ipsec-tunnel *string* **metric** *number*
Tree **metric**
Range 0 to 65535
Default 1
Introduced 22.7.R1
Platforms VSR

preference number

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	22.7.R1
Platforms	VSR

tag number

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> ipsec-tunnel <i>string</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	22.7.R1
Platforms	VSR

next-hop [**ip-address**] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the next-hop list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Introduced	16.0.R1
Platforms	All

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the directly-connected next hop
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>)
Tree	next-hop
Description	This command specifies the IP address of the directly-connected next hop. The IP address can either be on the network side or the access side on the node. The address

must be associated with a network directly connected to a network configured on the node.

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the static route operation
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

backup-next-hop

Synopsis	Enter the backup-next-hop context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) backup-next-hop
Tree	backup-next-hop
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Backup next-hop IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) backup-next-hop address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Description	This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails. The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the

Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.

One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.

The configured IP address can be either on the network or the access side.

Introduced	21.2.R1
Platforms	All

bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i>
Tree	bfd-liveness
Default	false
Introduced	16.0.R1
Platforms	All

community *string*

Synopsis	Community ID associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) community <i>string</i>
Tree	community
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the cpe-check list instance
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Description	When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances	1
Introduced	16.0.R1
Platforms	All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	cpe-check
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) drop-count <i>number</i>
Tree	drop-count
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

interval *number*

Synopsis	Interval between ICMP pings to the target CPE IP address
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i>
Tree	interval
Range	1 to 255
Default	1
Units	seconds
Introduced	16.0.R1
Platforms	All

log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i>
Tree	log
Default	false
Introduced	16.0.R1
Platforms	All

padding-size *number*

Synopsis	Padding size for CPE connectivity checks
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i>
Tree	padding-size
Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

destination-class *number*

Synopsis	Destination class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) destination-class <i>number</i>
Tree	destination-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

ldp-sync *boolean*

Synopsis	Use LDP synchronization feature for a static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ldp-sync <i>boolean</i>
Tree	ldp-sync
Default	false
Introduced	16.0.R1
Platforms	All

load-balancing-weight *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) load-balancing-weight <i>number</i>
Tree	load-balancing-weight

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

metric *number*

Synopsis	Static route metric
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) metric <i>number</i>
Tree	metric
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Priority of this static route over the routes from different sources
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference <i>number</i>
Tree	preference
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

prefix-list

Synopsis	Enter the prefix-list context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list
Tree	prefix-list
Introduced	16.0.R1
Platforms	All

flag keyword

Synopsis	Static route match condition from prefix list
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list flag <i>keyword</i>
Tree	flag
Default	any
Options	any, all, none
Introduced	16.0.R1
Platforms	All

name reference

Synopsis	Prefix list name
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list name <i>reference</i>
Tree	name
Reference	configure policy-options prefix-list <i>string</i>
Introduced	16.0.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos
Tree	qos
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

forwarding-class keyword

Synopsis	Forwarding class associated with the static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos forwarding-class <i>keyword</i>
Tree	forwarding-class

Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority *keyword*

Synopsis	Static route priority
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos priority <i>keyword</i>
Tree	priority
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class *number*

Synopsis	Source class for this static route
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) source-class <i>number</i>
Tree	source-class
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

validate-next-hop *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) validate-next-hop <i>boolean</i>
Tree	validate-next-hop
Default	false
Introduced	16.0.R1
Platforms	All

tag *number*

Synopsis	Static route tag
Context	configure router <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> tag <i>number</i>
Tree	tag
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

subscriber-mgmt

Synopsis	Enter the subscriber-mgmt context
Context	configure router <i>string</i> subscriber-mgmt
Tree	subscriber-mgmt
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcpv4

Synopsis	Enter the dhcpv4 context
Context	configure router <i>string</i> subscriber-mgmt dhcpv4
Tree	dhcpv4
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

routed-subnet-transparent-forward *boolean*

Synopsis	Transparently forward DHCPv4 from CPE LAN over IPoE
Context	configure <i>router string subscriber-mgmt dhcpv4 routed-subnet-transparent-forward boolean</i>
Tree	routed-subnet-transparent-forward
Description	<p>When configured to true, the router transparently forwards DHCPv4 packets received on a subscriber interface with a source IP in a routed subnet that is associated with a routed IPoE session or host. </p><p></p> <p>Supported routed subnets are:</p> <ul style="list-style-type: none"> • RADIUS and NASREQ framed routes • routes learned via an ESM dynamic BGP peer • managed routes that are associated with a static IPv4 host <p>When configured to false, the system disables transparent forwarding of DHCPv4 packets.</p>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

triggered-policy *boolean*

Synopsis	Trigger route policy re-evaluation
Context	configure <i>router string triggered-policy boolean</i>
Tree	triggered-policy
Default	false
Introduced	16.0.R1
Platforms	All

ttl-propagate

Synopsis	Enter the ttl-propagate context
Context	configure <i>router string ttl-propagate</i>
Tree	ttl-propagate
Introduced	16.0.R1
Platforms	All

label-route-local *keyword*

Synopsis	TTL propagation from IP header into label stack for local packets
Context	configure router <i>string</i> tli-propagate label-route-local <i>keyword</i>
Tree	label-route-local
Default	none
Options	none, all
Introduced	16.0.R1
Platforms	All

label-route-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for transit packets
Context	configure router <i>string</i> tli-propagate label-route-transit <i>keyword</i>
Tree	label-route-transit
Default	none
Options	none, all
Introduced	16.0.R1
Platforms	All

lsr-label-route *keyword*

Synopsis	TTL propagation from IP header into label stack
Context	configure router <i>string</i> tli-propagate lsr-label-route <i>keyword</i>
Tree	lsr-label-route
Default	none
Options	none, all
Introduced	16.0.R1
Platforms	All

vprn-local *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN local packets
Context	configure router <i>string</i> tli-propagate vprn-local <i>keyword</i>
Tree	vprn-local
Default	vc-only

Options	none, all, vc-only
Introduced	16.0.R1
Platforms	All

vprn-transit *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN transit packets
Context	configure router <i>string</i> tli-propagate vprn-transit <i>keyword</i>
Tree	vprn-transit
Default	vc-only
Options	none, all, vc-only
Introduced	16.0.R1
Platforms	All

tunnel-interface

Synopsis	Enter the tunnel-interface context
Context	configure router <i>string</i> tunnel-interface
Tree	tunnel-interface
Introduced	16.0.R1
Platforms	All

ldp-p2mp-leaf [**p2mp-id**] *number* **sender-address** *string*

Synopsis	Enter the ldp-p2mp-leaf list instance
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>string</i>
Tree	ldp-p2mp-leaf
Introduced	16.0.R1
Platforms	All

[p2mp-id] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>string</i>
Tree	ldp-p2mp-leaf

Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>string</i>
Tree	ldp-p2mp-leaf
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-leaf <i>number</i> sender-address <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

ldp-p2mp-root [[p2mp-id](#)] *number* **sender-address** *string*

Synopsis	Enter the ldp-p2mp-root list instance
Context	configure router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>
Tree	ldp-p2mp-root
Introduced	16.0.R1
Platforms	All

[p2mp-id] *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
----------	---

Context	configure <i>router string tunnel-interface ldp-p2mp-root number sender-address string</i>
Tree	ldp-p2mp-root
Range	1 to 8192
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	configure <i>router string tunnel-interface ldp-p2mp-root number sender-address string</i>
Tree	ldp-p2mp-root
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>router string tunnel-interface ldp-p2mp-root number sender-address string description string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

rsvp-p2mp-leaf [*lsp-name*] *string sender-address string*

Synopsis	Enter the rsvp-p2mp-leaf list instance
Context	configure <i>router string tunnel-interface rsvp-p2mp-leaf string sender-address string</i>
Tree	rsvp-p2mp-leaf
Introduced	16.0.R1
Platforms	All

[lsp-name] string

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-leaf <i>string</i> sender-address <i>string</i>
Tree	rsvp-p2mp-leaf
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

sender-address string

Synopsis	Address of a sender for the P2MP RSVP tunnel interface instance
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-leaf <i>string</i> sender-address <i>string</i>
Tree	rsvp-p2mp-leaf
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description string

Synopsis	Text description
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-leaf <i>string</i> sender-address <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

rsvp-p2mp-root [lsp-name] string

Synopsis	Enter the rsvp-p2mp-root list instance
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-root <i>string</i>
Tree	rsvp-p2mp-root
Introduced	16.0.R1
Platforms	All

[lsp-name] *string*

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-root <i>string</i>
Tree	rsvp-p2mp-root
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure router <i>string</i> tunnel-interface rsvp-p2mp-root <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

twamp-light

Synopsis	Enter the twamp-light context
Context	configure router <i>string</i> twamp-light
Tree	twamp-light
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

reflector

Synopsis	Enable the reflector context
Context	configure router <i>string</i> twamp-light reflector
Tree	reflector
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	configure router <i>string</i> twamp-light reflector admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

allow-ipv6-udp-checksum-zero *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	configure router <i>string</i> twamp-light reflector allow-ipv6-udp-checksum-zero <i>boolean</i>
Tree	allow-ipv6-udp-checksum-zero
Description	When configured to true , this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior. When configured to false , IPv6 packets that arrive with a UDP checksum of zero are discarded.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure router <i>string</i> twamp-light reflector description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the prefix list instance
Context	configure router <i>string twamp-light reflector prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	configure router <i>string twamp-light reflector prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis	Text description
Context	configure router <i>string twamp-light reflector prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description string
Tree	description
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type *keyword*

Synopsis	Processing behavior type for the reflector
Context	configure router <i>string twamp-light reflector type keyword</i>
Tree	type
Description	This command configures the processing behavior of the TWAMP Light reflector. When the value is twamp-light the reflector does not check the received PDU as a traditional

base TWAMP Light packet without TLV processing. When the value is **stamp**, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.

In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to **stamp**. When the reflector is operating in **stamp** mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.

Default	twamp-light
Options	stamp, twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

udp-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	configure <i>router string twamp-light reflector udp-port number</i>
Tree	udp-port
Range	862 64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vrgw

Synopsis	Enter the vrgw context
Context	configure <i>router string vrgw</i>
Tree	vrgw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis	Enable the lanext context
Context	configure router <i>string</i> vrgw lanext
Tree	lanext
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of Home LAN Extension
Context	configure router <i>string</i> vrgw lanext admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-port *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port to be used by local or remote VXLAN VTEP
Context	configure router <i>string</i> vrgw lanext vxlan-port <i>number</i>
Tree	vxlan-port
Range	4789 8472
Default	4789
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

vxlan-vtep-range

Synopsis	Enter the vxlan-vtep-range context
Context	configure router <i>string</i> vrgw lanext vxlan-vtep-range
Tree	vxlan-vtep-range

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the VXLAN VTEP range
 Context **configure** **router** *string* **vrgw** **lanext** **vxlan-vtep-range** **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree **end**
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the VXLAN VTEP range
 Context **configure** **router** *string* **vrgw** **lanext** **vxlan-vtep-range** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree **start**
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN-GW group used for Home LAN Extension
Context	configure router <i>string</i> vrgw lanext wlan-gw-group <i>reference</i>
Tree	wlan-gw-group
Reference	configure isa wlan-gw-group <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

weighted-ecmp *keyword*

Synopsis	Weighted load-balancing capability for ECMP routes
Context	configure router <i>string</i> weighted-ecmp <i>keyword</i>
Tree	weighted-ecmp
Default	false
Options	false, true, strict
Introduced	16.0.R1
Platforms	All

wlan-gw

Synopsis	Enable the wlan-gw context
Context	configure router <i>string</i> wlan-gw
Tree	wlan-gw
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

distributed-subscriber-mgmt

Synopsis	Enter the distributed-subscriber-mgmt context
Context	configure router <i>string</i> wlan-gw distributed-subscriber-mgmt
Tree	distributed-subscriber-mgmt
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv6-tcp-mss-adjust *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	configure router <i>string</i> wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust <i>number</i>
Tree	ipv6-tcp-mss-adjust
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-triggered-accounting

Synopsis	Enter the mobility-triggered-accounting context
Context	configure router <i>string</i> wlan-gw mobility-triggered-accounting
Tree	mobility-triggered-accounting
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of mobility triggered accounting
Context	configure router <i>string</i> wlan-gw mobility-triggered-accounting admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-down *number*

Synopsis	Hold additional mobility-triggered update until this timer expires
Context	configure router <i>string</i> wlan-gw mobility-triggered-accounting hold-down <i>number</i>
Tree	hold-down
Range	60 to 86400
Units	seconds
Introduced	16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-counters *boolean*

Synopsis Include counters in interim updates
 Context **configure** *router string wlan-gw mobility-triggered-accounting include-counters boolean*
 Tree [include-counters](#)
 Default false
 Introduced 16.0.R4
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect

Synopsis Enter the **xconnect** context
 Context **configure** *router string wlan-gw xconnect*
 Tree [xconnect](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the WLAN-GW cross-connect
 Context **configure** *router string wlan-gw xconnect admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-source-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 address and prefix for the tunnel source

Context	configure <i>router string wlan-gw xconnect tunnel-source-ip string</i>
Tree	tunnel-source-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	configure <i>router string wlan-gw xconnect wlan-gw-group reference</i>
Tree	wlan-gw-group
Reference	configure <i>isa wlan-gw-group number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

wpp

Synopsis	Enable the wpp context
Context	configure <i>router string wpp</i>
Tree	wpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of WPP
Context	configure <i>router string wpp admin-state keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

portal [*name*] *string*

Synopsis	Enter the portal list instance
Context	configure router <i>string wpp portal string</i>
Tree	portal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis	Web portal name
Context	configure router <i>string wpp portal string</i>
Tree	portal
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack-auth-retry-count *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	configure router <i>string wpp portal string ack-auth-retry-count number</i>
Tree	ack-auth-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
----------	--------------------

Context	configure router <i>string</i> wpp portal <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis	Administrative state of the WPP portal server
Context	configure router <i>string</i> wpp portal <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ntf-logout-retry-count *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	configure router <i>string</i> wpp portal <i>string</i> ntf-logout-retry-count <i>number</i>
Tree	ntf-logout-retry-count
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

port-format *keyword*

Synopsis	Format of the port in the ACK_INO message
Context	configure router <i>string</i> wpp portal <i>string</i> port-format <i>keyword</i>
Tree	port-format
Default	standard
Options	standard, vendor-specific
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-interval *number*

Synopsis Time between two consecutive retransmissions

Context **configure** *router string wpp portal string retry-interval number*

Tree [retry-interval](#)

Range 10 to 2000

Default 2000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis Message authentication between portal and BRAS by applying the secret used by WPPv2

Context **configure** *router string wpp portal string secret string*

Tree [secret](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *number*

Synopsis Protocol version to be expected by the WPP portal

Context **configure** *router string wpp portal string version number*

Tree [version](#)

Range 1 | 2

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

3.40 routing-options commands

```

configure
- routing-options
- admin-tags
  - admin-tag string
  - route-admin-tag-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - exclude reference
  - include reference
- apply-groups reference
- apply-groups-exclude reference
- flexible-algorithm-definitions
  - apply-groups reference
  - apply-groups-exclude reference
  - flex-algo string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - exclude
    - admin-group reference
  - flags-tlv boolean
  - include-all
    - admin-group reference
  - include-any
    - admin-group reference
  - metric-type keyword
  - priority number
- if-attribute
  - admin-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - value number
  - apply-groups reference
  - apply-groups-exclude reference
  - srlg-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - penalty-weight number
  - value number
- ip-fast-reroute boolean
- policy-accounting
  - apply-groups reference
  - apply-groups-exclude reference
  - policy-acct-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-class number
  - apply-groups reference
  - apply-groups-exclude reference
  - policer reference
  - policer number
  - apply-groups reference
  - apply-groups-exclude reference
  - max-burst-size (number | keyword)
  - peak-rate (number | keyword)
  - source-class number
- route-next-hop-policy
  - apply-groups reference

```

configure routing-options route-next-hop-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **template** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **exclude-group** *reference*
- **include-group** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **preference** *number*
- **nh-type** *keyword*
- **protection-type** *keyword*
- **srlg** *boolean*

3.40.1 routing-options command descriptions

routing-options

Synopsis	Enter the routing-options context
Context	configure routing-options
Tree	routing-options
Introduced	16.0.R1
Platforms	All

admin-tags

Synopsis	Enter the admin-tags context
Context	configure routing-options admin-tags
Tree	admin-tags
Introduced	16.0.R1
Platforms	All

admin-tag [[tag](#)] *string*

Synopsis	Add a list entry for admin-tag
Context	configure routing-options admin-tags admin-tag <i>string</i>
Tree	admin-tag
Max. Instances	256
Introduced	16.0.R1
Platforms	All

[\[tag\]](#) *string*

Synopsis	Administrative tag value
Context	configure routing-options admin-tags admin-tag <i>string</i>
Tree	admin-tag
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1
Platforms All

route-admin-tag-policy [[policy-name](#)] *string*

Synopsis Enter the **route-admin-tag-policy** list instance
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*
Tree [route-admin-tag-policy](#)
Max. Instances 2048
Introduced 16.0.R1
Platforms All

[policy-name] *string*

Synopsis Name of the route admin tag policy
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*
Tree [route-admin-tag-policy](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

exclude [[tag](#)] *reference*

Synopsis Add a list entry for **exclude**
Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string* [exclude](#) *reference*
Tree [exclude](#)
Max. Instances 8
Introduced 16.0.R1
Platforms All

[tag] *reference*

Synopsis Administrative tag value

Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> exclude <i>reference</i>
Tree	exclude
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

include [[tag](#)] *reference*

Synopsis	Add a list entry for include
Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> include <i>reference</i>
Tree	include
Max. Instances	8
Introduced	16.0.R1
Platforms	All

[tag] *reference*

Synopsis	Administrative tag value
Context	configure routing-options admin-tags route-admin-tag-policy <i>string</i> include <i>reference</i>
Tree	include
Reference	configure routing-options admin-tags admin-tag <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

flexible-algorithm-definitions

Synopsis	Enter the flexible-algorithm-definitions context
Context	configure routing-options flexible-algorithm-definitions
Tree	flexible-algorithm-definitions
Description	Commands in this context enable locally-configured algorithm definitions and configure administrative groups.
Introduced	20.7.R1

Platforms All

flex-algo [[flex-algo-name](#)] *string*

Synopsis Enter the **flex-algo** list instance

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description Commands in this context configure the definition context for a Flexible Algorithm Definition (FAD).

Max. Instances 256

Introduced 20.7.R1

Platforms All

[flex-algo-name] *string*

Synopsis Flexible Algorithm Definition (FAD) name

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description This command specifies the name of the flexible algorithm definition that is used as a reference anchor for the configuration.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.7.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the FAD

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 20.7.R1

Platforms All

description *string*

Synopsis	Text description
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

exclude**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the exclude context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> exclude
Tree	exclude
Description	<p>Commands in this context define administrative groups that are used to exclude links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The exclude rule that is part of the FAD specifies that links with the named administrative groups set are to be excluded from the topology graph.</p>
Introduced	20.7.R1
Platforms	All

admin-group [[group-name](#)] *reference*

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> exclude admin-group <i>reference</i>
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[group-name] reference

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> exclude admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

flags-tlv boolean**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise the FAD Flags TLV
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> flags-tlv <i>boolean</i>
Tree	flags-tlv
Description	<p>When configured to true, the router advertises the FAD Flags TLV within the FAD. The M-flag within the TLV is set to 1, specifying the use of a Flex-Algorithm specific prefix metric. A router receiving the TLV modifies the constrained SPF (cSPF) based on the M-flag status.</p> <p>When configured to false, the FAD Flags TLV is not included with the FAD advertisement.</p>
Default	true
Introduced	20.10.R1
Platforms	All

include-all**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the include-all context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-all
Tree	include-all

Description	Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph. Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that all named administrative groups must be present in a link to be included in the topology graph.
Introduced	20.7.R1
Platforms	All

admin-group [[group-name](#)] *reference*

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-all admin-group <i>reference</i>
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-all admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

include-any



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the include-any context
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-any
Tree	include-any

Description	Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph. Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that any link with the named administrative groups is included in the topology graph
Introduced	20.7.R1
Platforms	All

admin-group [[group-name](#)] *reference*

Synopsis	Add a list entry for admin-group
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-any admin-group <i>reference</i>
Tree	admin-group
Introduced	20.7.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> include-any admin-group <i>reference</i>
Tree	admin-group
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

metric-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD metric type
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> metric-type <i>keyword</i>
Tree	metric-type

Default	igp
Options	igp, delay, te-metric
Introduced	20.7.R1
Platforms	All

priority *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD priority
Context	configure routing-options flexible-algorithm-definitions flex-algo <i>string</i> priority <i>number</i>
Tree	priority
Description	This command configures the priority of the FAD. The priority is used as a tie-breaker when the router has received multiple FADs for the same flexible algorithm.
Range	0 to 255
Default	100
Introduced	20.7.R1
Platforms	All

if-attribute

Synopsis	Enter the if-attribute context
Context	configure routing-options if-attribute
Tree	if-attribute
Introduced	16.0.R1
Platforms	All

admin-group [[group-name](#)] *string*

Synopsis	Enter the admin-group list instance
Context	configure routing-options if-attribute admin-group <i>string</i>
Tree	admin-group
Max. Instances	256

Introduced 16.0.R1
 Platforms All

[group-name] *string*

Synopsis Interface group name
 Context **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *string*
 Tree [admin-group](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

value *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Integer value associated with the group
 Context **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *string* [value](#) *number*
 Tree [value](#)
 Range 0 to 255
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

srlg-group [[name](#)] *string*

Synopsis Enter the **srlg-group** list instance
 Context **configure** [routing-options](#) [if-attribute](#) [srlg-group](#) *string*
 Tree [srlg-group](#)
 Max. Instances 1024
 Introduced 16.0.R1
 Platforms All

[name] *string*

Synopsis	SRLG name
Context	configure routing-options if-attribute srlg-group <i>string</i>
Tree	srlg-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

penalty-weight *number*

Synopsis	Integer value of the penalty weight assigned to SRLG
Context	configure routing-options if-attribute srlg-group <i>string</i> penalty-weight <i>number</i>
Tree	penalty-weight
Description	This command specifies the penalty weight associated with a SRLG. The higher the penalty weight, the less desirable it is to use the link with a given SRLG.
Range	0 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

value *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the SRLG
Context	configure routing-options if-attribute srlg-group <i>string</i> value <i>number</i>
Tree	value
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

ip-fast-reroute *boolean*

Synopsis	Enable IP fast reroute capability
Context	configure routing-options ip-fast-reroute <i>boolean</i>
Tree	ip-fast-reroute
Default	false
Introduced	16.0.R1
Platforms	All

policy-accounting

Synopsis	Enter the policy-accounting context
Context	configure routing-options policy-accounting
Tree	policy-accounting
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policy-acct-template [[name](#)] *string*

Synopsis	Enter the policy-acct-template list instance
Context	configure routing-options policy-accounting policy-acct-template <i>string</i>
Tree	policy-acct-template
Max. Instances	1024
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[name] *string*

Synopsis	Policy accounting template name
Context	configure routing-options policy-accounting policy-acct-template <i>string</i>
Tree	policy-acct-template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

destination-class [[index](#)] *number*

Synopsis Enter the **destination-class** list instance

Context **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* **destination-class** *number*

Tree [destination-class](#)

Max. Instances 255

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[index] *number*

Synopsis Destination class index

Context **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* **destination-class** *number*

Tree [destination-class](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policer *reference*

Synopsis Policer ID

Context **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* **destination-class** *number* [policer](#) *reference*

Tree [policer](#)

Reference **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* [policer](#) *number*

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

policer [**policer-id**] *number*

Synopsis	Enter the policer list instance
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i>
Tree	policer
Description	Commands in this context configure the policer definition for the instance. Policing by action of a policy accounting template is only supported by cards and systems that are FP4 and later.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[policer-id] *number*

Synopsis	Policer ID
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

max-burst-size (*number* | *keyword*)

Synopsis	Exceed threshold to drop packets from PIR leaky bucket
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i> max-burst-size (<i>number</i> <i>keyword</i>)
Tree	max-burst-size
Description	This command specifies the maximum burst size for the policer. When this value is exceeded, packets are considered violating and are dropped.
Range	0 to 16777216
Default	auto
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

peak-rate (*number* | *keyword*)

Synopsis	Peak rate of the policy accounting policer
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> policer <i>number</i> peak-rate (<i>number</i> <i>keyword</i>)
Tree	peak-rate
Description	This command configures the peak rate of the policy accounting policer, which is the fill or drain rate of the bucket.
Range	1 to 6400000000
Default	max
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

source-class [[index](#)] *number*

Synopsis	Add a list entry for source-class
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> source-class <i>number</i>
Tree	source-class
Max. Instances	255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

[[index](#)] *number*

Synopsis	Source-class index
Context	configure routing-options policy-accounting policy-acct-template <i>string</i> source-class <i>number</i>
Tree	source-class
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

route-next-hop-policy

Synopsis	Enter the route-next-hop-policy context
Context	configure routing-options route-next-hop-policy
Tree	route-next-hop-policy
Introduced	16.0.R1
Platforms	All

template [[template-name](#)] *string*

Synopsis	Enter the template list instance
Context	configure routing-options route-next-hop-policy template <i>string</i>
Tree	template
Introduced	16.0.R1
Platforms	All

[[template-name](#)] *string*

Synopsis	Template name
Context	configure routing-options route-next-hop-policy template <i>string</i>
Tree	template
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

description *string*

Synopsis	Text description
Context	configure routing-options route-next-hop-policy template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

exclude-group [group-name] *reference*

Synopsis	Add a list entry for exclude-group
Context	configure routing-options route-next-hop-policy template <i>string</i> exclude-group <i>reference</i>
Tree	exclude-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
Context	configure routing-options route-next-hop-policy template <i>string</i> exclude-group <i>reference</i>
Tree	exclude-group
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement will win. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

include-group [group-name] *reference*

Synopsis	Enter the include-group list instance
Context	configure routing-options route-next-hop-policy template <i>string</i> include-group <i>reference</i>
Tree	include-group
Max. Instances	32
Introduced	16.0.R1
Platforms	All

[group-name] *reference*

Synopsis	Administrative group name
----------	---------------------------

Context	configure routing-options route-next-hop-policy template <i>string</i> include-group <i>reference</i>
Tree	include-group
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement will win. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	configure routing-options if-attribute admin-group <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

preference *number*

Synopsis	Preference number for configured admin-group.
Context	configure routing-options route-next-hop-policy template <i>string</i> include-group <i>reference</i> preference <i>number</i>
Tree	preference
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

nh-type *keyword*

Synopsis	Preferred next hop
Context	configure routing-options route-next-hop-policy template <i>string</i> nh-type <i>keyword</i>
Tree	nh-type
Default	ip
Options	ip, tunnel
Introduced	16.0.R1
Platforms	All

protection-type *keyword*

Synopsis	Protection type used
Context	configure routing-options route-next-hop-policy template <i>string</i> protection-type <i>keyword</i>

Tree	protection-type
Default	node
Options	link, node
Introduced	16.0.R1
Platforms	All

srlg *boolean*

Synopsis	Select next hops from the SRLG
Context	configure routing-options route-next-hop-policy template <i>string</i> srlg <i>boolean</i>
Tree	srlg
Default	false
Introduced	16.0.R1
Platforms	All

3.41 saa commands

```

configure
- saa
- apply-groups reference
- apply-groups-exclude reference
- owner string test string
- accounting-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- continuous boolean
- description string
- jitter-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- latency-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- loss-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- probe-history keyword
- type
- dns
- apply-groups reference
- apply-groups-exclude reference
- count number
- interval number
- name-server (ipv4-address-no-zone | ipv6-address-no-zone)
- record-type keyword
- router-instance string
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- target-address string
- timeout number
- trap-generation
- probe-fail boolean
- probe-fail-threshold number
- test-complete boolean
- test-fail boolean
- test-fail-threshold number
- icmp-ping
- apply-groups reference
- apply-groups-exclude reference
- bypass-routing boolean
- count number
- destination-address (ipv4-address-no-zone | ipv6-address-no-zone | string-
not-all-spaces)
- do-not-fragment boolean
- interface string
- interval (number | decimal-number)
- next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pattern (keyword | number)
- qos
- fc keyword
- tos number
- router-instance string
- size number

```


configure saa owner type icmp-ping source-address

- **source-address** (ipv4-address-no-zone | ipv6-address-no-zone)
- **timeout** number
- **trap-generation**
 - **probe-fail** boolean
 - **probe-fail-threshold** number
 - **test-complete** boolean
 - **test-fail** boolean
 - **test-fail-threshold** number
- **ttl** number
- **lsp-ping**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **interval** number
 - **qos**
 - **fc** keyword
 - **profile** keyword
 - **send-count** number
 - **size** number
 - **source-ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **sub-type**
 - **bgp-label**
 - **path-destination**
 - **interface** string
 - **ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **ldp**
 - **path-destination**
 - **interface** string
 - **ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **rsvp-te**
 - **lsp-name** string
 - **path** string
 - **sr-isis**
 - **igp-instance** number
 - **path-destination**
 - **interface** string
 - **ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **sr-ospf**
 - **igp-instance** number
 - **path-destination**
 - **interface** string
 - **ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **sr-ospf3**
 - **igp-instance** number
 - **path-destination**
 - **interface** string
 - **ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **prefix** (ipv4-prefix | ipv6-prefix)
 - **sr-policy**
 - **color** number
 - **endpoint** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **path-destination**
 - **interface** string
 - **ip-address** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **next-hop** (ipv4-address-no-zone | ipv6-address-no-zone)
 - **segment-list** number

configure saa owner type lsp-ping sub-type sr-te

- **sr-te**
- **lsp-name** *string*
- **path** *string*
- **path-destination**
 - **interface** *string*
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **timeout** *number*
- **trap-generation**
 - **probe-fail** *boolean*
 - **probe-fail-threshold** *number*
 - **test-complete** *boolean*
 - **test-fail** *boolean*
 - **test-fail-threshold** *number*
- **ttl** *number*

3.41.1 saa command descriptions

saa

Synopsis	Enter the saa context
Context	configure saa
Tree	saa
Description	Commands in this context configure the Service Assurance Agent (SAA) tests.
Introduced	16.0.R4
Platforms	All

owner [owner-name] string test string

Synopsis	Enter the owner list instance
Context	configure saa owner string test string
Tree	owner
Introduced	16.0.R4
Platforms	All

[owner-name] string

Synopsis	Optional owner name of the SAA operation
Context	configure saa owner string test string
Tree	owner
Description	This command configures the owner associated with the SAA operation. The owner is optional and "TiMOS CLI" is used if an owner is not specified.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

test string

Synopsis	SAA test name
Context	configure saa owner string test string

Tree	owner
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy associated with the SAA test
Context	configure saa owner string test string accounting-policy reference
Tree	accounting-policy
Reference	configure log accounting-policy number
Introduced	16.0.R4
Platforms	All

admin-state *keyword*

Synopsis	Administrative state of the SAA test
Context	configure saa owner string test string admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable
Introduced	16.0.R4
Platforms	All

continuous *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Execute the SAA tests as continuous
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Context	configure <i>saa owner string test string continuous boolean</i>
Tree	<i>continuous</i>
Description	<p>When configured to true, the SAA test execution is continuous, that is, it cannot be started or stopped with the oam saa test start or stop commands.</p> <p>The SAA test types supported by this command include the following:</p> <ul style="list-style-type: none"> • cpe-ping • dns • eth-cfm-loopback • eth-cfm-two-way-delay • eth-cfm-two-way-slm • icmp-ping (not applicable to rapid type) • lsp-ping • mac-ping • sdp-ping • vccv-ping • vprn-ping
Default	false
Introduced	16.0.R4
Platforms	All

description *string*

Synopsis	Text description
Context	configure <i>saa owner string test string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

jitter-event [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the jitter-event list instance
Context	configure <i>saa owner string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>

Description	Commands in this context configure the jitter event thresholds used to evaluate the jitter event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure saa owner <i>string test string jitter-event keyword threshold-type keyword</i>
Tree	jitter-event
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	configure saa owner <i>string test string jitter-event keyword threshold-type keyword</i>
Tree	jitter-event
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold jitter value
Context	configure saa owner <i>string test string jitter-event keyword threshold-type keyword threshold number</i>
Tree	threshold
Description	This command specifies the threshold jitter value. The system generates an SAA threshold event when the jitter value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

latency-event [*direction*] *keyword* *threshold-type* *keyword*

Synopsis	Enter the latency-event list instance
Context	configure <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <i>latency-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>latency-event</i>
Description	Commands in this context configure the latency event thresholds used to evaluate the latency event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <i>latency-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>latency-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <i>latency-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>latency-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold latency value
Context	configure <i>saa owner string test string latency-event keyword threshold-type keyword threshold number</i>
Tree	threshold
Description	This command specifies the threshold latency value. The system generates an SAA threshold event when the latency value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

loss-event [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the loss-event list instance
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	loss-event
Description	Commands in this context configure the loss event thresholds used to evaluate the loss event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

[direction] *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	loss-event
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold-type *keyword*

Synopsis	Threshold type
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<i>loss-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

threshold *number*

Synopsis	Threshold loss event value
Context	configure <i>saa owner string test string loss-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold loss value. The system generates an SAA threshold event when the loss value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	packets
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

probe-history *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	History probe behavior
Context	configure <i>saa owner string test string probe-history keyword</i>
Tree	<i>probe-history</i>
Default	auto
Options	keep, drop, auto
Introduced	16.0.R4
Platforms	All

type

Synopsis	Enter the type context
Context	configure <i>saa owner string test string type</i>
Tree	<i>type</i>
Introduced	16.0.R4
Platforms	All

dns

Synopsis	Enable the dns context
Context	configure <i>saa owner string test string type dns</i>
Tree	<i>dns</i>
Notes	The following elements are part of a choice: dns , icmp-ping , or lsp-ping .
Introduced	22.10.R1
Platforms	All

count *number*

Synopsis	Number of messages to send in a sample window
Context	configure <i>saa owner string test string type dns count number</i>
Tree	<i>count</i>
Description	This command specifies the number of messages to send. Each message request must either time out or receive a reply before the next message request is sent.
Range	1 to 100
Default	1
Units	packets
Introduced	22.10.R1
Platforms	All

interval *number*

Synopsis	Minimum time before the next message request is sent
Context	configure <i>saa owner string test string type dns interval number</i>
Tree	<i>interval</i>

Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	All

name-server (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the DNS name server used for the test
Context	configure <i>saa owner string test string type dns name-server</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	name-server
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

record-type *keyword*

Synopsis	Record type
Context	configure <i>saa owner string test string type dns record-type keyword</i>
Tree	record-type
Default	ipv4-a-record
Options	ipv4-a-record, ipv6-aaaa-record
Introduced	22.10.R1
Platforms	All

router-instance *string*

Synopsis	Router name or VPRN service name
Context	configure <i>saa owner string test string type dns router-instance string</i>
Tree	router-instance
Default	_Base_and_management
Introduced	22.10.R1
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address on the local system
Context	configure <i>saa owner string test string type dns source-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Description	This command configures the IP address on the local system. If unconfigured, the router uses a system selected local IP address.
Introduced	22.10.R1
Platforms	All

target-address *string*

Synopsis	DNS name to be resolved to an IP address
Context	configure <i>saa owner string test string type dns target-address string</i>
Tree	target-address
String Length	1 to 255
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

timeout *number*

Synopsis	Maximum time to wait for a reply message
Context	configure <i>saa owner string test string type dns timeout number</i>
Tree	timeout
Description	This command specifies the maximum time the router waits for a message response after sending the message request. When the timeout expires, the requesting router assumes the message response is not received. Any response received after the request times out is silently discarded.
Range	1 to 120
Default	5
Units	seconds
Introduced	22.10.R1
Platforms	All

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner string test string type dns trap-generation</i>
Tree	trap-generation
Introduced	22.10.R1
Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner string test string type dns trap-generation probe-fail boolean</i>
Tree	probe-fail
Description	When configured to true , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner string test string type dns trap-generation probe-fail-threshold number</i>
Tree	probe-fail-threshold
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the probe-fail command is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
Context	configure <i>saa owner string test string type dns trap-generation test-complete boolean</i>
Tree	test-complete
Default	false
Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner string test string type dns trap-generation test-fail boolean</i>
Tree	test-fail
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner string test string type dns trap-generation test-fail-threshold number</i>
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when test-fail is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

icmp-ping

Synopsis	Enable the icmp-ping context
Context	configure <i>saa owner string test string type icmp-ping</i>
Tree	<i>icmp-ping</i>
Description	Commands in this context configure an ICMP ping test.
Notes	The following elements are part of a choice: dns , icmp-ping , or lsp-ping .
Introduced	16.0.R4
Platforms	All

bypass-routing *boolean*

Synopsis	Bypass routing table for directly connected interfaces
Context	configure <i>saa owner string test string type icmp-ping bypass-routing boolean</i>
Tree	<i>bypass-routing</i>
Default	false
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	16.0.R4
Platforms	All

count *number*

Synopsis	ICMP Echo Request packets to send in a sample window
Context	configure <i>saa owner string test string type icmp-ping count number</i>
Tree	<i>count</i>
Range	1 to 100000
Default	5
Units	packets
Introduced	16.0.R4
Platforms	All

destination-address (*ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces*)

Synopsis	Destination IP address or DNS name to send ping request
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Context	configure <i>saa owner string test string type icmp-ping destination-address</i> (<i>ipv4-address-no-zone ipv6-address-no-zone string-not-all-spaces</i>)
Tree	destination-address
String Length	1 to 128
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

do-not-fragment *boolean*

Synopsis	Prevent fragmentation of the ICMP Echo Request packet
Context	configure <i>saa owner string test string type icmp-ping do-not-fragment boolean</i>
Tree	do-not-fragment
Default	false
Introduced	16.0.R4
Platforms	All

interface *string*

Synopsis	Interface name
Context	configure <i>saa owner string test string type icmp-ping interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	16.0.R4
Platforms	All

interval (*number | decimal-number*)

Synopsis	Minimum time to expire before message request is sent
Context	configure <i>saa owner string test string type icmp-ping interval</i> (<i>number decimal-number</i>)
Tree	interval
Range	1 to 10000
Default	1

Units	seconds
Introduced	16.0.R4
Platforms	All

next-hop-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address to reach destination
Context	configure <i>saa owner string test string type icmp-ping next-hop-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop-address
Notes	The following elements are part of a choice: bypass-routing , interface , or next-hop-address .
Introduced	16.0.R4
Platforms	All

pattern (*keyword* | *number*)

Synopsis	Pattern to fill the data portion in a ping packet
Context	configure <i>saa owner string test string type icmp-ping pattern</i> (<i>keyword</i> <i>number</i>)
Tree	pattern
Range	0 to 65535
Default	sequential
Options	sequential
Introduced	16.0.R4
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure <i>saa owner string test string type icmp-ping qos</i>
Tree	qos
Introduced	16.0.R4
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure <i>saa owner string test string type icmp-ping qos fc keyword</i>
Tree	fc
Default	nc
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R4
Platforms	All

tos number

Synopsis	Type of service
Context	configure <i>saa owner string test string type icmp-ping qos tos number</i>
Tree	tos
Range	0 to 255
Default	0
Introduced	16.0.R4
Platforms	All

router-instance string

Synopsis	Router name or VPRN service name
Context	configure <i>saa owner string test string type icmp-ping router-instance string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R4
Platforms	All

size number

Synopsis	Packet padding size
Context	configure <i>saa owner string test string type icmp-ping size number</i>
Tree	size
Description	This command configures the number of bytes in the combined ICMP Header (8 bytes) and ICMP Payload (variable size) of the ICMP Echo Request packets.

Range	0 to 16384
Default	56
Units	bytes
Introduced	16.0.R4
Platforms	All

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	configure <i>saa owner string test string type icmp-ping source-address</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-address
Description	This command configures the source IP address to be loaded into the IP header of the ICMP Echo Request packet. If unconfigured, the router uses a system-selected local address.
Introduced	16.0.R4
Platforms	All

timeout *number*

Synopsis	Time router waits for a reply after sending last probe
Context	configure <i>saa owner string test string type icmp-ping timeout number</i>
Tree	timeout
Range	1 to 10
Default	5
Units	seconds
Introduced	16.0.R4
Platforms	All

trap-generation

Synopsis	Enter the trap-generation context
Context	configure <i>saa owner string test string type icmp-ping trap-generation</i>
Tree	trap-generation
Introduced	22.10.R1

Platforms All

probe-fail *boolean*

Synopsis Enable the generation of probe fail notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail boolean*

Tree [probe-fail](#)

Description When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.
This command is not applicable to SAA traceroute tests.

Default false

Introduced 22.10.R1

Platforms All

probe-fail-threshold *number*

Synopsis Consecutive probe failure count

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail-threshold number*

Tree [probe-fail-threshold](#)

Description This command configures the number of consecutive ping probe failures required to generate a trap.
This command has no effect if the **probe-fail** command is set to **false**.
This command is not applicable to SAA traceroute tests.

Range 0 to 15

Default 1

Introduced 22.10.R1

Platforms All

test-complete *boolean*

Synopsis Enable generation of test complete notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation test-complete boolean*

Tree [test-complete](#)

Default false

Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner string test string type icmp-ping trap-generation test-fail boolean</i>
Tree	test-fail
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner string test string type icmp-ping trap-generation test-fail-threshold number</i>
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when test-fail is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

tll *number*

Synopsis	Time to live in the IP header
Context	configure <i>saa owner string test string type icmp-ping tll number</i>
Tree	tll
Range	1 to 128

Default	64
Introduced	16.0.R4
Platforms	All

lsp-ping

Synopsis	Enable the lsp-ping context
Context	configure saa owner string test string type lsp-ping
Tree	lsp-ping
Description	Commands in this context configure the command options to perform in-band LSP connectivity tests. LSP ping uses the protocol and data structures defined in RFC 8029, <i>Detecting Multiprotocol Label Switched (MPLS) Data-Plane Failures</i> .
Notes	The following elements are part of a choice: dns , icmp-ping , or lsp-ping .
Introduced	22.10.R1
Platforms	All

interval number

Synopsis	Minimum time before the next lsp-ping request is sent
Context	configure saa owner string test string type lsp-ping interval number
Tree	interval
Range	1 to 10
Default	1
Units	seconds
Introduced	22.10.R1
Platforms	All

qos

Synopsis	Enter the qos context
Context	configure saa owner string test string type lsp-ping qos
Tree	qos
Introduced	22.10.R1
Platforms	All

fc keyword

Synopsis	Forwarding class
Context	configure saa owner string test string type lsp-ping qos fc keyword
Tree	fc
Default	be
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	22.10.R1
Platforms	All

profile keyword

Synopsis	Profile
Context	configure saa owner string test string type lsp-ping qos profile keyword
Tree	profile
Default	out
Options	in, out
Introduced	22.10.R1
Platforms	All

send-count number

Synopsis	Number of request packets to send in a sample window
Context	configure saa owner string test string type lsp-ping send-count number
Tree	send-count
Range	1 to 100
Default	1
Units	packets
Introduced	22.10.R1
Platforms	All

size number

Synopsis	Packet pad size
Context	configure saa owner string test string type lsp-ping size number

Tree	size
Range	1 to 9786
Default	1
Units	bytes
Introduced	22.10.R1
Platforms	All

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	configure saa owner string test string type lsp-ping source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	source-ip-address
Introduced	22.10.R1
Platforms	All

sub-type

Synopsis	Enter the sub-type context
Context	configure saa owner string test string type lsp-ping sub-type
Tree	sub-type
Introduced	22.10.R1
Platforms	All

bgp-label

Synopsis	Enable the bgp-label context
Context	configure saa owner string test string type lsp-ping sub-type bgp-label
Tree	bgp-label
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface string

Synopsis	Egress router interface used with the path destination
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination interface string
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner string test string type lsp-ping sub-type bgp-label path-destination next-hop (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1

Platforms All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test

Context **configure** *saa owner string test string type lsp-ping sub-type bgp-label prefix* (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is mandatory.

Introduced 22.10.R1

Platforms All

ldp

Synopsis Enable the **ldp** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp*

Tree [ldp](#)

Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.

Introduced 22.10.R1

Platforms All

path-destination

Synopsis Enter the **path-destination** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination*

Tree [path-destination](#)

Introduced 22.10.R1

Platforms All

interface *string*

Synopsis Egress router interface used with the path destination

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination interface string*

Tree [interface](#)

String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type ldp path-destination ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type ldp path-destination next-hop (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type ldp prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

rsvp-te

Synopsis	Enable the rsvp-te context
Context	configure <i>saa owner string test string type lsp-ping sub-type rsvp-te</i>
Tree	<i>rsvp-te</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

lsp-name string

Synopsis	Name of the LSP to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type rsvp-te lsp-name string</i>
Tree	<i>lsp-name</i>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path string

Synopsis	Name of the MPLS path to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type rsvp-te path string</i>
Tree	<i>path</i>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

sr-isis

Synopsis	Enable the sr-isis context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis</i>
Tree	<i>sr-isis</i>
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .

Introduced	22.10.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR IS-IS test
Context	configure saa owner <i>string test string type lsp-ping sub-type sr-isis igp-instance number</i>
Tree	igp-instance
Range	0 to 127
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner <i>string test string type lsp-ping sub-type sr-isis path-destination</i>
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner <i>string test string type lsp-ping sub-type sr-isis path-destination interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
----------	------------------------------------

Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-isis prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-ospf

Synopsis	Enable the sr-ospf context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf</i>
Tree	sr-ospf
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

igp-instance *number*

Synopsis	IGP instance for the SR OSPF test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf igp-instance number</i>
Tree	igp-instance
Range	0 to 31
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination</i>
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address

Introduced 22.10.R1
 Platforms All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [next-hop](#)
 Notes The following elements are part of a choice: **interface** or **next-hop**.
 Introduced 22.10.R1
 Platforms All

prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf prefix* (*ipv4-prefix* | *ipv6-prefix*)
 Tree [prefix](#)
 Notes This element is mandatory.
 Introduced 22.10.R1
 Platforms All

sr-ospf3

Synopsis Enable the **sr-ospf3** context
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf3*
 Tree [sr-ospf3](#)
 Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.
 Introduced 22.10.R1
 Platforms All

igp-instance *number*

Synopsis IGP instance for the SR OSPFv3 test

Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 igp-instance number</i>
Tree	igp-instance
Range	0 to 31 64 to 95
Default	0
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination</i>
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination interface string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-ospf3 prefix (ipv4-prefix ipv6-prefix)</i>
Tree	prefix
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

sr-policy

Synopsis	Enable the sr-policy context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy</i>
Tree	sr-policy
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

color number

Synopsis	Segment Routing color for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy color number</i>
Tree	color
Range	0 to 4294967295

Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

endpoint (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Segment Routing endpoint for the test
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type sr-policy endpoint (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
Tree	endpoint
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type sr-policy path-destination
Tree	path-destination
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure saa owner <i>string</i> test <i>string</i> type lsp-ping sub-type sr-policy path-destination interface <i>string</i>
Tree	interface
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
----------	------------------------------------

Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination ip-address (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	ip-address
Introduced	22.10.R1
Platforms	All

next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i>
Tree	next-hop
Notes	The following elements are part of a choice: interface or next-hop .
Introduced	22.10.R1
Platforms	All

segment-list *number*

Synopsis	Segment Routing segment list for the test
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-policy segment-list number</i>
Tree	segment-list
Range	1 to 32
Introduced	22.10.R1
Platforms	All

sr-te

Synopsis	Enable the sr-te context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te</i>
Tree	sr-te
Notes	The following elements are part of a choice: bgp-label , ldp , rsvp-te , sr-isis , sr-ospf , sr-ospf3 , sr-policy , or sr-te .
Introduced	22.10.R1
Platforms	All

lsp-name *string*

Synopsis	Name of the LSP to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te lsp-name string</i>
Tree	<i>lsp-name</i>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

path *string*

Synopsis	Name of the MPLS path to be tested
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te path string</i>
Tree	<i>path</i>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

path-destination

Synopsis	Enter the path-destination context
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te path-destination</i>
Tree	<i>path-destination</i>
Introduced	22.10.R1
Platforms	All

interface *string*

Synopsis	Egress router interface used with the path destination
Context	configure <i>saa owner string test string type lsp-ping sub-type sr-te path-destination interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	The following elements are part of a choice: interface or next-hop .

Introduced 22.10.R1
 Platforms All

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the path destination
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination ip-address* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [ip-address](#)
 Introduced 22.10.R1
 Platforms All

next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [next-hop](#)
 Notes The following elements are part of a choice: **interface** or **next-hop**.
 Introduced 22.10.R1
 Platforms All

timeout *number*

Synopsis Time router waits for a reply to an echo request
 Context **configure** *saa owner string test string type lsp-ping timeout number*
 Tree [timeout](#)
 Range 1 to 10
 Default 5
 Units seconds
 Introduced 22.10.R1
 Platforms All

trap-generation

Synopsis Enter the **trap-generation** context

Context	configure <i>saa owner string test string type lsp-ping trap-generation</i>
Tree	<i>trap-generation</i>
Introduced	22.10.R1
Platforms	All

probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	configure <i>saa owner string test string type lsp-ping trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	When configured to true , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	configure <i>saa owner string test string type lsp-ping trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the probe-fail command is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

test-complete *boolean*

Synopsis	Enable generation of test complete notifications
----------	--

Context	configure <i>saa owner string test string type lsp-ping trap-generation test-complete boolean</i>
Tree	test-complete
Default	false
Introduced	22.10.R1
Platforms	All

test-fail *boolean*

Synopsis	Enable the generation of test fail notifications
Context	configure <i>saa owner string test string type lsp-ping trap-generation test-fail boolean</i>
Tree	test-fail
Description	When configured to true , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the test-fail-threshold setting.
Default	false
Introduced	22.10.R1
Platforms	All

test-fail-threshold *number*

Synopsis	Total probe failures for trap generation
Context	configure <i>saa owner string test string type lsp-ping trap-generation test-fail-threshold number</i>
Tree	test-fail-threshold
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when test-fail is set to false . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

ttl number

Synopsis	TTL value for the echo request MPLS label
Context	configure <i>saa owner string test string type lsp-ping ttl number</i>
Tree	<i>ttl</i>
Range	1 to 255
Default	255
Introduced	22.10.R1
Platforms	All

3.42 satellite commands

```

configure
- satellite
  - apply-groups reference
  - apply-groups-exclude reference
  - ethernet-satellite number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client-down-delay number
    - console-access keyword
    - description string
    - dynamic-uplink boolean
    - feature keyword
    - mac-address string
    - port-map reference
      - apply-groups reference
      - apply-groups-exclude reference
      - primary reference
      - secondary reference
    - port-template string
    - ptp-tc boolean
    - sat-type keyword
    - software-repository reference
    - sync-e boolean
    - uplink-distribution keyword
  - file-transfer
    - apply-groups reference
    - apply-groups-exclude reference
    - ftp boolean
    - scp boolean
  - port-template string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port string
      - apply-groups reference
      - apply-groups-exclude reference
      - role keyword
      - uplink reference
    - sat-type keyword
  - port-topology reference
    - apply-groups reference
    - apply-groups-exclude reference
    - far-end-port-id reference

```

3.42.1 satellite command descriptions

satellite

Synopsis	Enter the satellite context
Context	configure satellite
Tree	satellite
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ethernet-satellite [[satellite-id](#)] *number*

Synopsis	Enter the ethernet-satellite list instance
Context	configure satellite ethernet-satellite number
Tree	ethernet-satellite
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[\[satellite-id\]](#) *number*

Synopsis	The unique index identifying this satellite
Context	configure satellite ethernet-satellite number
Tree	ethernet-satellite
Range	1 to 20
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis	Administrative state of the satellite
Context	configure satellite ethernet-satellite number admin-state keyword
Tree	admin-state
Default	disable
Options	enable, disable

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

client-down-delay *number*

Synopsis Delay between uplink as unavailable and disabling ports
Context **configure** [satellite](#) [ethernet-satellite](#) *number* **client-down-delay** *number*
Tree [client-down-delay](#)
Range 0 to 1800
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

console-access *keyword*

Synopsis Satellite console interface access
Context **configure** [satellite](#) [ethernet-satellite](#) *number* **console-access** *keyword*
Tree [console-access](#)
Default disable
Options enable, disable
Introduced 20.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
Context **configure** [satellite](#) [ethernet-satellite](#) *number* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dynamic-uplink *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable dynamic uplink resilience for Ethernet satellite
Context	configure satellite ethernet-satellite <i>number</i> dynamic-uplink <i>boolean</i>
Tree	dynamic-uplink
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

feature *keyword*

Synopsis	Functionality to enable
Context	configure satellite ethernet-satellite <i>number</i> feature <i>keyword</i>
Tree	feature
Options	local-forward, ptp-tc
Max. Instances	2
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis	MAC address for the satellite chassis
Context	configure satellite ethernet-satellite <i>number</i> mac-address <i>string</i>
Tree	mac-address
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-map [[client-port-id](#)] *reference*

Synopsis	Enter the port-map list instance
Context	configure satellite ethernet-satellite <i>number</i> port-map <i>reference</i>
Tree	port-map

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[client-port-id] *reference*

Synopsis	Satellite client port associated with the port mapping
Context	configure satellite ethernet-satellite <i>number</i> port-map <i>reference</i>
Tree	port-map
Reference	configure port <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary *reference*

Synopsis	Primary satellite uplink for the associate client port
Context	configure satellite ethernet-satellite <i>number</i> port-map <i>reference</i> primary <i>reference</i>
Tree	primary
Reference	configure port <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

secondary *reference*

Synopsis	Secondary satellite uplink for associate client port
Context	configure satellite ethernet-satellite <i>number</i> port-map <i>reference</i> secondary <i>reference</i>
Tree	secondary
Reference	configure port <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-template *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port template name
Context	configure satellite ethernet-satellite <i>number port-template string</i>
Tree	port-template
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ptp-tc *boolean*

Synopsis	Enable the 1EEE 1588 transparent clock function
Context	configure satellite ethernet-satellite <i>number ptp-tc boolean</i>
Tree	ptp-tc
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sat-type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of satellite variant for the associated chassis
Context	configure satellite ethernet-satellite <i>number sat-type keyword</i>
Tree	sat-type
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

software-repository *reference*

Synopsis	Software repository bound to the associated satellite
Context	configure satellite ethernet-satellite <i>number</i> software-repository <i>reference</i>
Tree	software-repository
Reference	configure system software-repository <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sync-e *boolean*

Synopsis	Enable the synchronous Ethernet operation
Context	configure satellite ethernet-satellite <i>number</i> sync-e <i>boolean</i>
Tree	sync-e
Description	<p>When configured to true, this command enables the Ethernet satellite for synchronous Ethernet operation so that the transmit timing of the satellite access ports use the frequency of the central clock of the host router.</p> <p>To enable this functionality, both host ports on the router that connect to the U1 and U2 ports of the satellite must be synchronous Ethernet-capable ports.</p> <p>When configured to false, the command disables the Ethernet satellite for synchronous Ethernet operation.</p>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

uplink-distribution *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding complex type for uplink distribution
Context	configure satellite ethernet-satellite <i>number</i> uplink-distribution <i>keyword</i>
Tree	uplink-distribution
Description	<p>This command specifies the forwarding complex used for the satellite uplink association to the ports.</p> <p>With single-complex, all uplinks for the associated satellite must be connected to ports using a single forwarding complex.</p>

With **dual-complex**, all uplinks for the associated satellite must be connected to ports using a double forwarding complex. This option optimizes the resources across the two complexes.

Options	single-complex, dual-complex
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

file-transfer

Synopsis	Enter the file-transfer context
Context	configure satellite file-transfer
Tree	file-transfer
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ftp boolean

Synopsis	Use FTP between host and satellite
Context	configure satellite file-transfer ftp boolean
Tree	ftp
Description	When configured to true , the file transfer FTP is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

scp boolean

Synopsis	Use FTP between host and satellite
Context	configure satellite file-transfer scp boolean
Tree	scp
Description	When configured to true , the file transfer SCP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite. When configured to false , the file transfer FTP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.
Default	false

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-template [[template-name](#)] *string*

Synopsis Enter the **port-template** list instance
 Context **configure satellite port-template** *string*
 Tree [port-template](#)
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[template-name] *string*

Synopsis Associated port template name
 Context **configure satellite port-template** *string*
 Tree [port-template](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the port template
 Context **configure satellite port-template** *string admin-state* *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 19.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure satellite port-template** *string description* *string*

Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port [[sat-phys-port-id](#)] *string*

Synopsis	Enter the port list instance
Context	configure satellite port-template <i>string</i> port <i>string</i>
Tree	port
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[sat-phys-port-id] *string*

Synopsis	Satellite physical port ID
Context	configure satellite port-template <i>string</i> port <i>string</i>
Tree	port
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

role *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite port role
Context	configure satellite port-template <i>string</i> port <i>string</i> role <i>keyword</i>
Tree	role
Options	none, uplink, client
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

uplink reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Uplink association used for associated satellite port
Context	configure satellite port-template <i>string</i> port <i>string</i> uplink <i>reference</i>
Tree	uplink
Reference	configure satellite port-template <i>string</i> port <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

sat-type keyword

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The satellite type for the port template to use.
Context	configure satellite port-template <i>string</i> sat-type <i>keyword</i>
Tree	sat-type
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-topology [[local-port-id](#)] reference

Synopsis	Enter the port-topology list instance
Context	configure satellite port-topology <i>reference</i>
Tree	port-topology

Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[local-port-id] *reference*

Synopsis Local port identifier
Context **configure** [satellite port-topology reference](#)
Tree [port-topology](#)
Reference **configure** [port string](#)
Notes This element is part of a list key.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

far-end-port-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Far end port identifier.
Context **configure** [satellite port-topology reference](#) [far-end-port-id reference](#)
Tree [far-end-port-id](#)
Reference **configure** [port string](#)
Notes This element is mandatory.
Introduced 19.7.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

3.43 service commands

```

configure
- service
- apply-groups reference
- apply-groups-exclude reference
- cpipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- customer reference
- description string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- hold-time-active number
- revert-time (number | keyword)
- sap string
- accounting-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- cem
- packet
- jitter-buffer number
- payload-size number
- report-alarm
- buffer-overflow boolean
- buffer-underrun boolean
- malformed-packets boolean
- packet-loss boolean
- remote-fault boolean
- remote-packet-loss boolean
- remote-rdi boolean
- stray-packets boolean
- rtp-header boolean
- collect-stats boolean
- description string
- dist-cpu-protection reference
- egress
- agg-rate
- adaptation-rule keyword
- burst-limit (number | keyword)
- limit-unused-bandwidth boolean
- rate number
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- sap-egress

```

configure service cpipe sap egress qos sap-egress overrides

```

- overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - hs-class-weight number
    - hs-wred-queue
      - policy reference
    - hs-wrr-weight number
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- endpoint ingress
- qos
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - root

```

configure service cpipe sap ingress qos policer-control-policy overrides root max-rate

```

    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
      - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- lag

```


configure service cpipe sap multi-service-site

- **multi-service-site** *reference*
- **service-id** *number*
- **service-mtu** *number*
- **spoke-sdp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** (*number* | *keyword*)
 - **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **control-word** *boolean*
 - **description** *string*
 - **egress**
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **endpoint**
 - **icb** *boolean*
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **ingress**
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
- **test** *boolean*
- **vc-switching** *boolean*
- **vc-type** *keyword*
- **vpn-id** *number*
- **customer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **contact** *string*
 - **customer-id** *number*
 - **description** *string*
 - **multi-service-site** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **assignment**
 - **card** *number*
 - **fpe** *reference*
 - **port** *string*
 - **description** *string*
 - **egress**
 - **agg-rate**
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **policer-control-policy** *reference*
 - **scheduler-policy**
 - **overrides**
 - **scheduler** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**

configure service customer multi-service-site egress scheduler-policy overrides scheduler parent cir-weight

```

    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- ingress
- policer-control-policy reference
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- phone string
- epipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bgp number
  - adv-service-mtu number
  - apply-groups reference
  - apply-groups-exclude reference
  - pw-template-binding reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - endpoint reference
  - import-rt string
- route-distinguisher (keyword | vpn-route-distinguisher)
- route-target
  - export string
  - import string
- vsi-export reference
- vsi-import reference
- bgp-evpn
  - apply-groups reference
  - apply-groups-exclude reference
  - evi number
  - local-attachment-circuit string
  - apply-groups reference
  - apply-groups-exclude reference
  - endpoint reference
  - eth-tag number
- mpls number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
    - ecmp number
    - enforce-strict-tunnel-tagging boolean
    - resolution keyword
    - resolution-filter
      - bgp boolean
      - ldp boolean
      - mpls-fwd-policy boolean

```

configure service epipe bgp-evpn mpls auto-bind-tunnel resolution-filter rib-api

- **rib-api** *boolean*
- **rsvp** *boolean*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **sr-ospf3** *boolean*
- **sr-policy** *boolean*
- **sr-te** *boolean*
- **udp** *boolean*
- **weighted-ecmp** *boolean*
- **control-word** *boolean*
- **default-route-tag** *string*
- **dynamic-egress-label-limit** *boolean*
- **ecmp** *number*
- **entropy-label** *boolean*
- **evi-three-byte-auto-rt** *boolean*
- **force-vc-forwarding** *keyword*
- **oper-group** *reference*
- **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
- **send-tunnel-encap**
 - **mpls** *boolean*
 - **mpls-over-udp** *boolean*
- **remote-attachment-circuit** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **endpoint** *reference*
 - **eth-tag** *number*
- **segment-routing-v6** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **ecmp** *number*
 - **evi-three-byte-auto-rt** *boolean*
 - **force-vc-forwarding** *keyword*
 - **oper-group** *reference*
 - **resolution** *keyword*
 - **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
 - **source-address** *string*
 - **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vxlan** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **ecmp** *number*
 - **evi-three-byte-auto-rt** *boolean*
 - **send-tunnel-encap** *boolean*
 - **vxlan-instance** *reference*
- **bgp-mh-site** *string*
 - **activation-timer** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boot-timer** *number*
 - **id** *number*
 - **min-down-timer** *number*

configure service epipe bgp-mh-site preference

- **preference** *number*
- **sap** *string*
- **bgp-vpws**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ve**
 - **id** *number*
 - **name** *string*
 - **remote-ve** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **id** *number*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **hold-time-active** *number*
 - **revert-time** (*number* | *keyword*)
 - **standby-signaling** *keyword*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **load-balancing**
 - **lbl-eth-or-ip-l4-teid** *boolean*
 - **per-service-hashing** *boolean*
- **nat-outside** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **oper-group** *reference*
- **pbb**
 - **force-qtag-forwarding** *boolean*
 - **local-switch-service-state** *keyword*
 - **tunnel**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backbone-dest-mac** *string*
 - **backbone-dest-mac-name** *reference*
 - **backbone-vpls-service-name** *reference*
 - **isid** *number*
- **sap** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **cflowd** *boolean*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*

configure service epipe sap egress

- **egress**
 - **agg-rate**
 - **adaptation-rule** *keyword*
 - **burst-limit** (*number* | *keyword*)
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mac** *reference*
 - **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*
 - **qinq-mark-top-only** *boolean*
 - **sap-egress**
 - **overrides**
 - **hs-secondary-shaper** *string*
 - **hs-wrr-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue** *reference*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avg-frame-overhead** *decimal-number*
 - **burst-limit** (*number* | *keyword*)
 - **cbs** (*number* | *keyword*)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **hs-class-weight** *number*
 - **hs-wred-queue**
 - **policy** *reference*
 - **hs-wrr-weight** *number*

configure service epipe sap egress qos sap-egress overrides queue mbs

```

    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - endpoint reference
  - eth-cfm
    - ais boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-lmm-fc-stats
      - fc keyword
      - fc-in-profile keyword
    - collect-lmm-stats boolean
    - mep md-admin-name reference ma-admin-name reference mep-id number
      - admin-state keyword
    - ais
      - client-meg-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - ccm boolean
    - ccm-ltm-priority number
    - ccm-padding-size number
    - cfm-vlan-tag string
    - csf
      - multiplier decimal-number
    - description string
    - direction keyword
    - eth-test
      - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword

```

configure service epipe sap eth-cfm mep fault-propagation

```

- fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - lbm-svc-act-responder boolean
  - low-priority-defect keyword
  - mac-address string
  - one-way-delay-threshold number
  - primary-vlan boolean
- mip primary-vlan (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - cfm-vlan-tag string
  - mac-address string
  - snmpch-ingress-ctag-levels number
  - snmpch-ingress-levels number
- ethernet
  - llf
    - admin-state keyword
- ignore-oper-down boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
    - mac reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
          - policy-name reference
      - sap-ingress
        - fp-redirect-group
          - group-name reference
          - instance number
        - overrides
          - ip-criteria
            - activate-entry-tag number
          - ipv6-criteria
            - activate-entry-tag number
          - policer reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - mbs (number | keyword)
          - packet-byte-offset number
          - percent-rate
            - cir decimal-number
            - pir decimal-number

```

configure service epipe sap ingress qos sap-ingress overrides policer rate

```

- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- l2tpv3-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pseudo-wire
    - ethernet
    - ethernet-vlan-id number
  - router
    - group string
    - router-instance string
  - vc-id number
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node string

```


configure service epipe sap monitor-oper-group

- **monitor-oper-group** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **end-dx2**
 - **value** *number*
- **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **udx2**
 - **value** *number*
- **service-id** *number*
- **service-mtu** *number*
- **spoke-sdp** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **adv-service-mtu** *number*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** (*number* | *keyword*)
 - **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **wait-for-up-timer** *number*
 - **collect-stats** *boolean*
 - **control-word** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mac** *reference*
 - **l2tpv3**
 - **cookie** *string*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
 - **endpoint**

configure service epipe spoke-sdp endpoint icb

```

- icb boolean
- name reference
- precedence (number | keyword)
- entropy-label
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
- fc keyword
- fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais
- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- force-vc-forwarding keyword
- hash-label
- signal-capability
- ingress
- filter

```

configure service epipe spoke-sdp ingress filter ip

```

    - ip reference
    - ipv6 reference
    - mac reference
  - l2tpv3
    - cookie
      - cookie1 string
      - cookie2 string
    - qos
      - network
        - fp-redirect-group
          - group-name reference
          - instance number
          - policy-name reference
    - vc-label number
  - monitor-oper-group reference
  - oper-group reference
  - pw-status
    - block-on-peer-fault boolean
    - signaling boolean
    - standby-signaling-slave boolean
  - source-bmac
    - use-sdp-bmac-lsb boolean
  - transit-policy
    - ip reference
    - prefix reference
  - vc-type keyword
  - vlan-vc-tag number
  - test boolean
  - vc-switching boolean
  - vpn-id number
  - vxlan
    - instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - egress-vtep
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - oper-group reference
      - vni number
    - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - ies string
    - aa-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ip-mtu number
    - ipv4
      - primary
        - address string
        - apply-groups reference
        - apply-groups-exclude reference
        - prefix-length number
    - sap string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - egress
        - filter
          - ip reference
        - qos
          - sap-egress
            - policy-name reference
    - fwd-wholesale

```

configure service ies aa-interface sap fwd-wholesale pppoe-service

```

    - pppoe-service reference
  - ingress
    - qos
      - sap-ingress
        - overrides
        - policy-name reference
    - lag
  - aarp-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - egress
        - filter
          - ip reference
          - vc-label number
      - ingress
        - filter
          - ip reference
          - vc-label number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - customer reference
  - description string
  - eth-cfm
    - apply-groups reference
    - apply-groups-exclude reference
  - igmp-host-tracking
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - expiry-time number
  - interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - sample-profile (keyword | number)
      - type keyword
  - cpu-protection reference
  - description string
  - dynamic-tunnel-redundant-nexthop string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
    - ipv6

```

configure service ies interface hold-time ipv6 down

```

- down
  - init-only boolean
  - seconds number
- up
  - seconds number
- if-attribute
  - admin-group reference
  - srlg-group reference
- ingress
  - destination-class-lookup boolean
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
          - trust-anchor-profile reference
      - id
        - fqdn string
        - ipv4 string
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - manual
      - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service ies interface ipsec ipsec-tunnel key-exchange manual keys authentication-key

```

zone)
    - authentication-key string
    - encryption-key string
    - ipsec-transform reference
    - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
    - max-history-key-records
      - esp number
      - ike number
    - pmtu-discovery-aging number
    - private-sap number
    - private-service string
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - replay-window number
    - security-policy
      - id number
      - strict-match boolean
    - ipv6-exception reference
    - public-sap number
    - tunnel-group reference
  - ipv4
    - addresses
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
    - allow-directed-broadcasts boolean
    - bfd
      - admin-state keyword
      - echo-receive number
      - multiplier number
      - receive number
      - transmit-interval number
      - type keyword
    - dhcp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - gi-address string
      - lease-populate
        - max-leases number
      - option-82
        - action keyword
        - circuit-id
          - ascii-tuple
          - ifindex
          - none
          - sap-id
          - vlan-ascii-tuple
        - remote-id
          - ascii-string string
          - mac
          - none
      - vendor-specific-option
        - client-mac-address boolean
        - pool-name boolean
        - sap-id boolean
        - service-id boolean
        - string string

```

configure service ies interface ipv4 dhcp option-82 vendor-specific-option system-id

```

    - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
    - lease-time
      - radius-override boolean
      - value number
  - python-policy reference
  - relay-plain-bootp boolean
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
  - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - trusted boolean
  - use-arp boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - host-route
    - populate keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - route-tag number
  - learn-unsolicited boolean
- limit
  - log-only boolean
  - max-entries number
  - threshold number
- local-proxy-arp boolean
- populate boolean
- proactive-refresh boolean
- proxy-arp-policy reference
- remote-proxy-arp boolean
- retry-timer number
- static-neighbor string
  - apply-groups reference
  - apply-groups-exclude reference
  - mac-address string
- static-neighbor-unnumbered
  - mac-address string
- timeout number
- primary
  - address string
  - apply-groups reference

```

configure service ies interface ipv4 primary apply-groups-exclude

```

- apply-groups-exclude reference
- broadcast keyword
- prefix-length number
- track-srrp number
- qos-route-lookup keyword
- secondary string
- apply-groups reference
- apply-groups-exclude reference
- broadcast keyword
- igp-inhibit boolean
- prefix-length number
- track-srrp number
- tcp-mss number
- unnumbered
- ip-address string
- ip-int-name string
- system
- urpf-check
- ignore-default boolean
- mode keyword
- vrrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authentication-key string
- backup string
- bfd-liveness
- apply-groups reference
- apply-groups-exclude reference
- dest-ip string
- interface-name string
- service-name string
- init-delay number
- mac string
- master-int-inherit boolean
- message-interval number
- monitor-oper-group reference
- ntp-reply boolean
- oper-group reference
- owner boolean
- passive boolean
- ping-reply boolean
- policy reference
- preempt boolean
- priority number
- ssh-reply boolean
- standby-forwarding boolean
- telnet-reply boolean
- traceroute-reply boolean
- ipv6
- address string
- apply-groups reference
- apply-groups-exclude reference
- duplicate-address-detection boolean
- eui-64 boolean
- prefix-length number
- primary-preference number
- track-srrp number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number

```


configure service ies interface ipv6 bfd type

- **type** *keyword*
- **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **relay**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **lease-populate**
 - **max-nbr-of-leases** *number*
 - **route-populate**
 - **na** *boolean*
 - **pd**
 - **exclude** *boolean*
 - **ta** *boolean*
 - **link-address** *string*
 - **neighbor-resolution** *boolean*
- **option**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-id**
 - **ascii-tuple**
 - **if-index**
 - **sap-id**
 - **string** *string*
 - **remote-id** *boolean*
 - **python-policy** *reference*
 - **server** *string*
 - **source-address** *string*
 - **user-db** *reference*
- **server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-nbr-of-leases** *number*
 - **prefix-delegation**
 - **admin-state** *keyword*
 - **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-id**
 - **duid** *string*
 - **iaid** *number*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
- **duplicate-address-detection** *boolean*
- **forward-ipv4-packets** *boolean*
- **icmp6**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **time-exceeded**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*

configure service ies interface ipv6 icmp6 unreachable

- **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **link-local-address**
 - **address** *string*
 - **duplicate-address-detection** *boolean*
 - **local-dhcp-server** *reference*
 - **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-nd** *boolean*
 - **proactive-refresh** *keyword*
 - **proxy-nd-policy** *reference*
 - **reachable-time** *number*
 - **secure-nd**
 - **admin-state** *keyword*
 - **allow-unsecured-msgs** *boolean*
 - **public-key-min-bits** *number*
 - **security-parameter** *number*
 - **stale-time** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*

configure service ies interface ipv6 vrrp traceroute-reply

```

- traceroute-reply boolean
- load-balancing
- flow-label-load-balancing boolean
- ip-load-balancing keyword
- spi-load-balancing boolean
- teid-load-balancing boolean
- loopback boolean
- mac string
- mac-accounting boolean
- monitor-oper-group reference
- multi-chassis-shunting-profile reference
- multicast-network-domain reference
- ping-template
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- destination-address string
- name reference
- ptp-hw-assist
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- radius-auth-policy reference
- sap string
- aarp
- id reference
- type keyword
- accounting-policy reference
- admin-state keyword
- anti-spoof keyword
- app-profile reference
- apply-groups reference
- apply-groups-exclude reference
- bandwidth number
- calling-station-id string
- collect-stats boolean
- cpu-protection
- eth-cfm-monitoring
- aggregate
- car
- ip-src-monitoring
- mac-monitoring
- policy-id reference
- description string
- dist-cpu-protection reference
- egress
- agg-rate
- adaptation-rule keyword
- burst-limit (number | keyword)
- limit-unused-bandwidth boolean
- queue-frame-based-accounting boolean
- rate number
- filter
- ip reference
- ipv6 reference
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)

```

configure service ies interface sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority

```

    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
  - policy-name reference
- qinq-mark-top-only boolean
- sap-egress
  - overrides
    - hs-secondary-shaper string
    - hs-wrr-group reference
      - apply-groups reference
      - apply-groups-exclude reference
      - hs-class-weight number
      - percent-rate decimal-number
      - rate (number | keyword)
    - policer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - mbs (number | keyword)
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - avg-frame-overhead decimal-number
      - burst-limit (number | keyword)
      - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - hs-class-weight number
      - hs-wred-queue
        - policy reference
      - hs-wrr-weight number
      - mbs (number | keyword)
      - monitor-queue-depth
        - fast-polling boolean
        - violation-threshold decimal-number
      - parent
        - cir-weight number
        - weight number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
- scheduler-policy
  - overrides
    - scheduler string

```

configure service ies interface sap egress qos scheduler-policy overrides scheduler apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
    - low-priority-defect keyword
    - one-way-delay-threshold number
  - snelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
        - root

```

configure service ies interface sap ingress qos policer-control-policy overrides root max-rate

- **max-rate** (number | keyword)
- **priority-mbs-thresholds**
 - **min-thresh-separation** (number | keyword)
 - **priority** number
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **mbs-contribution** (number | keyword)
- **policy-name** reference
- **sap-ingress**
 - **fp-redirect-group**
 - **group-name** reference
 - **instance** number
 - **overrides**
 - **ip-criteria**
 - **activate-entry-tag** number
 - **ipv6-criteria**
 - **activate-entry-tag** number
 - **policer** reference
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **cbs** (number | keyword)
 - **mbs** (number | keyword)
 - **packet-byte-offset** number
 - **percent-rate**
 - **cir** decimal-number
 - **pir** decimal-number
 - **rate**
 - **cir** (number | keyword)
 - **pir** (number | keyword)
 - **stat-mode** keyword
 - **queue** reference
 - **adaptation-rule**
 - **cir** keyword
 - **pir** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **cbs** (number | keyword)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (number | keyword)
 - **mbs** (number | keyword)
 - **monitor-queue-depth**
 - **fast-polling** boolean
 - **parent**
 - **cir-weight** number
 - **weight** number
 - **percent-rate**
 - **cir** decimal-number
 - **pir** decimal-number
 - **rate**
 - **cir** (number | keyword)
 - **pir** (number | keyword)
 - **policy-name** reference
 - **queuing-type** keyword
 - **scheduler-policy**
 - **overrides**
 - **scheduler** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **parent**
 - **cir-weight** number
 - **weight** number
 - **rate**
 - **cir** (number | keyword)

configure service ies interface sap ingress qos scheduler-policy overrides scheduler rate pir

```

    - pir (number | keyword)
      - policy-name reference
    - queue-group-redirect-list reference
  - ip-tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - clear-df-bit boolean
    - delivery-service string
    - description string
    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - dscp keyword
    - encapsulated-ip-mtu number
    - gre-header
      - admin-state keyword
      - key
        - admin-state keyword
        - receive number
        - send number
    - icmp-generation
      - frag-required
        - admin-state keyword
        - interval number
        - message-count number
    - icmp6-generation
      - packet-too-big
        - admin-state keyword
        - number number
        - seconds number
    - ip-mtu number
    - ipsec-transport-mode-profile reference
    - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - pmtu-discovery-aging number
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - reassembly (number | keyword)
    - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - ipsec-gateway string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - client-db
      - fallback boolean
      - name reference
    - default-secure-service
      - interface string
      - service-name string
    - default-tunnel-template reference
    - dhcp-address-assignment
      - dhcpv4
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - gi-address string

```

configure service ies interface sap ipsec-gateway dhcp-address-assignment dhcpv4 send-release

```

    - send-release boolean
    - server
      - address string
      - router-instance string
  - dhcpv6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - link-address string
    - send-release boolean
    - server
      - address string
      - router-instance string
  - ike-policy reference
  - local
    - address-assignment
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ipv4
        - dhcp-server string
        - pool string
        - router-instance string
        - secondary-pool string
      - ipv6
        - dhcp-server string
        - pool string
        - router-instance string
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - id
      - auto
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pre-shared-key string
  - radius
    - accounting-policy reference
    - authentication-policy reference
  - ts-list reference
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - multi-service-site reference
  - static-host
    - ipv4 string mac string
    - admin-state keyword
    - ancc-string string
    - app-profile
      - profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - transit-policy
    - ip reference

```


configure service ies interface sap transit-policy prefix

- **prefix** *reference*
- **shcv-policy-ipv4** *reference*
- **spoke-sdp** *string*
- **aarp**
 - **id** *reference*
 - **type** *keyword*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **wait-for-up-timer** *number*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais** *boolean*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*

configure service ies interface spoke-sdp eth-cfm mep eth-test test-pattern pattern

- **pattern** *keyword*
- **fault-propagation** *keyword*
- **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **low-priority-defect** *keyword*
 - **one-way-delay-threshold** *number*
- **snelch-ingress-levels** *number*
- **hash-label**
 - **signal-capability**
- **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **fp-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **policy-name** *reference*
 - **vc-label** *number*
 - **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
 - **vc-type** *keyword*
- **static-tunnel-redundant-nexthop** *string*
- **tos-marking-state** *keyword*
- **tunnel** *boolean*
- **vas-if-type** *keyword*
- **vpls** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress**
 - **reclassify-using-qos** *reference*
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **evpn**
 - **arp**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **flood-garp-and-unknown-req** *boolean*
 - **learn-dynamic** *boolean*
 - **nd**
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-dynamic** *boolean*
 - **ingress**
 - **routed-override-filter**
 - **ip** *reference*
 - **ipv6** *reference*
- **redundant-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure service ies redundant-interface apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- hold-time
  - ipv4
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
- ip-mtu number
- ipv4
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
    - remote-ip string
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - control-word boolean
  - description string
  - egress
    - filter
      - ip reference
    - vc-label number
  - ingress
    - filter
      - ip reference
    - vc-label number
- service-id number
- subscriber-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fwd-service reference
  - fwd-subscriber-interface reference
- group-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bonding-parameters
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection number
      - apply-groups reference
      - apply-groups-exclude reference
      - service string
    - fpe reference
    - multicast
      - connection (number | keyword)
  - brg
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service ies subscriber-interface group-interface cflowd-parameters sampling direction

- **direction** *keyword*
- **sample-profile** (*keyword | number*)
- **type** *keyword*
- **data-trigger**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **description** *string*
- **dynamic-routes-track-srrp**
 - **hold-time** *number*
- **gtp-parameters**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe** *reference*
- **gx-policy** *reference*
- **ingress**
 - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipoe-linking**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gratuitous-router-advertisement** *boolean*
 - **shared-circuit-id** *boolean*
- **ipoe-session**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **force-auth**
 - **cid-change** *boolean*
 - **rid-change** *boolean*
 - **ipoe-session-policy** *reference*
 - **min-auth-interval** (*keyword | number*)
 - **radius-session-timeout** *keyword*
 - **sap-session-limit** *number*
 - **session-limit** *number*
 - **stateless-redundancy** *boolean*
 - **user-db** *reference*
- **ipv4**
 - **arp-host**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **host-limit** *number*
 - **min-auth-interval** *number*
 - **sap-host-limit** *number*
 - **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-applications**
 - **dhcp** *boolean*
 - **ppp** *boolean*
 - **description** *string*
 - **filter** *reference*
 - **gi-address** *string*
 - **lease-populate**
 - **l2-header**
 - **mac** *string*
 - **max-leases** *number*
 - **match-circuit-id** *boolean*

configure service ies subscriber-interface group-interface ipv4 dhcp offer-selection

```

- offer-selection
  - client-mac
    - discover-delay number
    - mac-address keyword
  - discover-delay number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - discover-delay number
- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - ifindex
    - none
    - sap-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- user-db reference
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
    - use-matching-address boolean
- unreachablees
  - admin-state keyword
  - number number
  - seconds number
- ignore-df-bit boolean
- neighbor-discovery

```

configure service ies subscriber-interface group-interface ipv4 neighbor-discovery local-proxy-arp

- **local-proxy-arp** *boolean*
- **populate** *boolean*
- **proxy-arp-policy** *reference*
- **remote-proxy-arp** *boolean*
- **timeout** *number*
- **qos-route-lookup** *keyword*
- **urpf-check**
 - **mode** *keyword*
- **ipv6**
 - **allow-multiple-wan-addresses** *boolean*
 - **auto-reply**
 - **neighbor-solicitation** *boolean*
 - **router-solicitation** *boolean*
 - **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter** *reference*
 - **option**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-id**
 - **ascii-tuple**
 - **if-index**
 - **sap-id**
 - **string** *string*
 - **remote-id** *boolean*
 - **override-slaac** *boolean*
 - **pd-managed-route**
 - **next-hop** *keyword*
 - **proxy-server**
 - **admin-state** *keyword*
 - **client-applications**
 - **dhcp** *boolean*
 - **ppp** *boolean*
 - **preferred-lifetime** *(number | keyword)*
 - **rebind-timer** *number*
 - **renew-timer** *number*
 - **server-id**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duid-en-ascii** *string*
 - **duid-en-hex** *string*
 - **duid-ll**
 - **valid-lifetime** *(number | keyword)*
 - **python-policy** *reference*
 - **relay**
 - **admin-state** *keyword*
 - **advertise-selection**
 - **client-mac**
 - **mac-address** *keyword*
 - **preference-option**
 - **value** *number*
 - **solicit-delay** *number*
 - **preference-option**
 - **value** *number*
 - **server** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **preference-option**
 - **value** *number*
 - **solicit-delay** *number*
 - **solicit-delay** *number*
 - **client-applications**
 - **dhcp** *boolean*

configure service ies subscriber-interface group-interface ipv6 dhcp6 relay client-applications ppp

```

    - ppp boolean
    - description string
    - lease-split
      - admin-state keyword
      - valid-lifetime number
    - link-address string
    - server string
    - source-address string
  - snooping
    - admin-state keyword
  - user-db reference
  - user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdns-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number
    - router-lifetime (number | keyword)
  - prefix-options
    - autonomous boolean
    - on-link boolean
    - preferred-lifetime (number | keyword)
    - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)
  - min-auth-interval number
  - user-db reference
- urpf-check
  - mode keyword
- local-address-assignment
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- ipv4
  - client-applications
    - ipoe boolean
    - ppp boolean
  - default-pool string
  - server reference
- ipv6
  - client-applications
    - ipoe-slaac boolean

```

configure service ies subscriber-interface group-interface local-address-assignment ipv6 client-applications ipoe-wan

```

    - ipoe-wan boolean
    - ppp-slaac boolean
  - server reference
- mac string
- nasreq-auth-policy reference
- oper-up-while-empty boolean
- pppoe
  - admin-state keyword
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dhcp-client
    - client-id keyword
  - policy reference
  - python-policy reference
  - sap-session-limit number
  - session-limit number
  - user-db reference
- radius-auth-policy reference
- redundant-interface reference
- sap string
  - accounting-policy reference
  - admin-state keyword
  - anti-spoof keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - calling-station-id string
  - collect-stats boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - ip-src-monitoring
    - mac-monitoring
    - policy-id reference
  - default-host
    - ipv4 reference prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
    - ipv6 string prefix-length number
      - apply-groups reference
      - apply-groups-exclude reference
      - next-hop string
  - description string
  - dist-cpu-protection reference
- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy
      - policy-name reference
    - qinq-mark-top-only boolean
    - sap-egress
      - policy-name reference

```


configure service ies subscriber-interface group-interface sap egress qos scheduler-policy

```

    - scheduler-policy
      - policy-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
  - squelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- igmp-host-tracking
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - router-alert-check boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - policy-name reference
    - sap-ingress
      - policy-name reference

```

configure service ies subscriber-interface group-interface sap ingress qos sap-ingress queuing-type

```

    - queuing-type keyword
    - scheduler-policy
    - policy-name reference
- lag
- link-map-profile number
- per-link-hash
  - class number
  - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
      - drop-count number
      - failed-action
        - metric number
        - preference number
        - tag number
        - withdraw boolean
      - interval number
      - log boolean
      - padding-size number
      - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
    - metric number
    - preference number
    - tag number
  - rip-policy reference
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - string string
    - use-sap-id
- ipv6 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - mac-linking string
  - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service ies subscriber-interface group-interface sap static-host ipv6 managed-route cpe-check

```

no-zone)
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - drop-count number
    - failed-action
      - metric number
      - preference number
      - tag number
      - withdraw boolean
    - interval number
    - log boolean
    - padding-size number
    - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
zone)
    - timeout number
    - metric number
    - preference number
    - tag number
    - retail-svc-id number
    - shcv
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
    - mac-learning
      - data-triggered boolean
      - single-mac boolean
    - sub-sla-mgmt
    - admin-state keyword
    - defaults
      - app-profile reference
      - int-dest-id
        - string string
        - top-q-tag
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - sap-id
        - string string
    - single-sub-parameters
      - non-sub-traffic
        - app-profile reference
        - sla-profile reference
        - sub-profile reference
        - subscriber-id string
      - profiled-traffic-only boolean
    - sub-ident-policy reference
    - subscriber-limit (keyword | number)
    - sap-parameters
      - anti-spoof keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - sub-sla-mgmt
        - defaults
          - app-profile reference
          - sla-profile reference
          - sub-profile reference
          - subscriber-id
            - auto-id

```

configure service ies subscriber-interface group-interface sap-parameters sub-sla-mgmt defaults subscriber-id string

```

    - string string
    - sub-ident-policy reference
- shcv-policy reference
- shcv-policy-ipv4 reference
- shcv-policy-ipv6 reference
- srrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
  - description string
  - gw-mac string
  - keep-alive-interval number
  - message-path reference
  - monitor-oper-group
    - group-name reference
    - priority-step number
  - one-garp-per-sap boolean
  - policy reference
  - preempt boolean
  - priority number
  - send-fib-population-packets keyword
- suppress-aa-sub boolean
- tos-marking-state keyword
- type keyword
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - purpose
      - xconnect boolean
  - gateway-router string
  - group-encryption
    - encryption-keygroup-inbound reference
    - encryption-keygroup-outbound reference
- l2-ap
  - access-point string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - encap-type keyword
    - epipe-sap-template reference
  - auto-sub-id-fmt keyword
  - default-encap-type keyword
- lanext
  - max-bd number
- learn-ap-mac
  - delay-auth boolean
- mobility
  - hold-time number
  - inter-tunnel-type boolean
  - inter-vlan boolean
  - trigger
    - control boolean
    - data boolean
    - iapp boolean

```

configure service ies subscriber-interface group-interface wlan-gw oper-down-on-group-degrade

```

- oper-down-on-group-degrade boolean
- tcp-mss-adjust number
- tunnel-egress-qos
  - admin-state keyword
  - agg-rate-limit (number | keyword)
  - granularity keyword
  - hold-time (number | keyword)
  - multi-client-only boolean
  - qos reference
  - scheduler-policy reference
- tunnel-encaps
  - learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - hold-time number
    - local
      - coa-policy reference
      - default-ue-state keyword
    - on-control-plane boolean
    - policy reference
    - vlan-mismatch-timeout number
  - data-triggered-ue-creation
    - admin-state keyword
    - arp boolean
    - create-proxy-cache-entry
      - mac-format string
      - proxy-server
        - name string
        - router-instance string
  - dhcp4
    - admin-state keyword
    - dns string
    - l2-aware-ip-address (ipv4-unicast-address | keyword)
    - lease-time
      - active number
      - initial number
    - nbns string
  - dhcp6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - preferred-lifetime
      - active number
      - initial number
    - valid-lifetime
      - active number
      - initial number
  - dsm
    - accounting-policy reference
    - accounting-update
      - interval number
    - admin-state keyword
    - application-assurance
      - accounting-statistics boolean
      - profile reference
      - url-parameter string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress
      - policer reference
    - ingress
      - ip-filter reference

```

configure service ies subscriber-interface group-interface wlan-gw vlan-range dsm ingress policer

```

    - policer reference
    - soft-quota-exhausted-filter reference
  - one-time-redirect
    - port number
    - url string
  - volume-quota-direction keyword
- dynamic-service boolean
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assistive-address-resolution boolean
    - bd-mac-prefix string
    - mac-translation boolean
    - network
      - admin-state keyword
      - max-mac number
      - policer reference
  - xconnect
    - accounting
      - mobility-updates boolean
      - policy reference
      - update-interval number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - initial
    - app-profile reference
    - sla-profile reference

```

configure service ies subscriber-interface group-interface wpp initial sub-profile

```

    - sub-profile reference
    - lease-time number
    - portal
      - name string
      - portal-group reference
      - router-instance string
    - restore-to-initial-on-disconnect boolean
    - triggered-hosts boolean
    - user-db reference
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
    - ipv6
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
  - ipoe-linking
    - apply-groups reference
    - apply-groups-exclude reference
    - gratuitous-router-advertisement boolean
  - ipoe-session
    - apply-groups reference
    - apply-groups-exclude reference
    - session-limit number
  - ipv4
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - gateway string
    - holdup-time number
    - populate-host-routes boolean
    - prefix-length number
    - track-srrp number
  - allow-unmatching-subnets boolean
  - default-dns string
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client-applications
      - dhcp boolean
      - ppp boolean
    - description string
    - gi-address string
    - lease-populate
      - max-leases number
    - option-82
      - vendor-specific-option
        - client-mac-address boolean
        - sap-id boolean
        - service-id boolean
        - string string
        - system-id boolean
    - proxy-server
      - admin-state keyword
      - emulated-server string
      - lease-time
        - radius-override boolean

```

configure service ies subscriber-interface ipv4 dhcp proxy-server lease-time value

```

    - value number
  - python-policy reference
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
  - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - virtual-subnet boolean
- export-host-routes boolean
- unnumbered
  - ip-address string
  - ip-int-name string
- ipv6
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - host-type keyword
  - prefix-length number
- allow-multiple-wan-addresses boolean
- allow-unmatching-prefixes boolean
- default-dns string
- delegated-prefix-length (number | keyword)
- dhcp6
  - apply-groups reference
  - apply-groups-exclude reference
  - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
  - python-policy reference
  - relay
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - description string
    - lease-split
      - admin-state keyword
      - valid-lifetime number
    - link-address string
    - server string
    - source-address string
- ipoe-bridged-mode boolean
- link-local-address
  - address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - holdup-time number

```


configure service ies subscriber-interface ipv6 prefix host-type

- **host-type** *keyword*
- **track-srrp** *number*
- **router-advertisements**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **force-mcast** *keyword*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **options**
 - **current-hop-limit** *number*
 - **dns**
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **managed-configuration** *boolean*
 - **mtu** (*number* | *keyword*)
 - **other-stateful-configuration** *boolean*
 - **reachable-time** *number*
 - **retransmit-timer** *number*
 - **router-lifetime** (*number* | *keyword*)
 - **prefix-options**
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
- **router-solicit**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timer** (*number* | *keyword*)
- **local-address-assignment**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4**
 - **client-applications**
 - **ppp** *boolean*
 - **default-pool** *string*
 - **server** *reference*
 - **ipv6**
 - **client-applications**
 - **ipoe-slaac** *boolean*
 - **ipoe-wan** *boolean*
 - **ppp-slaac** *boolean*
 - **server** *reference*
- **pppoe**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **session-limit** *number*
- **wan-mode** *keyword*
- **wlan-gw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pool-manager**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp6-client**
 - **dhcpv4-nat**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*
 - **ia-na**
 - **admin-state** *keyword*
 - **link-address** *string*

configure service ies subscriber-interface wlan-gw pool-manager dhcp6-client ia-na pool-name

- **pool-name** *string*
- **lease-query**
- **max-retries** *number*
- **servers** *string*
- **slaac**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*
- **source-ip** (*keyword* | *ipv6-address*)
- **watermarks**
 - **high** *number*
 - **low** *number*
- **wlan-gw-group** *reference*
- **redundancy**
 - **admin-state** *keyword*
 - **export** *string*
 - **monitor** *string*
- **subscriber-mgmt**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **multi-chassis-shunt-id** *number*
 - **up-resiliency**
 - **monitor-oper-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
- **video-interface** *string*
 - **accounting-policy** *reference*
 - **address** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **channel** *string* **source** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **channel-name** *string*
 - **description** *string*
 - **scte35-action** *keyword*
 - **zone-channel** *string* **zone-source** *string*
 - **adi-channel-name** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cpu-protection** *reference*
 - **description** *string*
 - **multicast-service** *number*
 - **output-format** *keyword*
 - **video-sap**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter**
 - **ip** *reference*
 - **qos**
 - **policy-name** *reference*
 - **ingress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter**
 - **ip** *reference*
 - **qos**
 - **policy-name** *reference*
 - **video-group-id** *reference*

configure service ies vpn-id

```

- vpn-id number
- ipfix
- apply-groups reference
- apply-groups-exclude reference
- export-policy string
- apply-groups reference
- apply-groups-exclude reference
- collector-router-instance string ip-address string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- mtu number
- refresh-timeout number
- source-ip-address string
- description string
- template-format keyword
- ipipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ce-address-discovery
- customer reference
- description string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- hold-time-active number
- revert-time (number | keyword)
- standby-signaling keyword
- sap string
- accounting-policy reference
- admin-state keyword
- app-profile reference
- apply-groups reference
- apply-groups-exclude reference
- bandwidth number
- ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
- collect-stats boolean
- cpu-protection
- mac-monitoring
- policy-id reference
- description string
- dist-cpu-protection reference
- egress
- agg-rate
- adaptation-rule keyword
- burst-limit (number | keyword)
- limit-unused-bandwidth boolean
- rate number
- filter
- ip reference
- ipv6 reference
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference

```

configure service ipipe sap egress qos policer-control-policy overrides root priority-mbs-thresholds priority apply-groups-exclude

```

    - apply-groups-exclude reference
    - mbs-contribution (number | keyword)
- policy-name reference
- qinq-mark-top-only boolean
- sap-egress
- overrides
  - hs-secondary-shaper string
  - hs-wrr-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - percent-rate decimal-number
    - rate (number | keyword)
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - drop-tail
      - low
      - percent-reduction-from-mbs (number | keyword)
    - hs-class-weight number
    - hs-wred-queue
      - policy reference
    - hs-wrr-weight number
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number
    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service ipipe sap egress qos scheduler-policy overrides scheduler parent

```

    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
- endpoint reference
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
        - policy-name reference
  - sap-ingress
    - fp-redirect-group
      - group-name reference
      - instance number
    - overrides
      - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword
      - queue reference
        - adaptation-rule
          - cir keyword
          - pir keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - drop-tail
          - low
            - percent-reduction-from-mbs (number | keyword)
        - mbs (number | keyword)
        - monitor-queue-depth
          - fast-polling boolean
      - parent
        - cir-weight number
        - weight number
      - percent-rate
        - cir decimal-number
        - pir decimal-number

```

configure service ipipe sap ingress qos sap-ingress overrides queue rate

```

    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
    - queuing-type keyword
  - scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
  - mac string
  - mac-refresh number
  - multi-service-site reference
  - transit-policy
    - prefix reference
  - use-broadcast-mac boolean
- service-id number
- service-mtu number
- spoke-sdp string
  - aarp
    - id reference
    - type keyword
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth (number | keyword)
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
  - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - control-word boolean
  - description string
  - egress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - network
        - policy-name reference
        - port-redirect-group
          - group-name reference
          - instance number
      - vc-label number
  - endpoint
    - name reference
    - precedence (number | keyword)
  - entropy-label
  - hash-label
    - signal-capability
  - ingress

```

configure service ipipe spoke-sdp ingress filter

```

- filter
  - ip reference
  - ipv6 reference
- qos
  - network
    - fp-redirect-group
      - group-name reference
      - instance number
    - policy-name reference
  - vc-label number
- transit-policy
  - prefix reference
- vc-switching boolean
- vpn-id number
- mac-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - mac string
    - apply-groups reference
    - apply-groups-exclude reference
    - mask string
- md-auto-id
  - customer-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - pw-template-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
  - service-id-range
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- mrp
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action keyword
    - description string
    - entry number
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - match
        - isid number
          - apply-groups reference
          - apply-groups-exclude reference
          - higher-value number
    - scope keyword
- nat
  - apply-groups reference
  - apply-groups-exclude reference
  - classifier string
    - apply-groups reference
    - apply-groups-exclude reference
  - default
    - action
      - destination-nat

```

configure service nat classifier default action destination-nat ip-address

```

    - ip-address string
    - forward
  - dnat-ip-address string
- description string
- entry number
  - action
    - destination-nat
      - ip-address string
    - forward
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - dst-port-range
      - end number
      - start number
    - foreign-ip-address string
    - protocol keyword
- deterministic-script
  - location string
- firewall-policy string
  - alg
    - ftp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - domain
    - name string
    - router-instance string
  - filtering keyword
  - l2-outside
  - port-limits
    - forwarding number
  - priority-sessions
    - fc
      - af boolean
      - be boolean
      - ef boolean
      - h1 boolean
      - h2 boolean
      - l1 boolean
      - l2 boolean
      - nc boolean
  - session-limits
    - max number
    - reserved number
    - watermarks
      - high number
      - low number
  - tcp
    - mss-adjust number
  - timeouts
    - icmp6-query number
    - sip number
    - tcp
      - established number
      - rst number
      - syn number
      - time-wait number
      - transitory number
  - udp
    - dns number

```


configure service nat firewall-policy timeouts udp initial

```

    - initial number
    - normal number
    - unknown-protocol number
  - udp
    - inbound-refresh boolean
  - unknown-protocols
    - all
    - protocol number
- map-t
  - domain string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - dmr-prefix string
    - ip-fragmentation
      - v6-frag-header boolean
    - mapping-rule string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - ea-length number
      - ipv4-prefix string
      - psid-offset number
      - rule-prefix string
    - mtu number
    - tcp-mss-adjust number
- nat-policy string
  - alg
    - ftp boolean
    - pptp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - block-limit number
  - description string
  - dnat
    - classifier reference
  - dnat-only
    - nat-group reference
    - router-instance string
    - wlan-gw-group reference
  - filtering keyword
  - flow-log-policy
    - ipfix reference
    - syslog reference
  - l2-outside
  - pool
    - name string
    - router-instance string
  - port-forwarding-range-end number
  - port-limits
    - forwarding number
    - reserved number
  - watermarks
    - high number
    - low number
  - priority-sessions
    - fc
      - af boolean
      - be boolean
      - ef boolean

```

configure service nat nat-policy priority-sessions fc h1

```

    - h1 boolean
    - h2 boolean
    - l1 boolean
    - l2 boolean
    - nc boolean
  - session-limits
    - max number
    - reserved number
    - watermarks
      - high number
      - low number
  - tcp
    - mss-adjust number
    - reset-unknown boolean
  - timeouts
    - icmp-query number
    - sip number
    - subscriber-retention number
    - tcp
      - established number
      - rst number
      - syn number
      - time-wait number
      - transitory number
    - udp
      - dns number
      - initial number
      - normal number
  - udp
    - inbound-refresh boolean
  - pcp-server-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - lifetime
      - maximum number
      - minimum number
    - max-description-size number
    - opcode
      - announce boolean
      - get boolean
      - map boolean
    - option
      - description boolean
      - next boolean
      - port-reservation boolean
      - port-set boolean
      - prefer-failure boolean
      - third-party boolean
    - reuse-external-ip-address boolean
    - version
      - maximum number
      - minimum number
  - prefix-list string
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix string
      - apply-groups reference
      - apply-groups-exclude reference
      - nat-policy reference
  - syslog
    - export-policy string
      - apply-groups reference

```

configure service nat syslog export-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **collector router-instance** *string* **ip-address** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination-port** *number*
 - **ipv4-source-address** *string*
- **description** *string*
- **facility** *keyword*
- **include**
 - **destination-ip** *boolean*
 - **foreign-ip** *boolean*
 - **foreign-port** *boolean*
 - **nat-policy-name** *boolean*
 - **sub-id** *boolean*
- **log-prefix** *string*
- **max-tx-delay** *number*
- **mtu** *number*
- **rate-limit** *number*
- **severity-level** *keyword*
- **up-nat-policy** *string*
 - **alg**
 - **ftp** *boolean*
 - **pptp** *boolean*
 - **rtsp** *boolean*
 - **sip** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block-limit** *number*
 - **default-host**
 - **inside-router-instance** *string*
 - **ip-address** *string*
 - **rate-limit** *number*
 - **description** *string*
 - **filtering** *keyword*
 - **flow-log-policy**
 - **ipfix** *reference*
 - **icmp-echo-reply** *boolean*
 - **port-block-extension**
 - **ports** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **port-limits**
 - **reserved** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **priority-sessions**
 - **fc**
 - **af** *boolean*
 - **be** *boolean*
 - **ef** *boolean*
 - **h1** *boolean*
 - **h2** *boolean*
 - **l1** *boolean*
 - **l2** *boolean*
 - **nc** *boolean*
 - **session-limits**
 - **max** *number*
 - **reserved** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*

configure service nat up-nat-policy tcp

- **tcp**
 - **mss-adjust** *number*
 - **reset-unknown** *boolean*
- **timeouts**
 - **icmp-query** *number*
 - **sip** *number*
 - **subscriber-retention** *number*
 - **tcp**
 - **established** *number*
 - **rst** *number*
 - **syn** *number*
 - **time-wait** *number*
 - **transitory** *number*
 - **udp**
 - **dns** *number*
 - **initial** *number*
 - **normal** *number*
- **udp**
 - **inbound-refresh** *boolean*
- **oper-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **router-instance** *string*
 - **hold-time**
 - **down** *number*
 - **up** *number*
- **pbb**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-notification**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **count** *number*
 - **interval** *number*
 - **source-bmac**
 - **address** *string*
 - **evpn-etree-leaf-address** *string*
- **proxy-arp-nd**
 - **mac-list**
 - **list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
- **pw-template** *string*
 - **accounting-policy** *number*
 - **allow-fragmentation** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-gre-sdp** *boolean*
 - **block-on-peer-fault** *boolean*
 - **collect-stats** *boolean*
 - **control-word** *boolean*
 - **egress**
 - **filter**
 - **ip** *string*

configure service pw-template egress filter ipv6

```

    - ipv6 string
    - mac string
  - mfib-allowed-mda-destinations
    - mda string
  - qos
    - network
      - policy-name string
      - port-redirect-group
        - group-name string
        - instance number
  - encryption-keygroup
    - inbound number
    - outbound number
  - entropy-label
  - fdb
    - auto-learn-mac-protect boolean
    - auto-learn-mac-protect-exclude-list string
    - discard-unknown-source boolean
    - limit-mac-move keyword
    - mac-learning
      - aging boolean
      - learning boolean
    - mac-pinning boolean
    - maximum-mac-addresses number
    - protected-src-mac-violation-action keyword
  - force-vc-forwarding keyword
  - hash-label
    - signal-capability
  - igmp-snooping
    - fast-leave boolean
    - import-policy string
    - maximum-number-groups number
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - robust-count number
    - send-queries boolean
    - version keyword
  - ingress
    - filter
      - ip string
      - ipv6 string
      - mac string
    - qos
      - network
        - fp-redirect-group
          - group-name string
          - instance number
        - policy-name string
  - l2pt
    - termination
      - protocols
        - cdp boolean
        - dtp boolean
        - pagp boolean
        - stp boolean
        - udld boolean
        - vtp boolean
  - provisioned-sdp keyword
  - pw-template-id number
  - sdp-exclude reference
  - sdp-include reference
  - split-horizon-group
    - description string

```

configure service pw-template split-horizon-group fdb

```

- fdb
  - saps
    - auto-learn-mac-protect boolean
    - discard-unprotected-dest-mac boolean
    - protected-src-mac-violation-action keyword
  - name string
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - priority number
  - root-guard boolean
- vc-type keyword
- vlan-vc-tag number
- sdp number
  - accounting-policy reference
  - admin-state keyword
  - adv-mtu-override boolean
  - allow-fragmentation boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-tunnel boolean
  - booking-factor number
  - class-forwarding
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-lsp reference
    - enforce-diffserv-lsp-fc boolean
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - lsp reference
  - multicast-lsp reference
  - collect-stats boolean
  - delivery-type keyword
  - description string
  - far-end
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - keep-alive
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hello-time number
    - hold-down-time number
    - maximum-drop-count number
    - message-length number
    - timeout number
  - ldp boolean
  - local-end (ipv4-address-no-zone | ipv6-address-no-zone)
  - lsp string
  - metric number
  - mixed-lsp-mode
    - revert-time (number | keyword)
  - network-domain reference
  - path-mtu number
  - pbb-etype string
  - pw-port
    - binding-port string
  - sdp-group reference
  - signaling keyword
  - source-bmac-lsb

```

configure service sdp source-bmac-lsb control-pw-vc-id

- **control-pw-vc-id** *number*
- **value** *string*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **tunnel-far-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **vlan-vc-etype** *string*
- **weighted-ecmp** *boolean*
- **sdp-group**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-name** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **value** *number*
- **system**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bgp**
 - **evpn**
 - **ad-per-es-route**
 - **extended-evi-range** *boolean*
 - **route-distinguisher-ip-address** *string*
 - **route-target-type** *keyword*
 - **ethernet-segment** *string*
 - **ac-df-capability** *keyword*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **association**
 - **lag** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **virtual-ranges**
 - **dot1q**
 - **q-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** (*number* | *keyword*)
 - **qinq**
 - **s-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** (*number* | *keyword*)
 - **s-tag-c-tag** (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **c-tag-end** (*number* | *keyword*)
 - **network-interconnect-vxlan** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **virtual-ranges**
 - **service-id** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **port** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **virtual-ranges**
 - **dot1q**
 - **q-tag** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** (*number* | *keyword*)

configure service system bgp evpn ethernet-segment association port virtual-ranges qinq

```

- qinq
  - s-tag (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - end (number | keyword)
  - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - c-tag-end (number | keyword)
- pw-port reference
  - apply-groups reference
  - apply-groups-exclude reference
  - pw-port-headend boolean
- virtual-ranges
  - dot1q
    - q-tag (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - end (number | keyword)
    - qinq
      - s-tag (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - end (number | keyword)
      - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - c-tag-end (number | keyword)
- sdp reference
  - apply-groups reference
  - apply-groups-exclude reference
- virtual-ranges
  - vc-id number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
- vprn-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - virtual-ranges
    - evi number
- auto-esi keyword
- df-election
  - es-activation-timer number
- manual
  - evi number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
  - isid number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
  - preference
    - apply-groups reference
    - apply-groups-exclude reference
    - mode keyword
    - value number
- service-carving-mode keyword
- esi string
- multi-homing-mode keyword
- oper-group reference
- orig-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- pbb

```


configure service system bgp evpn ethernet-segment pbb es-bmac-table-size

```

    - es-bmac-table-size number
    - source-bmac-lsb string
    - route-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - type keyword
  - etree-leaf-label boolean
  - etree-leaf-label-value (number | keyword)
  - ip-prefix-routes
    - d-path-length-ignore boolean
    - iff-attribute-uniform-propagation boolean
    - iff-bgp-path-selection boolean
    - multicast-leave-sync-propagation number
    - route-distinguisher string
  - bgp-auto-rd-range
    - apply-groups reference
    - apply-groups-exclude reference
    - community-value
      - end number
      - start number
    - ip-address string
  - extended-default-qinq-sap-lookup boolean
  - fdb
    - apply-groups reference
    - apply-groups-exclude reference
    - table-size number
  - gre-eth-bridged
    - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - fpe-id reference
  - pw-port-list
    - port string
  - vpn-gre-source-ip string
  - vxlan
    - assisted-replication
      - apply-groups reference
      - apply-groups-exclude reference
      - ip-address string
    - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - fpe-id reference
  - template
    - epipe-sap-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress
      - filter
        - ip reference
        - ipv6 reference
        - mac reference
      - qos
        - policy-name reference
    - ingress
      - filter
        - ip reference
        - ipv6 reference
        - mac reference
      - qos
        - policy-name reference
        - queuing-type keyword
  - upnp
    - policy string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service upnp policy description

```

- description string
- mapping-limit number
- port number
- strict-mode boolean
- vpls string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp number
    - adv-service-mtu number
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-template-binding reference
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - bfd-template reference
      - import-rt string
      - monitor-oper-group reference
      - oper-group reference
      - split-horizon-group string
    - route-distinguisher (keyword | vpn-route-distinguisher)
    - route-target
      - export string
      - import string
    - vsi-export reference
    - vsi-import reference
  - bgp-ad
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - vpls-id string
    - vsi-id-prefix string
  - bgp-evpn
    - accept-ivpls-evpn-flush boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - evi number
    - ignore-mtu-mismatch boolean
    - incl-mcast-orig-ip string
    - isid-route-target
      - range number
        - apply-groups reference
        - apply-groups-exclude reference
        - end number
        - route-target string
        - type keyword
    - mac-duplication
      - blackhole boolean
      - detect
        - num-moves number
        - window number
      - retry (number | keyword)
  - mpls number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-bind-tunnel
      - allow-flex-algo-fallback boolean
      - ecmp number
      - enforce-strict-tunnel-tagging boolean
      - resolution keyword
      - resolution-filter
        - bgp boolean

```

configure service vpls bgp-evpn mpls auto-bind-tunnel resolution-filter ldp

```

    - ldp boolean
    - mpls-fwd-policy boolean
    - rib-api boolean
    - rsvp boolean
    - sr-isis boolean
    - sr-ospf boolean
    - sr-ospf3 boolean
    - sr-policy boolean
    - sr-te boolean
    - udp boolean
  - weighted-ecmp boolean
- control-word boolean
- default-route-tag string
- dynamic-egress-label-limit boolean
- ecmp number
- entropy-label boolean
- evi-three-byte-auto-rt boolean
- fdb
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- ingress-replication-bum-label boolean
- mh-mode keyword
- oper-group reference
- route-next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - system-ipv4
  - system-ipv6
- send-tunnel-encap
  - mpls boolean
  - mpls-over-udp boolean
- split-horizon-group reference
- routes
- incl-mcast
  - advertise-ingress-replication boolean
  - advertise-l2-attributes boolean
- ip-prefix
  - advertise boolean
  - domain-id string
  - include-direct-interface-host boolean
  - link-bandwidth
    - advertise
      - max-dynamic-weight number
      - weight (number | keyword)
    - weighted-ecmp boolean
- mac-ip
  - advertise boolean
  - arp-nd-extended-community boolean
  - cfm-mac boolean
  - unknown-mac boolean
- sel-mcast
  - advertise boolean
- segment-routing-v6 number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- default-route-tag string
- ecmp number
- evi-three-byte-auto-rt boolean
- fdb
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- mh-mode keyword
- oper-group reference
- resolution keyword

```

configure service vpls bgp-evpn segment-routing-v6 route-next-hop

- **route-next-hop**
 - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **system-ipv4**
 - **system-ipv6**
 - **source-address** *string*
 - **split-horizon-group** *reference*
 - **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vxlan** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **ecmp** *number*
 - **evi-three-byte-auto-rt** *boolean*
 - **mh-mode** *keyword*
 - **oper-group** *reference*
 - **routes**
 - **auto-disc**
 - **advertise** *boolean*
 - **send-incl-mcast-ir-on-ndf** *boolean*
 - **send-tunnel-encap** *boolean*
 - **vxlan-instance** *reference*
- **bgp-mh-site** *string*
 - **activation-timer** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **boot-timer** *number*
 - **failed-threshold** (*number | keyword*)
 - **id** *number*
 - **mesh-sdp-binds**
 - **min-down-timer** *number*
 - **monitor-oper-group** *reference*
 - **sap** *string*
 - **shg-name** *string*
 - **spoke-sdp** *string*
- **bgp-vpls**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **maximum-ve-id** *number*
 - **ve**
 - **id** *number*
 - **name** *string*
- **capture-sap** *string*
 - **admin-state** *keyword*
 - **allow-dot1q-msaps** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **cpu-protection**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dhcp**
 - **python-policy** *reference*
 - **user-db** *reference*
 - **dhcp6**
 - **python-policy** *reference*
 - **user-db** *reference*
 - **dist-cpu-protection** *reference*
 - **host-lockout-policy** *reference*

configure service vpls capture-sap ingress

- **ingress**
 - **filter**
 - **mac** *reference*
- **ipoe-session**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ipoe-session-policy** *reference*
 - **user-db** *reference*
- **msap-defaults**
 - **group-interface** *string*
 - **policy** *reference*
 - **service-name** *string*
- **nasreq-auth-policy** *reference*
- **pfc**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **association** *reference*
 - **l2-access-id-alias** *string*
 - **up-resiliency**
 - **monitor-oper-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **health-drop** *number*
- **pppoe**
 - **policy** *reference*
 - **python-policy** *reference*
 - **user-db** *reference*
- **radius-auth-policy** *reference*
- **router-solicit**
 - **user-db** *reference*
- **track-srrp** *number*
- **trigger-packet**
 - **arp** *boolean*
 - **data** *boolean*
 - **dhcp** *boolean*
 - **dhcp6** *boolean*
 - **pppoe** *boolean*
 - **rtr-solicit** *boolean*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **block-on-mesh-failure** *boolean*
 - **description** *string*
 - **fdb**
 - **auto-learn-mac-protect** *boolean*
 - **mac-pinning** *boolean*
 - **maximum-mac-addresses** *number*
 - **protected-src-mac-violation-action** *keyword*
 - **ignore-standby-signaling** *boolean*
- **mc-endpoint** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mc-ep-peer**
 - **name** *string*
 - **peer-address** *reference*
- **revert-time** (*number* | *keyword*)
- **suppress-standby-signaling** *boolean*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vpls eth-cfm mep

- **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
- **admin-state** *keyword*
- **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-padding-size** *number*
- **cfm-vlan-tag** *string*
- **description** *string*
- **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
- **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
- **low-priority-defect** *keyword*
- **mac-address** *string*
- **one-way-delay-threshold** *number*
- **etree** *boolean*
- **fdb**
 - **discard-unknown** *boolean*
 - **mac-learning**
 - **aging** *boolean*
 - **learning** *boolean*
 - **local-age-time** *number*
 - **remote-age-time** *number*
 - **mac-move**
 - **admin-state** *keyword*
 - **hold-down-time** *number*
 - **move-frequency** *number*
 - **primary-cumulative-factor** *number*
 - **retry-count** (*number* | *keyword*)
 - **sap** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **secondary-cumulative-factor** *number*
 - **spoke-sdp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *keyword*
 - **mac-subnet-length** *number*
 - **selective-learning** *boolean*
 - **static-mac**
 - **mac** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole**
 - **endpoint** *reference*
 - **mesh-sdp** *reference*
 - **monitor** *keyword*
 - **sap** *reference*
 - **spoke-sdp** *reference*

configure service vpls fdb table

- **table**
 - **high-wmark** *number*
 - **low-wmark** *number*
 - **size** *number*
- **gsmp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group** *string*
 - **admin-state** *keyword*
 - **ancp**
 - **dynamic-topology-discovery** *boolean*
 - **oam** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **hold-multiplier** *number*
 - **idle-filter** *boolean*
 - **keepalive** *number*
 - **neighbor** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **local-address** *string*
 - **priority-marking**
 - **dscp** *keyword*
 - **prec** *number*
 - **persistency** *boolean*
- **igmp-host-tracking**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expiry-time** *number*
- **igmp-snooping**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **evpn-proxy**
 - **admin-state** *keyword*
- **mvr**
 - **admin-state** *keyword*
 - **description** *string*
 - **group-policy** *string*
 - **query-interval** *number*
 - **query-source-address** (*keyword* | *ipv4-address*)
 - **report-source-address** *string*
 - **robust-count** *number*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
- **ipv4**
 - **neighbor-discovery**
 - **static-neighbor** *string*

configure service vpls interface ipv4 neighbor-discovery static-neighbor apply-groups

- **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
 - **timeout** *number*
- **primary**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-length** *number*
- **mac** *string*
- **isid-policy**
 - **entry** *number*
 - **advertise-local** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **range**
 - **end** *number*
 - **start** *number*
 - **use-def-mcast** *boolean*
- **load-balancing**
 - **lbl-eth-or-ip-l4-teid** *boolean*
 - **per-service-hashing** *boolean*
 - **spi-load-balancing** *boolean*
 - **teid-load-balancing** *boolean*
- **m-vpls** *boolean*
- **mac-flush**
 - **tldp**
 - **propagate** *boolean*
 - **send-on-failure** *boolean*
- **mac-protect**
 - **mac** *string*
- **mcast-ipv6-snooping-scope** *keyword*
- **mcr-default-gtw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip** *string*
 - **mac** *string*
- **mesh-sdp** *string*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **collect-stats** *boolean*
 - **control-word** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dhcp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **snoop** *boolean*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*

configure service vpls mesh-sdp egress filter mac

```

- mac reference
- mfib-allowed-mda-destinations
- mda string
- qos
  - network
    - policy-name reference
    - port-redirect-group
      - group-name reference
      - instance number
  - vc-label number
- entropy-label
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
  - fc keyword
  - fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais
    - client-meg-level number
    - interface-support boolean
    - interval number
    - low-priority-defect keyword
    - priority number
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - cfm-vlan-tag string
  - csf
    - multiplier decimal-number
  - description string
  - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - cfm-vlan-tag string
  - mac-address string

```

configure service vpls mesh-sdp eth-cfm squelch-ingress-ctag-levels

```

- squelch-ingress-ctag-levels number
- squelch-ingress-levels number
- vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- mac-pinning boolean
- protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
- signal-capability
- igmp-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
- mandatory (number | keyword)
- total (number | keyword)
- interface-policy reference
- policy reference
- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
- group string
- apply-groups reference
- apply-groups-exclude reference
- source string
- starg
- version keyword
- ingress
- filter
- ip reference
- ipv6 reference
- mac reference
- qos
- network
- fp-redirect-group
- group-name reference
- instance number
- policy-name reference
- vc-label number
- mld-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-groups number
- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number

```

configure service vpls mesh-sdp mld-snooping router-alert-check

```

- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - version keyword
- mrp
  - apply-groups reference
  - apply-groups-exclude reference
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- vc-type keyword
- vlan-vc-tag number
- mfib
  - table
    - high-wmark number
    - low-wmark number
    - size number
- mld-snooping
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - evpn-proxy
    - admin-state keyword
- mvr
  - admin-state keyword
  - description string
  - group-policy string
  - query-interval number
  - query-source-address (keyword | ipv6-address)
  - report-source-address string
  - robust-count number
- mrp
  - admin-state keyword
  - mmrp
    - admin-state keyword
    - attribute-table
      - high-wmark number
      - low-wmark number
      - size number
    - end-station-only boolean
    - flood-time number
- multicast-info-policy reference
- pbb
  - backbone-vpls reference
  - apply-groups reference
  - apply-groups-exclude reference
  - fdb
    - protected-src-mac-violation-action keyword
  - igmp-snooping
    - mrouter-destination reference
  - isid number
  - mesh-sdp reference

```

configure service vpls pbb backbone-vpls mesh-sdp apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **igmp-snooping**
 - **mrouter-port** *boolean*
- **mld-snooping**
 - **mrouter-port** *boolean*
- **mld-snooping**
 - **mrouter-destination** *reference*
- **sap** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **igmp-snooping**
 - **mrouter-port** *boolean*
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **spoke-sdp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **igmp-snooping**
 - **mrouter-port** *boolean*
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **force-qtag-forwarding** *boolean*
- **i-vpls-mac-flush**
 - **bgp-evpn**
 - **send-to-bvpls** *boolean*
 - **tldp**
 - **propagate-from-bvpls** *boolean*
 - **send-on-bvpls-failure** *boolean*
 - **send-to-bvpls**
 - **all-but-mine** *boolean*
 - **all-from-me** *boolean*
- **mac-notification**
 - **admin-state** *keyword*
 - **count** *number*
 - **interval** *number*
 - **renotify** (*number* | *keyword*)
- **source-bmac**
 - **address** *string*
 - **use-es-bmac-lsb** *boolean*
 - **use-mclag-bmac-lsb** *boolean*
- **pbb-type** *keyword*
- **pim-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-policy** *string*
 - **hold-time** *number*
 - **ipv4**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **provider-tunnel**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inclusive**
 - **admin-state** *keyword*
 - **data-delay-interval** *number*
 - **mldp**
 - **owner** *keyword*
 - **root-and-leaf** *boolean*

configure service vpls provider-tunnel inclusive rsvp

- **rsvp**
 - **lsp-template** *reference*
 - **selective**
 - **admin-state** *keyword*
 - **data-delay-interval** *number*
 - **data-threshold**
 - **group-prefix** (*ipv4-prefix | ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pe-threshold-add** *number*
 - **pe-threshold-delete** *number*
 - **threshold** *number*
 - **maximum-p2mp-spmsi** *number*
 - **mldp** *boolean*
 - **owner** *keyword*
 - **wildcard-spmsi** *boolean*
 - **proxy-arp**
 - **admin-state** *keyword*
 - **age-time** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-detect**
 - **anti-spoof-mac** *string*
 - **hold-down-time** (*number | keyword*)
 - **num-moves** *number*
 - **static-blackhole** *boolean*
 - **window** *number*
 - **dynamic-arp**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-list** *reference*
 - **resolve-retry-time** *number*
 - **dynamic-populate** *boolean*
 - **evpn**
 - **flood**
 - **gratuitous-arp** *boolean*
 - **unknown-arp-req** *boolean*
 - **route-tag** *number*
 - **process-arp-probes** *boolean*
 - **send-refresh** (*number | keyword*)
 - **static-arp**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
 - **table-size** *number*
- **proxy-nd**
 - **admin-state** *keyword*
 - **age-time** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-detect**
 - **anti-spoof-mac** *string*
 - **hold-down-time** (*number | keyword*)
 - **num-moves** *number*
 - **static-blackhole** *boolean*
 - **window** *number*
 - **dynamic-neighbor**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-list** *reference*
 - **resolve-retry-time** *number*

configure service vpls proxy-nd dynamic-populate

- **dynamic-populate** *boolean*
- **evpn**
 - **advertise-neighbor-type** *keyword*
 - **flood**
 - **unknown-neighbor-advertise-host** *boolean*
 - **unknown-neighbor-advertise-router** *boolean*
 - **unknown-neighbor-solicitation** *boolean*
 - **route-tag** *number*
- **process-dad-neighbor-solicitations** *boolean*
- **send-refresh** (*number* | *keyword*)
- **static-neighbor**
 - **ip-address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac** *string*
 - **type** *keyword*
- **table-size** *number*
- **routed-vpls**
 - **evpn-mpls-ecmp** *boolean*
 - **multicast**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **evpn-gateway**
 - **admin-state** *keyword*
 - **advertise** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dr-activation-timer** *number*
 - **non-dr-attract-traffic** *keyword*
 - **ip-multicast-ecmp** *boolean*
 - **ipv4**
 - **forward-to-ip-interface** *boolean*
 - **igmp-snooping**
 - **mrouter-port** *boolean*
 - **ipv6**
 - **forward-to-ip-interface** *boolean*
 - **mld-snooping**
 - **mrouter-port** *boolean*
- **vxlan-ipv4-tep-ecmp** *boolean*
- **sap** *string*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arp-host**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **host-limit** *number*
 - **min-auth-interval** *number*
 - **arp-reply-agent** *keyword*
 - **bandwidth** *number*
 - **bgp-vpls-mh-veid** *number*
 - **bpdu-translation** *keyword*
 - **calling-station-id** *string*
 - **cflowd** *boolean*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**

configure service vpls sap cpu-protection policy-id

- **policy-id** *reference*
- **description** *string*
- **dhcp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **lease-populate**
 - **max-leases** *number*
- **option-82**
 - **action** *keyword*
 - **circuit-id**
 - **ascii-tuple**
 - **hex-string** *string*
 - **none**
 - **vlan-ascii-tuple**
 - **remote-id**
 - **ascii-string** *string*
 - **hex-string** *string*
 - **mac**
 - **none**
 - **vendor-specific-option**
 - **client-mac-address** *boolean*
 - **sap-id** *boolean*
 - **service-id** *boolean*
 - **string** *string*
 - **system-id** *boolean*
- **proxy-server**
 - **admin-state** *keyword*
 - **emulated-server** *string*
 - **lease-time**
 - **radius-override** *boolean*
 - **value** *number*
- **snoop** *boolean*
- **dist-cpu-protection** *reference*
- **egress**
 - **agg-rate**
 - **adaptation-rule** *keyword*
 - **burst-limit** (*number* | *keyword*)
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **dest-mac-rewrite** *string*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mac** *reference*
 - **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*
 - **qinq-mark-top-only** *boolean*
 - **sap-egress**
 - **overrides**

configure service vpls sap egress qos sap-egress overrides hs-secondary-shaper

```

- hs-secondary-shaper string
- hs-wrr-group reference
- apply-groups reference
- apply-groups-exclude reference
- hs-class-weight number
- percent-rate decimal-number
- rate (number | keyword)
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
- fast-polling boolean
- violation-threshold decimal-number
- parent
- cir-weight number
- weight number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- port-redirect-group
- group-name reference
- instance number
- scheduler-policy
- overrides
- scheduler string
- apply-groups reference
- apply-groups-exclude reference
- parent
- cir-weight number
- weight number
- rate
- cir (number | keyword)
- pir (number | keyword)

```


configure service vpls sap egress qos scheduler-policy policy-name

- **policy-name** *reference*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**
 - **client-meg-level** *number*
 - **interface-support** *boolean*
 - **interval** *number*
 - **low-priority-defect** *keyword*
 - **priority** *number*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **cfm-vlan-tag** *string*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **direction** *keyword*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*
 - **grace**
 - **eth-ed**
 - **max-rx-defect-window** *number*
 - **priority** *number*
 - **rx-eth-ed** *boolean*
 - **tx-eth-ed** *boolean*
 - **eth-vsm-grace**
 - **rx-eth-vsm-grace** *boolean*
 - **tx-eth-vsm-grace** *boolean*
 - **lhm-svc-act-responder** *boolean*
 - **low-priority-defect** *keyword*
 - **mac-address** *string*
 - **one-way-delay-threshold** *number*
 - **primary-vlan** *boolean*
 - **mip primary-vlan** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cfm-vlan-tag** *string*
 - **mac-address** *string*
 - **snelch-ingress-ctag-levels** *number*
 - **snelch-ingress-levels** *number*
 - **vmep-filter** *boolean*
- **eth-ring** *number*
- **etree-leaf** *boolean*
- **etree-root-leaf-tag**
 - **leaf** *number*
- **fdb**
 - **auto-learn-mac-protect** *boolean*
 - **auto-learn-mac-protect-exclude-list** *reference*

configure service vpls sap fdb discard-unknown-source

- **discard-unknown-source** *boolean*
- **discard-unprotected-dest-mac** *boolean*
- **limit-mac-move** *keyword*
- **mac-learning**
 - **aging** *boolean*
 - **learning** *boolean*
- **mac-pinning** *boolean*
- **maximum-mac-addresses** *number*
- **protected-src-mac-violation-action** *keyword*
- **host-admin-state** *keyword*
- **host-lockout-policy** *reference*
- **i-vpls-mac-flush**
 - **bgp-evpn**
 - **send-to-bvpls** *boolean*
- **igmp-host-tracking**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expiry-time** *number*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
 - **router-alert-check** *boolean*
- **igmp-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fast-leave** *boolean*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
- **mrouter-port** *boolean*
- **mvr**
 - **from-vpls** *reference*
 - **to-sap** *string*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **router-alert-check** *boolean*
- **send-queries** *boolean*
- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **version** *keyword*

configure service vpls sap ingress

```

- ingress
- filter
  - ip reference
  - ipv6 reference
  - mac reference
- qos
- match-qinq-dot1p keyword
- policer-control-policy
  - overrides
    - apply-groups reference
    - apply-groups-exclude reference
    - root
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-thresh-separation (number | keyword)
        - priority number
          - apply-groups reference
          - apply-groups-exclude reference
          - mbs-contribution (number | keyword)
    - policy-name reference
- sap-ingress
- fp-redirect-group
  - group-name reference
  - instance number
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - stat-mode keyword
- queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs (number | keyword)
  - drop-tail
    - low
      - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)

```

configure service vpls sap ingress qos sap-ingress policy-name

- **policy-name** *reference*
- **queuing-type** *keyword*
- **scheduler-policy**
- **overrides**
 - **scheduler** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **policy-name** *reference*
- **qtag-manipulation**
 - **c-tag** (*number* | *keyword*)
 - **push-dot1q-vlan** (*number* | *keyword*)
 - **s-tag** *number*
- **l2pt**
- **force-boundary**
- **protocols**
 - **cdp** *boolean*
 - **dtp** *boolean*
 - **pagp** *boolean*
 - **stp** *boolean*
 - **udld** *boolean*
 - **vtp** *boolean*
- **termination**
- **protocols**
 - **cdp** *boolean*
 - **dtp** *boolean*
 - **pagp** *boolean*
 - **stp** *boolean*
 - **udld** *boolean*
 - **vtp** *boolean*
- **l2tpv3-session**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **pseudo-wire**
 - **ethernet**
 - **ethernet-vlan-id** *number*
- **router**
 - **group** *string*
 - **router-instance** *string*
- **vc-id** *number*
- **lag**
- **link-map-profile** *number*
- **per-link-hash**
 - **class** *number*
 - **weight** *number*
- **managed-vlan-list**
 - **range** *string*
- **mc-ring**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ring-node** *string*
- **mld-snooping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fast-leave** *boolean*
 - **import-policy** *reference*
 - **maximum-number-groups** *number*
 - **mrouter-port** *boolean*

configure service vpls sap mld-snooping mvr

```

- mvr
  - from-vpls reference
  - to-sap string
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - version keyword
- monitor-oper-group reference
- mrp
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- multi-service-site reference
- oper-group reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- pim-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - maximum-number-groups number
- process-cpm-traffic-on-sap-down boolean
- radius-auth-policy reference
- shcv-policy-ipv4 reference
- spb
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
    - apply-groups reference
    - apply-groups-exclude reference
    - hello-interval number
    - hello-multiplier number
    - metric number
  - lsp-pacing-interval number
  - retransmit-interval number
- split-horizon-group reference
- static-host
  - ipv4 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - string string

```

configure service vpls sap static-host ipv4 subscriber-id use-sap-id

- **use-sap-id**
- **static-isid**
 - **range** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
- **stp**
 - **admin-state** *keyword*
 - **auto-edge** *boolean*
 - **edge-port** *boolean*
 - **link-type** *keyword*
 - **mst-instance** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mst-path-cost** *number*
 - **mst-port-priority** *number*
 - **path-cost** *number*
 - **port-num** *number*
 - **priority** *number*
 - **root-guard** *boolean*
- **sub-sla-mgmt**
 - **admin-state** *keyword*
 - **defaults**
 - **app-profile** *reference*
 - **int-dest-id**
 - **string** *string*
 - **top-q-tag**
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id**
 - **auto-id**
 - **sap-id**
 - **string** *string*
 - **mac-da-hashing** *boolean*
 - **single-sub-parameters**
 - **non-sub-traffic**
 - **app-profile** *reference*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id** *string*
 - **profiled-traffic-only** *boolean*
 - **sub-ident-policy** *reference*
 - **subscriber-limit** (*keyword* | *number*)
- **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
- **segment-routing-v6** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **end-dt2m**
 - **value** *number*
 - **end-dt2u**
 - **value** *number*
- **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **udt2m**
 - **value** *number*

configure service vpls segment-routing-v6 micro-segment-locator function udt2u

```

    - udt2u
      - value number
- service-id number
- service-mtu number
- shcv-policy-ipv4 reference
- spb
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fid number
  - isis-instance number
  - level number
    - apply-groups reference
    - apply-groups-exclude reference
    - bridge-priority number
    - ect-high-path-fid number
    - forwarding-tree
      - topology keyword
  - lsp-lifetime number
  - lsp-refresh-interval
    - half-lifetime boolean
    - interval number
  - overload
    - timeout number
  - overload-on-boot
    - timeout number
  - timers
    - lsp-wait
      - initial-wait number
      - max-wait number
      - second-wait number
    - spf-wait
      - initial-wait number
      - max-wait number
      - second-wait number
- spbm-control-vpls
  - fid number
  - service-name string
- split-horizon-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fdb
    - saps
      - auto-learn-mac-protect boolean
      - auto-learn-mac-protect-exclude-list reference
      - discard-unprotected-dest-mac boolean
      - protected-src-mac-violation-action keyword
  - residential boolean
- spoke-sdp string
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
    - failure-action keyword
    - wait-for-up-timer number
  - block-on-mesh-failure boolean
  - bpdu-translation keyword
  - collect-stats boolean

```

configure service vpls spoke-sdp control-word

- **control-word** *boolean*
- **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **dhcp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **snoop** *boolean*
- **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **mac** *reference*
 - **mfib-allowed-mds-destinations**
 - **mds** *string*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
- **vc-label** *number*
- **endpoint**
 - **name** *reference*
 - **precedence** (*number* | *keyword*)
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais**
 - **client-meg-level** *number*
 - **interface-support** *boolean*
 - **interval** *number*
 - **low-priority-defect** *keyword*
 - **priority** *number*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **cfm-vlan-tag** *string*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **direction** *keyword*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*

configure service vpls spoke-sdp eth-cfm mep fault-propagation

```

- fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - lbm-svc-act-responder boolean
  - low-priority-defect keyword
  - mac-address string
  - one-way-delay-threshold number
  - primary-vlan boolean
- mip primary-vlan (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - cfm-vlan-tag string
  - mac-address string
- squelch-ingress-ctag-levels number
- squelch-ingress-levels number
- vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
  - auto-learn-mac-protect boolean
  - auto-learn-mac-protect-exclude-list reference
  - discard-unknown-source boolean
  - limit-mac-move keyword
  - mac-learning
    - aging boolean
    - learning boolean
  - mac-pinning boolean
  - maximum-mac-addresses number
  - protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
  - signal-capability
- i-vpls-mac-flush
  - bgp-evpn
    - send-to-bvpls boolean
- igmp-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static

```

configure service vpls spoke-sdp igmp-snooping static group

```

    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - version keyword
  - ignore-standby-signaling boolean
  - ingress
    - filter
      - ip reference
      - ipv6 reference
      - mac reference
    - qos
      - network
        - fp-redirect-group
          - group-name reference
          - instance number
          - policy-name reference
    - vc-label number
  - l2pt
    - termination
      - protocols
        - cdp boolean
        - dtp boolean
        - pagp boolean
        - stp boolean
        - udld boolean
        - vtp boolean
  - mld-snooping
    - apply-groups reference
    - apply-groups-exclude reference
    - fast-leave boolean
    - import-policy reference
    - maximum-number-groups number
    - mrouter-port boolean
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - robust-count number
    - router-alert-check boolean
    - send-queries boolean
    - static
      - group string
        - apply-groups reference
        - apply-groups-exclude reference
        - source string
        - starg
      - version keyword
  - monitor-oper-group reference
  - mrp
    - apply-groups reference
    - apply-groups-exclude reference
    - join-time number
    - leave-all-time number
    - leave-time number
    - periodic-time number
    - periodic-timer boolean
    - policy reference
  - oper-group reference
  - pbb
    - fault-propagation
      - backbone-mac-address string
      - backbone-mac-name reference
  - pim-snooping

```

configure service vpls spoke-sdp pim-snooping apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- maximum-number-groups number
- pw-status
- signaling boolean
- spb
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- level number
- apply-groups reference
- apply-groups-exclude reference
- hello-interval number
- hello-multiplier number
- metric number
- lsp-pacing-interval number
- retransmit-interval number
- split-horizon-group reference
- static-isid
- range number
- apply-groups reference
- apply-groups-exclude reference
- end number
- start number
- stp
- admin-state keyword
- auto-edge boolean
- edge-port boolean
- link-type keyword
- path-cost number
- port-num number
- priority number
- root-guard boolean
- transit-policy
- prefix reference
- vc-type keyword
- vlan-vc-tag number
- stp
- admin-state keyword
- forward-delay number
- hello-time number
- hold-count number
- maximum-age number
- mode keyword
- mst-instance number
- apply-groups reference
- apply-groups-exclude reference
- mst-priority number
- vlan-range string
- mst-maximum-hops number
- mst-name string
- mst-revision number
- priority number
- temp-flooding number
- vpn-id number
- vxlan
- instance number
- apply-groups reference
- apply-groups-exclude reference
- assisted-replication
- leaf
- acttime number
- replicator
- egress-vtep (ipv4-address-no-zone | ipv6-address-no-zone)

```

configure service vpls vxlan instance fdb

```

- fdb
  - discard-unknown-source boolean
  - mac-learning
    - aging boolean
    - learning boolean
  - maximum-mac-addresses number
  - protected-src-mac-violation-action keyword
- igmp-snooping
  - mrouter-port boolean
- mld-snooping
  - mrouter-port boolean
- network
  - ingress
    - qos
      - network
        - fp-redirect-group
          - group-name reference
          - instance number
        - policy-name reference
  - rx-discard-on-ndf keyword
  - source-vtep-security boolean
  - vni number
  - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - wlan-gw-group reference
- vprn string
  - aa-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - ipv4
    - primary
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
  - sap string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - filter
        - ip reference
      - qos
        - sap-egress
          - policy-name reference
  - fwd-wholesale
    - pppoe-service reference
  - ingress
    - qos
      - sap-ingress
        - overrides
        - policy-name reference
  - lag
- aaa
  - remote-servers
  - radius

```

configure service vprn aaa remote-servers radius access-algorithm

```

- access-algorithm keyword
- accounting boolean
- accounting-port number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authorization boolean
- interactive-authentication boolean
- port number
- server number
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - authenticator keyword
  - secret string
  - tls-client-profile reference
- server-retry number
- server-timeout number
- use-default-template boolean
- tacplus
  - accounting
    - record-type keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authorization
    - request-format
      - access-operation-cmd keyword
    - use-priv-lvl boolean
  - interactive-authentication boolean
  - priv-lvl-map
    - priv-lvl number
      - apply-groups reference
      - apply-groups-exclude reference
      - user-profile-name reference
  - server number
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - port number
    - secret string
    - server-timeout number
    - use-default-template boolean
- aarp-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - filter
        - ip reference
      - vc-label number
  - ingress
    - filter
      - ip reference

```

configure service vpn aarp-interface spoke-sdp ingress vc-label

- **vc-label** *number*
- **admin-state** *keyword*
- **aggregates**
 - **aggregate** (*ipv4-prefix | ipv6-prefix*)
 - **aggregator**
 - **address** *string*
 - **as-number** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-set** *boolean*
 - **blackhole**
 - **generate-icmp** *boolean*
 - **community** *string*
 - **description** *string*
 - **discard-component-communities** *boolean*
 - **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **local-preference** *number*
 - **policy** *reference*
 - **summary-only** *boolean*
 - **tunnel-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **allow-export-bgp-vpn** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **autonomous-system** *number*
- **bgp**
 - **admin-state** *keyword*
 - **advertise-inactive** *boolean*
 - **advertise-ipv6-next-hops**
 - **ipv4** *boolean*
 - **aggregator-id-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **asn-4-byte** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **backup-path**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **best-path-selection**
 - **always-compare-med**
 - **med-value** *keyword*
 - **strict-as** *boolean*
 - **as-path-ignore**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **compare-origin-validation-state** *boolean*
 - **d-path-length-ignore** *boolean*
 - **deterministic-med** *boolean*
 - **ebgp-ibgp-equal**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **label-ipv6** *boolean*
 - **ignore-nh-metric** *boolean*
 - **ignore-router-id**
 - **origin-invalid-unusable** *boolean*
- **bfd-liveness** *boolean*
- **client-reflect** *boolean*

configure service vprn bgp cluster

- **cluster**
 - **cluster-id** *string*
 - **connect-retry** *number*
- **convergence**
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-wait-to-advertise** *number*
 - **min-wait-to-advertise** *number*
- **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
- **description** *string*
- **domain-id** *string*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
- **eibgp-loadbalance** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
 - **update-fault-tolerance** *boolean*
- **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
- **family**
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **flowspec**
 - **validate-dest-prefix** *boolean*
 - **validate-redirect-ip** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*

configure service vprn bgp graceful-restart restart-time

- **restart-time** *number*
- **stale-routes-time** *number*
- **group** *string*
 - **admin-state** *keyword*
 - **advertise-inactive** *boolean*
 - **advertise-ipv6-next-hops**
 - **ipv4** *boolean*
 - **aggregator-id-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-override** *boolean*
 - **asn-4-byte** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **bfd-liveness** *boolean*
 - **capability-negotiation** *boolean*
 - **client-reflect** *boolean*
 - **cluster**
 - **cluster-id** *string*
 - **connect-retry** *number*
 - **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
 - **damping** *boolean*
 - **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
 - **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
 - **description** *string*
 - **dynamic-neighbor**
 - **interface** *reference*
 - **allowed-peer-as** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **max-sessions** *number*
 - **match**
 - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **allowed-peer-as** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dynamic-neighbor-limit** *number*
 - **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
 - **enforce-first-as** *boolean*
 - **error-handling**
 - **update-fault-tolerance** *boolean*
 - **evpn-link-bandwidth**
 - **add-to-received-bgp** *number*
 - **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **extended-nh-encoding**
 - **ipv4** *boolean*
 - **family**
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **ipv4** *boolean*

configure service vprn bgp group family ipv6

- **ipv6** *boolean*
- **label-ipv4** *boolean*
- **mcast-ipv4** *boolean*
- **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **label-preference** *number*
- **link-bandwidth**
 - **accept-from-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **add-to-received-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **aggregate-used-paths**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **send-to-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
- **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)
- **local-as**
 - **as-number** *number*
 - **prepend-global-as** *boolean*
 - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
 - **admin-state** *keyword*
 - **all-stations** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-monitoring**

configure service vprn bgp group monitor route-monitoring post-policy

```

    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
- passive boolean
- path-mtu-discovery boolean
- peer-as number
- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - idle-timeout number
  - log-only boolean
  - maximum number
  - post-import boolean
  - threshold number
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- send-communities
  - extended boolean
  - large boolean
  - standard boolean
- send-default
  - export-policy reference
  - ipv4 boolean
  - ipv6 boolean
- split-horizon boolean
- static-group boolean
- tcp-mss (number | keyword)
- third-party-nexthop boolean
- ttl-security number
- type keyword
- hold-time
  - minimum-hold-time number
  - seconds number
- ibgp-multipath boolean
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean

```

configure service vprn bgp monitor apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **route-monitoring**
 - **post-policy** *boolean*
 - **pre-policy** *boolean*
- **station** *reference*
- **multihop** *number*
- **multipath**
 - **ebgp** *number*
 - **family** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ebgp** *number*
 - **ibgp** *number*
 - **max-paths** *number*
 - **restrict** *keyword*
 - **unequal-cost** *boolean*
 - **ibgp** *number*
 - **max-paths** *number*
 - **restrict** *keyword*
 - **unequal-cost** *boolean*
- **neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)
 - **admin-state** *keyword*
 - **advertise-inactive** *boolean*
 - **advertise-ipv6-next-hops**
 - **ipv4** *boolean*
 - **aggregator-id-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **as-override** *boolean*
 - **asn-4-byte** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **bfd-liveness** *boolean*
 - **capability-negotiation** *boolean*
 - **client-reflect** *boolean*
 - **cluster**
 - **cluster-id** *string*
 - **connect-retry** *number*
 - **damp-peer-oscillations**
 - **error-interval** *number*
 - **idle-hold-time**
 - **initial-wait** *number*
 - **max-wait** *number*
 - **second-wait** *number*
 - **damping** *boolean*
 - **default-label-preference**
 - **ebgp** *number*
 - **ibgp** *number*
 - **default-preference**
 - **ebgp** *number*
 - **ibgp** *number*
 - **description** *string*
 - **ebgp-default-reject-policy**
 - **export** *boolean*
 - **import** *boolean*
 - **enforce-first-as** *boolean*
 - **error-handling**
 - **update-fault-tolerance** *boolean*
 - **evpn-link-bandwidth**
 - **add-to-received-bgp** *number*
 - **export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vprn bgp neighbor export policy

- **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
 - **ipv4** *boolean*
- **family**
 - **flow-ipv4** *boolean*
 - **flow-ipv6** *boolean*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **mcast-ipv4** *boolean*
 - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
 - **gr-notification** *boolean*
 - **long-lived**
 - **advertise-stale-to-all-neighbors** *boolean*
 - **advertised-stale-time** *number*
 - **family** *keyword*
 - **advertised-stale-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **helper-override-stale-time** *number*
 - **forwarding-bits-set** *keyword*
 - **helper-override-restart-time** *number*
 - **helper-override-stale-time** *number*
 - **without-no-export** *boolean*
 - **restart-time** *number*
 - **stale-routes-time** *number*
- **group** *reference*
- **hold-time**
 - **minimum-hold-time** *number*
 - **seconds** *number*
- **import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **label-preference** *number*
- **link-bandwidth**
 - **accept-from-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **add-to-received-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **aggregate-used-paths**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
 - **send-to-ebgp**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
- **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)
- **local-as**
 - **as-number** *number*
 - **prepend-global-as** *boolean*
 - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*

configure service vprn bgp neighbor med-out

- **med-out** (*number | keyword*)
- **min-route-advertisement** *number*
- **monitor**
 - **admin-state** *keyword*
 - **all-stations** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-monitoring**
 - **post-policy** *boolean*
 - **pre-policy** *boolean*
 - **station** *reference*
- **multihop** *number*
- **multipath-eligible** *boolean*
- **next-hop-self** *boolean*
- **origin-validation**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **label-ipv4** *boolean*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **idle-timeout** *number*
 - **log-only** *boolean*
 - **maximum** *number*
 - **post-import** *boolean*
 - **threshold** *number*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number | keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **next-hop-resolution**
 - **policy** *reference*
 - **use-bgp-routes** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*
- **preference** *number*
- **rapid-withdrawal** *boolean*
- **remove-private**
 - **limited** *boolean*
 - **replace** *boolean*
 - **skip-peer-as** *boolean*
- **rib-management**
 - **ipv4**
 - **leak-import**

configure service vprn bgp rib-management ipv4 leak-import apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **policy** (*policy-expr-string* | *string*)
- **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **label-ipv4**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
 - **route-table-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy-name** *reference*
- **label-ipv6**
 - **leak-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **router-id** *string*
- **send-communities**
 - **extended** *boolean*
 - **large** *boolean*
 - **standard** *boolean*
- **send-default**
 - **export-policy** *reference*
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** *number*
- **third-party-next-hop** *boolean*
- **bgp-evpn**
 - **mpls** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-bind-tunnel**
 - **allow-flex-algo-fallback** *boolean*
 - **ecmp** *number*
 - **enforce-strict-tunnel-tagging** *boolean*
 - **resolution** *keyword*
 - **resolution-filter**
 - **bgp** *boolean*
 - **ldp** *boolean*
 - **mpls-fwd-policy** *boolean*
 - **rib-api** *boolean*
 - **rsvp** *boolean*
 - **sr-isis** *boolean*
 - **sr-ospf** *boolean*
 - **sr-ospf3** *boolean*
 - **sr-policy** *boolean*
 - **sr-te** *boolean*
 - **udp** *boolean*

configure service vprn bgp-evpn mpls default-route-tag

```

- default-route-tag string
- domain-id string
- dynamic-egress-label-limit boolean
- evi number
- evpn-link-bandwidth
  - advertise
    - max-dynamic-weight number
    - weight (number | keyword)
  - weighted-ecmp boolean
- route-distinguisher (string | keyword)
- send-tunnel-encap
  - mpls boolean
  - mpls-over-udp boolean
- vrf-export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- vrf-import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- vrf-target
  - community string
  - export-community string
  - import-community string
- segment-routing-v6 number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- default-route-tag string
- domain-id string
- evi number
- resolution keyword
- route-distinguisher (string | keyword)
- source-address string
- srv6
  - default-locator string
  - instance reference
- vrf-export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- vrf-import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- vrf-target
  - community string
  - export-community string
  - import-community string
- bgp-ipvpn
  - mpls
    - admin-state keyword
    - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - ecmp number
    - enforce-strict-tunnel-tagging boolean
    - resolution keyword
    - resolution-filter
      - bgp boolean
      - gre boolean
      - ldp boolean

```

configure service vpn bgp-ipvpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy

- **mpls-fwd-policy** *boolean*
- **rib-api** *boolean*
- **rsvp** *boolean*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **sr-ospf3** *boolean*
- **sr-policy** *boolean*
- **sr-te** *boolean*
- **udp** *boolean*
- **weighted-ecmp** *boolean*
- **domain-id** *string*
- **dynamic-egress-label-limit** *boolean*
- **route-distinguisher** (*string* | *keyword*)
- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *string*
 - **export-community** *string*
 - **import-community** *string*
- **segment-routing-v6** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-route-tag** *string*
 - **domain-id** *string*
 - **resolution** *keyword*
 - **route-distinguisher** (*string* | *keyword*)
 - **source-address** *string*
- **srv6**
 - **default-locator** *string*
 - **instance** *reference*
- **vrf-export**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-import**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** (*policy-expr-string* | *string*)
- **vrf-target**
 - **community** *string*
 - **export-community** *string*
 - **import-community** *string*
- **bgp-shared-queue**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **bgp-vpn-backup**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **carrier-carrier-vpn** *boolean*
- **class-forwarding** *boolean*
- **confederation**
 - **confed-as-num** *number*
 - **members** *number*
- **customer** *reference*
- **d-path-length-ignore** *boolean*
- **description** *string*
- **dhcp-server**

configure service vprn dhcp-server apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **dhcpv4** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **force-renews** *boolean*
 - **lease-hold**
 - **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
 - **time** *number*
 - **pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **max-lease-time** *number*
 - **min-lease-time** *number*
 - **minimum-free**
 - **absolute** *number*
 - **event-when-depleted** *boolean*
 - **percent** *number*
 - **nak-non-matching-subnet** *boolean*
 - **offer-time** *number*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv4-address** *string*
 - **netbios-node-type** *keyword*
 - **subnet** *string*
 - **address-range** *string* **end** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **failover-control-type** *keyword*

configure service vprn dhcp-server dhcpv4 pool subnet apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **drain** *boolean*
- **exclude-addresses** *string end string*
- **maximum-declined** *number*
- **minimum-free**
 - **absolute** *number*
 - **event-when-depleted** *boolean*
 - **percent** *number*
- **options**
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv4-address** *string*
 - **netbios-node-type** *keyword*
- **pool-selection**
 - **use-gi-address**
 - **scope** *keyword*
 - **use-pool-from-client**
 - **delimiter** *string*
- **user-db** *reference*
- **user-identification** *keyword*
- **dhcpv6** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **auto-provisioned** *boolean*
- **defaults**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **options**
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv6-address** *string*
 - **preferred-lifetime** *number*
 - **rebind-time** *number*
 - **renew-time** *number*
 - **valid-lifetime** *number*
- **description** *string*
- **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
- **ignore-rapid-commit** *boolean*
- **interface-id-mapping** *boolean*
- **lease-hold**

configure service vprn dhcp-server dhcpv6 lease-hold additional-scenarios

- **additional-scenarios**
 - **internal-lease-ipsec** *boolean*
 - **solicited-release** *boolean*
- **time** *number*
- **lease-query** *boolean*
- **pool** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **delegated-prefix**
 - **length** *number*
 - **maximum** *number*
 - **minimum** *number*
 - **description** *string*
 - **exclude-prefix** *string*
 - **failover**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ignore-mclt-on-takeover** *boolean*
 - **maximum-client-lead-time** *number*
 - **partner-down-delay** *number*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sync-tag** *string*
 - **startup-wait-time** *number*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv6-address** *string*
- **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drain** *boolean*
 - **failover-control-type** *keyword*
 - **options**
 - **option** (*number* | *keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **domain-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv6-address** *string*
 - **preferred-lifetime** *number*
 - **prefix-length-threshold** *number*
 - **absolute** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **event-when-depleted** *boolean*
 - **percent** *number*
 - **prefix-type**
 - **pd** *boolean*
 - **wan-host** *boolean*
 - **rebind-time** *number*
 - **renew-time** *number*
 - **valid-lifetime** *number*

configure service vprn dhcp-server dhcpv6 pool prefix-length-threshold

- **prefix-length-threshold** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **event-when-depleted** *boolean*
- **minimum-free-percent** *number*
- **pool-selection**
- **use-link-address**
- **scope** *keyword*
- **use-pool-from-client**
- **delimiter** *string*
- **server-id**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **duid-enterprise**
- **ascii-string** *string*
- **hex-string** *string*
- **duid-link-local**
- **user-identification** *keyword*
- **dns**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-domain** *string*
- **ipv4-source-address** (*keyword* | *ipv4-unicast-address*)
- **ipv6-source-address** (*keyword* | *ipv6-unicast-address*)
- **server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **ecmp** *number*
- **ecmp-unequal-cost** *boolean*
- **entropy-label** *boolean*
- **eth-cfm**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **export-inactive-bgp** *boolean*
- **fib-priority** *keyword*
- **firewall**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **domain** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **dhcpv6-server**
- **name** *string*
- **router-instance** *string*
- **nat-group** *reference*
- **prefix** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **wlan-gw-group** *reference*
- **flowspec**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **filter-cam-type** *keyword*
- **ip-filter-max-size** *number*
- **ipv6-filter-max-size** *number*
- **grt-leaking**
- **allow-local-management** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **export-grt**
- **policy-name** (*policy-expr-string* | *string*)
- **export-limit** *number*
- **export-v6-limit** *number*

configure service vprn grt-leaking grt-lookup

```

- grt-lookup boolean
- import-grt
  - policy-name (policy-expr-string | string)
- gsmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group string
    - admin-state keyword
    - ancp
      - dynamic-topology-discovery boolean
      - oam boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - hold-multiplier number
    - idle-filter boolean
    - keepalive number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - local-address string
      - priority-marking
        - dscp keyword
        - prec number
    - persistency boolean
- gtp
  - s11
    - interface reference
    - apn-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
    - upf-data-endpoint
      - apply-groups reference
      - apply-groups-exclude reference
      - fpe reference
      - interface reference
  - uplink
    - apn string
    - apply-groups reference
    - apply-groups-exclude reference
    - pdn-type keyword
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
- hash-label boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vpn igmp forwarding-group-interface import-policy

```

- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - policy reference
- query-interval number
- query-last-member-interval number
- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
  - mc-constraints
    - level number
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
    - number-down number
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
    - use-lag-port-weight boolean

```

configure service vprn igmp interface mcac policy

```

- policy reference
- query-interval number
- query-last-member-interval number
- query-response-interval number
- redundant-mcast boolean
- router-alert-check boolean
- ssm-translate
  - group-range start string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - group-range start string end string step string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - subnet-check boolean
  - version keyword
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- ssm-translate
  - group-range start string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
- igmp-host-tracking
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
- ignore-nh-metric boolean
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword
      - sample-profile (keyword | number)
      - type keyword
  - cpu-protection reference
  - description string
  - dynamic-tunnel-redundant-nexthop string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
    - ipv6
      - down
        - init-only boolean
        - seconds number

```

configure service vpn interface hold-time ipv6 up

```

- up
  - seconds number
- if-attribute
  - admin-group reference
  - srlg-group reference
- ingress
  - destination-class-lookup boolean
  - policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipsec
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-exception reference
  - ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
      - id
        - fqdn string
        - ipv4 string
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - manual
      - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference

```


configure service vpn interface ipsec ipsec-tunnel key-exchange manual keys spi

```

zone)
    - spi number
    - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
    - max-history-key-records
      - esp number
      - ike number
    - pmtu-discovery-aging number
    - private-sap number
    - private-service string
    - private-tcp-mss-adjust number
    - propagate-pmtu-v4 boolean
    - propagate-pmtu-v6 boolean
    - public-tcp-mss-adjust (number | keyword)
    - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - replay-window number
    - security-policy
      - id number
      - strict-match boolean
    - ipv6-exception reference
    - public-sap number
    - tunnel-group reference
  - ipv4
    - addresses
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
    - allow-directed-broadcasts boolean
    - bfd
      - admin-state keyword
      - echo-receive number
      - multiplier number
      - receive number
      - transmit-interval number
      - type keyword
    - dhcp
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - gi-address string
      - lease-populate
        - max-leases number
      - option-82
        - action keyword
        - circuit-id
          - ascii-tuple
          - ifindex
          - none
          - sap-id
          - vlan-ascii-tuple
        - remote-id
          - ascii-string string
          - mac
          - none
        - vendor-specific-option
          - client-mac-address boolean
          - pool-name boolean
          - sap-id boolean
          - service-id boolean
          - string string
          - system-id boolean
      - proxy-server
        - admin-state keyword

```

configure service vprn interface ipv4 dhcp proxy-server emulated-server

```

- emulated-server string
- lease-time
  - radius-override boolean
  - value number
- python-policy reference
- relay-plain-bootp boolean
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- use-arp boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachableables
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - host-route
    - populate keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
  - learn-unsolicited boolean
- limit
  - log-only boolean
  - max-entries number
  - threshold number
- local-proxy-arp boolean
- populate boolean
- proactive-refresh boolean
- proxy-arp-policy reference
- remote-proxy-arp boolean
- retry-timer number
- static-neighbor string
  - apply-groups reference
  - apply-groups-exclude reference
  - mac-address string
- static-neighbor-unnumbered
  - mac-address string
- timeout number
- primary
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast keyword
  - prefix-length number

```

configure service vprn interface ipv4 primary track-srrp

- **track-srrp** *number*
- **qos-route-lookup** *keyword*
- **secondary** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **igp-inhibit** *boolean*
 - **prefix-length** *number*
 - **track-srrp** *number*
- **tcp-mss** *number*
- **unnumbered**
 - **ip-address** *string*
 - **ip-int-name** *string*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** *string*
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **ssh-reply** *boolean*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **ipv6**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **duplicate-address-detection** *boolean*
 - **eui-64** *boolean*
 - **prefix-length** *number*
 - **primary-preference** *number*
 - **track-srrp** *number*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vprn interface ipv6 dhcp6 relay

```

- relay
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - lease-populate
    - max-nbr-of-leases number
  - route-populate
    - na boolean
    - pd
      - exclude boolean
    - ta boolean
  - link-address string
  - neighbor-resolution boolean
  - option
    - apply-groups reference
    - apply-groups-exclude reference
    - interface-id
      - ascii-tuple
      - if-index
      - sap-id
      - string string
    - remote-id boolean
  - python-policy reference
  - server string
  - source-address string
  - user-db reference
- server
  - apply-groups reference
  - apply-groups-exclude reference
  - max-nbr-of-leases number
  - prefix-delegation
    - admin-state keyword
    - prefix string
      - apply-groups reference
      - apply-groups-exclude reference
    - client-id
      - duid string
      - iaid number
    - preferred-lifetime (number | keyword)
    - valid-lifetime (number | keyword)
- duplicate-address-detection boolean
- forward-ipv4-packets boolean
- icmp6
  - packet-too-big
    - admin-state keyword
    - number number
    - seconds number
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - time-exceeded
    - admin-state keyword
    - number number
    - seconds number
  - unreachable
    - admin-state keyword
    - number number
    - seconds number

```

configure service vprn interface ipv6 link-local-address

- **link-local-address**
 - **address** *string*
 - **duplicate-address-detection** *boolean*
 - **local-dhcp-server** *reference*
 - **neighbor-discovery**
 - **host-route**
 - **populate** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **route-tag** *number*
 - **learn-unsolicited** *keyword*
 - **limit**
 - **log-only** *boolean*
 - **max-entries** *number*
 - **threshold** *number*
 - **local-proxy-nd** *boolean*
 - **proactive-refresh** *keyword*
 - **proxy-nd-policy** *reference*
 - **reachable-time** *number*
 - **secure-nd**
 - **admin-state** *keyword*
 - **allow-unsecured-msgs** *boolean*
 - **public-key-min-bits** *number*
 - **security-parameter** *number*
 - **stale-time** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
- **qos-route-lookup** *keyword*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **vrrp** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup** *string*
 - **bfd-liveness**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **interface-name** *string*
 - **service-name** *string*
 - **init-delay** *number*
 - **mac** *string*
 - **master-int-inherit** *boolean*
 - **message-interval** *number*
 - **monitor-oper-group** *reference*
 - **ntp-reply** *boolean*
 - **oper-group** *reference*
 - **owner** *boolean*
 - **passive** *boolean*
 - **ping-reply** *boolean*
 - **policy** *reference*
 - **preempt** *boolean*
 - **priority** *number*
 - **standby-forwarding** *boolean*
 - **telnet-reply** *boolean*
 - **traceroute-reply** *boolean*
- **load-balancing**
 - **flow-label-load-balancing** *boolean*
 - **ip-load-balancing** *keyword*

configure service vprn interface load-balancing spi-load-balancing

- **spi-load-balancing** *boolean*
- **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **ping-template**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination-address** *string*
 - **name** *reference*
- **ptp-hw-assist**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **calling-station-id** *string*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **agg-rate**
 - **adaptation-rule** *keyword*
 - **burst-limit** (*number* | *keyword*)
 - **limit-unused-bandwidth** *boolean*
 - **queue-frame-based-accounting** *boolean*
 - **rate** *number*
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **policer-control-policy**
 - **overrides**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **root**
 - **max-rate** (*number* | *keyword*)
 - **priority-mbs-thresholds**
 - **min-thresh-separation** (*number* | *keyword*)
 - **priority** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbs-contribution** (*number* | *keyword*)
 - **policy-name** *reference*

configure service vprn interface sap egress qos qinq-mark-top-only

- **qinq-mark-top-only** *boolean*
- **sap-egress**
 - **overrides**
 - **hs-secondary-shaper** *string*
 - **hs-wrr-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **percent-rate** *decimal-number*
 - **rate** (*number* | *keyword*)
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue** *reference*
 - **adaptation-rule**
 - **cir** *keyword*
 - **pir** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avg-frame-overhead** *decimal-number*
 - **burst-limit** (*number* | *keyword*)
 - **cbs** (*number* | *keyword*)
 - **drop-tail**
 - **low**
 - **percent-reduction-from-mbs** (*number* | *keyword*)
 - **hs-class-weight** *number*
 - **hs-wred-queue**
 - **policy** *reference*
 - **hs-wrr-weight** *number*
 - **mbs** (*number* | *keyword*)
 - **monitor-queue-depth**
 - **fast-polling** *boolean*
 - **violation-threshold** *decimal-number*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*
 - **percent-rate**
 - **cir** *decimal-number*
 - **pir** *decimal-number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
- **scheduler-policy**
 - **overrides**
 - **scheduler** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **parent**
 - **cir-weight** *number*
 - **weight** *number*

configure service vprn interface sap egress qos scheduler-policy overrides scheduler rate

```

    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
  - fc keyword
  - fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais boolean
- alarm-notification
  - fng-alarm-time number
  - fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- csf
  - multiplier decimal-number
- description string
- eth-test
  - bit-error-threshold number
  - test-pattern
    - crc-tlv boolean
    - pattern keyword
- fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
- squelch-ingress-levels number
- fwd-wholesale
  - pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - overrides
        - apply-groups reference
        - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
        - apply-groups reference

```


configure service vprn interface sap ingress qos policer-control-policy overrides root priority-mbs-thresholds priority apply-groups-exclude

```

    - apply-groups-exclude reference
    - mbs-contribution (number | keyword)
- policy-name reference
- sap-ingress
- fp-redirect-group
  - group-name reference
  - instance number
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
- ip-tunnel string
- admin-state keyword

```

configure service vpn interface sap ip-tunnel apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backup-remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **clear-df-bit** *boolean*
- **delivery-service** *string*
- **description** *string*
- **dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **dscp** *keyword*
- **encapsulated-ip-mtu** *number*
- **gre-header**
 - **admin-state** *keyword*
 - **key**
 - **admin-state** *keyword*
 - **receive** *number*
 - **send** *number*
- **icmp-generation**
 - **frag-required**
 - **admin-state** *keyword*
 - **interval** *number*
 - **message-count** *number*
- **icmp6-generation**
 - **packet-too-big**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **ip-mtu** *number*
- **ipsec-transport-mode-profile** *reference*
- **local-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **pmtu-discovery-aging** *number*
- **private-tcp-mss-adjust** *number*
- **propagate-pmtu-v4** *boolean*
- **propagate-pmtu-v6** *boolean*
- **public-tcp-mss-adjust** (*number* | *keyword*)
- **reassembly** (*number* | *keyword*)
- **remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **ipsec-gateway** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert**
 - **cert-profile** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **primary** *keyword*
 - **secondary** *keyword*
 - **trust-anchor-profile** *reference*
- **client-db**
 - **fallback** *boolean*
 - **name** *reference*
- **default-secure-service**
 - **interface** *string*
 - **service-name** *string*
- **default-tunnel-template** *reference*
- **dhcp-address-assignment**
 - **dhcpv4**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gi-address** *string*
 - **send-release** *boolean*
 - **server**
 - **address** *string*
 - **router-instance** *string*
 - **dhcpv6**

configure service vpn interface sap ipsec-gateway dhcp-address-assignment dhcpv6 admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- link-address string
- send-release boolean
- server
  - address string
  - router-instance string
- ike-policy reference
- local
  - address-assignment
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv4
      - dhcp-server string
      - pool string
      - router-instance string
      - secondary-pool string
    - ipv6
      - dhcp-server string
      - pool string
      - router-instance string
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
- id
  - auto
  - fqdn string
  - ipv4 string
  - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
- max-history-key-records
  - esp number
  - ike number
- pre-shared-key string
- radius
  - accounting-policy reference
  - authentication-policy reference
- ts-list reference
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-designate boolean
    - bfd-liveness
      - dest-ip string
      - interface string
      - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange

```

configure service vpn interface sap ipsec-tunnel key-exchange dynamic

- **dynamic**
 - **auto-establish** *boolean*
 - **cert**
 - **cert-profile** *reference*
 - **status-verify**
 - **default-result** *keyword*
 - **primary** *keyword*
 - **secondary** *keyword*
 - **trust-anchor-profile** *reference*
 - **id**
 - **fqdn** *string*
 - **ipv4** *string*
 - **ipv6** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **ike-policy** *reference*
 - **ipsec-transform** *reference*
 - **pre-shared-key** *string*
- **manual**
 - **keys** *number* **direction** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **encryption-key** *string*
 - **ipsec-transform** *reference*
 - **spi** *number*
- **max-history-key-records**
 - **esp** *number*
 - **ike** *number*
- **pmtu-discovery-aging** *number*
- **private-tcp-mss-adjust** *number*
- **propagate-pmtu-v4** *boolean*
- **propagate-pmtu-v6** *boolean*
- **public-tcp-mss-adjust** (*number | keyword*)
- **replay-window** *number*
- **security-policy**
 - **id** *reference*
 - **strict-match** *boolean*
- **tunnel-endpoint**
 - **delivery-service** *string*
 - **local-gateway-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **remote-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **lag**
 - **link-map-profile** *number*
 - **per-link-hash**
 - **class** *number*
 - **weight** *number*
- **multi-service-site** *reference*
- **static-host**
 - **ipv4** *string* **mac** *string*
 - **admin-state** *keyword*
 - **ancp-string** *string*
 - **app-profile**
 - **profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **int-dest-id** *string*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id**
 - **string** *string*
 - **use-sap-id**
- **transit-policy**
 - **ip** *reference*
 - **prefix** *reference*
- **shcv-policy-ipv4** *reference*

configure service vprn interface spoke-sdp

- **spoke-sdp** *string*
 - **aarp**
 - **id** *reference*
 - **type** *keyword*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd**
 - **bfd-liveness**
 - **encap** *keyword*
 - **bfd-template** *reference*
 - **failure-action** *keyword*
 - **wait-for-up-timer** *number*
 - **collect-stats** *boolean*
 - **control-word** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **description** *string*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **network**
 - **policy-name** *reference*
 - **port-redirect-group**
 - **group-name** *reference*
 - **instance** *number*
 - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **collect-lmm-fc-stats**
 - **fc** *keyword*
 - **fc-in-profile** *keyword*
 - **collect-lmm-stats** *boolean*
 - **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
 - **admin-state** *keyword*
 - **ais** *boolean*
 - **alarm-notification**
 - **fng-alarm-time** *number*
 - **fng-reset-time** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ccm** *boolean*
 - **ccm-ltm-priority** *number*
 - **ccm-padding-size** *number*
 - **csf**
 - **multiplier** *decimal-number*
 - **description** *string*
 - **eth-test**
 - **bit-error-threshold** *number*
 - **test-pattern**
 - **crc-tlv** *boolean*
 - **pattern** *keyword*
 - **fault-propagation** *keyword*

configure service vprn interface spoke-sdp eth-cfm mep grace

```

- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
  - squelch-ingress-levels number
- hash-label
- signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
      - policy-name reference
    - vc-label number
  - transit-policy
    - ip reference
    - prefix reference
  - vc-type keyword
- static-tunnel-redundant-nextthop string
- tos-marking-state keyword
- tunnel boolean
- vas-if-type keyword
- vpls string
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - reclassify-using-qos reference
    - routed-override-filter
      - ip reference
      - ipv6 reference
  - evpn
    - arp
      - advertise keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - route-tag number
      - flood-garp-and-unknown-req boolean
      - learn-dynamic boolean
    - nd
      - advertise keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - route-tag number
      - learn-dynamic boolean
  - evpn-tunnel
    - allow-bfd boolean
    - ipv6-gateway-address keyword
    - supplementary-broadcast-domain boolean
  - ingress
    - routed-override-filter
      - ip reference
      - ipv6 reference
- ip-mirror-interface string

```

configure service vprn ip-mirror-interface admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **spoke-sdp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **vc-label** *number*
- **ipsec**
 - **allow-reverse-route-override-type** *keyword*
 - **multi-chassis-shunt-interface** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop**
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **multi-chassis-shunting-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **multi-chassis-shunt-interface** *reference*
- **security-policy** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-ip**
 - **address** *string*
 - **any** *boolean*
 - **local-ipv6**
 - **address** *string*
 - **any** *boolean*
 - **remote-ip**
 - **address** *string*
 - **any** *boolean*
 - **remote-ipv6**
 - **address** *string*
 - **any** *boolean*
- **ipv6**
 - **neighbor-discovery**
 - **reachable-time** *number*
 - **stale-time** *number*
 - **router-advertisement**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dns-options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rdnss-lifetime** (*keyword* | *number*)
 - **server** *string*
 - **interface** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **current-hop-limit** *number*
 - **dns-options**
 - **apply-groups** *reference*

configure service vprn ipv6 router-advertisement interface dns-options apply-groups-exclude

- **apply-groups-exclude** *reference*
- **include-rdnss** *boolean*
- **rdnss-lifetime** (*number* | *keyword*)
- **server** *string*
- **managed-configuration** *boolean*
- **max-advertisement-interval** *number*
- **min-advertisement-interval** *number*
- **mtu** *number*
- **other-stateful-configuration** *boolean*
- **prefix** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*keyword* | *number*)
 - **valid-lifetime** (*keyword* | *number*)
- **reachable-time** *number*
- **retransmit-time** *number*
- **router-lifetime** *number*
- **use-virtual-mac** *boolean*
- **isis** *number*
 - **admin-state** *keyword*
 - **advertise-passive-only** *boolean*
 - **advertise-router-capability** *keyword*
 - **all-llisis** *string*
 - **all-l2isis** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-address** *string*
 - **authentication-check** *boolean*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **csnp-authentication** *boolean*
 - **default-route-tag** *number*
 - **export-limit**
 - **log-percent** *number*
 - **number** *number*
 - **export-policy** *reference*
 - **graceful-restart**
 - **helper-mode** *boolean*
 - **hello-authentication** *boolean*
 - **hello-padding** *keyword*
 - **ignore-attached-bit** *boolean*
 - **ignore-lsp-errors** *boolean*
 - **ignore-narrow-metric** *boolean*
 - **iid-tlv** *boolean*
 - **import-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness**
 - **ipv4**
 - **include-bfd-tlv** *boolean*
 - **ipv6**
 - **include-bfd-tlv** *boolean*
 - **csnp-interval** *number*
 - **default-instance** *boolean*
 - **hello-authentication** *boolean*
 - **hello-authentication-key** *string*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-padding** *keyword*

configure service vprn isis interface interface-type

- **interface-type** *keyword*
- **ipv4-multicast** *boolean*
- **ipv6-unicast** *boolean*
- **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hello-authentication-key** *string*
 - **hello-authentication-keychain** *reference*
 - **hello-authentication-type** *keyword*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **hello-padding** *keyword*
 - **ipv4-multicast-metric** *number*
 - **ipv6-unicast-metric** *number*
 - **metric** *number*
 - **passive** *boolean*
 - **priority** *number*
 - **sd-offset** *number*
 - **sf-offset** *number*
- **level-capability** *keyword*
- **load-balancing-weight** *number*
- **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
- **lsp-pacing-interval** *number*
- **mesh-group**
 - **blocked**
 - **value** *number*
- **passive** *boolean*
- **retransmit-interval** *number*
- **tag** *number*
- **ipv4-multicast-routing** *keyword*
- **ipv4-routing** *boolean*
- **ipv6-routing** *keyword*
- **level** *keyword*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **csnp-authentication** *boolean*
 - **default-ipv4-multicast-metric** *number*
 - **default-ipv6-unicast-metric** *number*
 - **default-metric** *number*
 - **external-preference** *number*
 - **hello-authentication** *boolean*
 - **hello-padding** *keyword*
 - **loopfree-alternate-exclude** *boolean*
 - **lsp-mtu-size** *number*
 - **preference** *number*
 - **psnp-authentication** *boolean*
 - **wide-metrics-only** *boolean*
- **level-capability** *keyword*
- **link-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **level** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4-multicast-metric-offset** *number*
 - **ipv4-unicast-metric-offset** *number*

configure service vprn isis link-group level ipv6-unicast-metric-offset

- **ipv6-unicast-metric-offset** *number*
- **member** *reference*
- **oper-members** *number*
- **revert-members** *number*
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** *reference*
- **lsp-lifetime** *number*
- **lsp-minimum-remaining-lifetime** *number*
- **lsp-mtu-size** *number*
- **lsp-refresh**
 - **half-lifetime** *boolean*
 - **interval** *number*
- **mru-mismatch-detection** *boolean*
- **multi-topology**
 - **ipv4-multicast** *boolean*
 - **ipv6-unicast** *boolean*
- **multicast-import**
 - **ipv4** *boolean*
- **overload**
 - **max-metric** *boolean*
- **overload-export-external** *boolean*
- **overload-export-internal** *boolean*
- **overload-on-boot**
 - **max-metric** *boolean*
 - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
 - **limit** *number*
 - **log-only** *boolean*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **psnp-authentication** *boolean*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**
 - **prefix-list** *reference*
 - **tag** *number*
- **router-id** *string*
- **standard-multi-instance** *boolean*
- **strict-adjacency-check** *boolean*
- **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level-capability** *keyword*
 - **route-tag** *number*
- **suppress-attached-bit** *boolean*
- **system-id** *string*
- **timers**
 - **lsp-wait**
 - **lsp-initial-wait** *number*
 - **lsp-max-wait** *number*
 - **lsp-second-wait** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **l2tp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*

configure service vprn l2tp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **avp-hiding** *keyword*
- **challenge** *boolean*
- **destruct-timeout** *number*
- **ethernet-tunnel**
 - **reconnect-timeout** (*number* | *keyword*)
- **exclude-avps**
 - **calling-number** *boolean*
 - **initial-rx-lcp-conf-req** *boolean*
- **failover**
 - **recovery-max-session-lifetime** *number*
 - **recovery-method** *keyword*
 - **recovery-time** *number*
 - **track-srrp** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer** *reference*
 - **sync-tag** *string*
- **group** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avp-hiding** *keyword*
 - **challenge** *keyword*
 - **description** *string*
 - **destruct-timeout** *number*
 - **ethernet-tunnel**
 - **reconnect-timeout** (*number* | *keyword*)
 - **failover**
 - **recovery-method** *keyword*
 - **recovery-time** *number*
 - **hello-interval** (*number* | *keyword*)
 - **idle-timeout** (*number* | *keyword*)
 - **l2tpv3**
 - **cookie-length** (*number* | *keyword*)
 - **digest-type** *keyword*
 - **nonce-length** *number*
 - **password** *string*
 - **private-tcp-mss-adjust** (*number* | *keyword*)
 - **public-tcp-mss-adjust** (*number* | *keyword*)
 - **pw-cap-list**
 - **ethernet** *boolean*
 - **ethernet-vlan** *boolean*
 - **rem-router-id** *string*
 - **track-password-change** *boolean*
 - **lac**
 - **df-bit** *keyword*
 - **lns**
 - **lns-group** *reference*
 - **load-balance-method** *keyword*
 - **mlppp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **endpoint**
 - **ip** (*ipv4-address* | *keyword*)
 - **mac** (*mac-address* | *keyword*)
 - **interleave** *boolean*
 - **max-fragment-delay** (*number* | *keyword*)
 - **max-links** *number*
 - **reassembly-timeout** *number*
 - **short-sequence-numbers** *boolean*
 - **ppp**
 - **authentication** *keyword*

configure service vprn l2tp group lns ppp authentication-policy

```

- authentication-policy string
- chap-challenge-length
  - end number
  - start number
- default-group-interface
  - interface string
  - service-name string
- ipcp-subnet-negotiation boolean
- keepalive
  - interval number
  - multiplier number
- lcp-force-ack-accm boolean
- lcp-ignore-magic-numbers boolean
- mtu number
- proxy-authentication boolean
- proxy-lcp boolean
- reject-disabled-ncp boolean
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- protocol keyword
- radius-accounting-policy reference
- receive-window-size number
- session-assign-method keyword
- session-limit (number | keyword)
- tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-establish boolean
  - avp-hiding keyword
  - challenge keyword
  - description string
  - destruct-timeout number
  - failover
    - recovery-method keyword
    - recovery-time number
  - hello-interval (number | keyword)
  - idle-timeout (number | keyword)
  - l2tpv3
    - private-tcp-mss-adjust (number | keyword)
    - public-tcp-mss-adjust (number | keyword)
  - lac
    - df-bit keyword
  - lns
    - lns-group reference
    - load-balance-method keyword
  - mlpp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint
      - ip (ipv4-address | keyword)
      - mac (mac-address | keyword)
    - interleave keyword
    - max-fragment-delay number
    - max-links number
    - reassembly-timeout number
    - short-sequence-numbers keyword
- ppp
  - authentication keyword

```

configure service vprn l2tp group tunnel lns ppp authentication-policy

```

    - authentication-policy string
    - chap-challenge-length
      - end number
      - start number
    - default-group-interface
      - interface string
      - service-name string
    - ipcp-subnet-negotiation keyword
    - keepalive
      - interval number
      - multiplier number
    - lcp-force-ack-accm keyword
    - lcp-ignore-magic-numbers keyword
    - mtu number
    - proxy-authentication keyword
    - proxy-lcp keyword
    - reject-disabled-ncp keyword
    - user-db string
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - password string
  - peer string
  - preference number
  - radius-accounting-policy reference
  - receive-window-size number
  - remote-name string
  - session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
  - sequencing-required boolean
- l2tpv3
  - cookie-length number
  - digest-type keyword
  - nonce-length number
  - password string
  - private-tcp-mss-adjust number
  - public-tcp-mss-adjust number
  - transport-type
    - ip boolean
- lac
  - calling-number-format string
  - cisco-nas-port
    - ethernet string
  - df-bit boolean
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- next-attempt keyword
- password string
- peer-address-change-policy keyword
- radius-accounting-policy reference
- receive-window-size number
- replace-result-code
  - cdn-invalid-dst boolean
  - cdn-permanent-no-facilities boolean
  - cdn-temporary-no-facilities boolean
- rtm-debounce-time (number | keyword)
- session-assign-method keyword
- session-limit number

```

configure service vprn l2tp tunnel-selection-blacklist

- **tunnel-selection-blacklist**
 - **add-tunnel-on**
 - **address-change-timeout** *boolean*
 - **cdn-err-code** *boolean*
 - **cdn-invalid-dst** *boolean*
 - **cdn-permanent-no-facilities** *boolean*
 - **cdn-temporary-no-facilities** *boolean*
 - **stop-ccn-err-code** *boolean*
 - **stop-ccn-other** *boolean*
 - **tx-cdn-not-established-in-time** *boolean*
 - **max-list-length** (*number* | *keyword*)
 - **max-time** *number*
 - **timeout-action** *keyword*
- **tunnel-session-limit** *number*
- **label-mode** *keyword*
- **local-routes-domain-id** *string*
- **log**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **description** *string*
 - **named-entry** *string*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **application**
 - **eq** *keyword*
 - **neq** *keyword*
 - **event**
 - **eq** *number*
 - **gt** *number*
 - **gte** *number*
 - **lt** *number*
 - **lte** *number*
 - **neq** *number*
 - **message**
 - **eq** *string*
 - **neq** *string*
 - **regexp** *boolean*
 - **severity**
 - **eq** *keyword*
 - **gt** *keyword*
 - **gte** *keyword*
 - **lt** *keyword*
 - **lte** *keyword*
 - **neq** *keyword*
 - **subject**
 - **eq** *string*
 - **neq** *string*
 - **regexp** *boolean*
 - **log-id** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **destination**
 - **netconf**
 - **max-entries** *number*
 - **snmp**

configure service vprn log log-id destination snmp max-entries

```

    - max-entries number
    - syslog reference
    - filter reference
    - netconf-stream string
    - python-policy reference
    - source
      - change boolean
      - debug boolean
      - main boolean
      - security boolean
    - time-format keyword
  - snmp-trap-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - trap-target string
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - notify-community string
    - port number
    - replay boolean
    - security-level keyword
    - version keyword
  - syslog string
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - facility keyword
    - log-prefix (keyword | string)
    - port number
    - severity keyword
    - tls-client-profile reference
  - management
    - allow-ftp boolean
    - allow-grpc boolean
    - allow-netconf boolean
    - allow-ssh boolean
    - allow-telnet boolean
    - allow-telnet6 boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - maximum-ipv4-routes
    - log-only boolean
    - threshold number
    - value number
  - maximum-ipv6-routes
    - log-only boolean
    - threshold number
    - value number
  - mc-maximum-routes
    - log-only boolean
    - threshold number
    - value number
  - mld
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - forwarding-group-interface forwarding-service string group-interface-
name reference
    - admin-state keyword
    - apply-groups reference

```

configure service vpn mld forwarding-group-interface apply-groups-exclude

```

- apply-groups-exclude reference
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
  - bandwidth
    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - policy reference
- query-interval number
- query-last-member-interval number
- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - mc-constraints
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
      - number-down number
        - apply-groups reference
        - apply-groups-exclude reference
        - level number

```


configure service vprn mld interface mcac mc-constraints use-lag-port-weight

```

    - use-lag-port-weight boolean
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - router-alert-check boolean
  - ssm-translate
    - group-range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - group-range start string end string step string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
    - version keyword
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - ssm-translate
    - group-range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
- msdp
  - active-source-limit number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - data-encapsulation boolean
  - export-policy reference
  - group string
    - active-source-limit number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - export-policy reference
    - import-policy reference
    - local-address string
    - mode keyword
    - peer string
      - active-source-limit number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - default-peer boolean
      - export-policy reference
      - import-policy reference
      - local-address string
      - receive-message-rate
        - rate number
        - threshold number
        - time number
    - receive-message-rate
      - rate number

```

configure service vpn msdp group receive-message-rate threshold

```

    - threshold number
    - time number
  - import-policy reference
  - local-address string
  - peer string
    - active-source-limit number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - default-peer boolean
    - export-policy reference
    - import-policy reference
    - local-address string
    - receive-message-rate
      - rate number
      - threshold number
      - time number
  - receive-message-rate
    - rate number
    - threshold number
    - time number
  - rpf-table keyword
  - source string
    - active-source-limit number
    - apply-groups reference
    - apply-groups-exclude reference
    - source-active-cache-lifetime number
  - mss-adjust
    - apply-groups reference
    - apply-groups-exclude reference
    - nat-group number
    - segment-size number
  - mtrace2
    - admin-state keyword
    - udp-port number
  - multicast-info-policy reference
  - vpn
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-discovery
      - source-address string
      - type keyword
    - c-mcast-signaling keyword
    - intersite-shared
      - admin-state keyword
      - kat-type5-advertisement-withdraw boolean
      - persistent-type5-advertisement boolean
    - mdt-type keyword
    - provider-tunnel
      - inclusive
        - bier
          - admin-state keyword
          - sub-domain number
        - bsr keyword
        - mldp
          - admin-state keyword
        - p2mp-sr
          - admin-state keyword
          - bfd-leaf boolean
          - bfd-root
            - multiplier number
            - transmit-interval number
        - p2mp-policy boolean

```

configure service vprn mvpn provider-tunnel inclusive p2mp-sr static-policy

```

- static-policy reference
- pim
- admin-state keyword
- group-address string
- hello-interval number
- hello-multiplier number
- improved-assert boolean
- mode keyword
- three-way-hello boolean
- tracking-support boolean
- rsvp
- admin-state keyword
- bfd-leaf boolean
- bfd-root
  - multiplier number
  - transmit-interval number
- lsp-template reference
- umh-rate-monitoring
  - revertive-timer number
  - traffic-rate-delta number
- wildcard-spmsi boolean
- selective
- asm-mdt boolean
- auto-discovery boolean
- bier
  - admin-state keyword
  - sub-domain number
- data-delay-interval number
- data-threshold
  - group-prefix (ipv4-prefix | ipv6-prefix)
    - apply-groups reference
    - apply-groups-exclude reference
    - pe-threshold-add number
    - pe-threshold-delete number
    - threshold number
- join-tlv-packing boolean
- mldp
  - admin-state keyword
  - maximum-p2mp-spmsi number
- multistream-spmsi number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group-prefix (ipv4-prefix | ipv6-prefix) source-prefix (ipv4-prefix |
ipv6-prefix)
  - lsp-template reference
- p2mp-sr
  - p2mp-policy boolean
  - static-policy reference
- pim
  - group-address string
  - mode keyword
- p2mp-sr
  - admin-state keyword
  - p2mp-policy boolean
  - static-policy reference
- pim
  - group-prefix string
  - mode keyword
- rsvp
  - admin-state keyword
  - lsp-template reference
  - maximum-p2mp-spmsi number
- umh-rate-monitoring

```

configure service vprn mvpn provider-tunnel selective umh-rate-monitoring group

- **group** (ipv4-prefix | ipv6-prefix) **source** (ipv4-prefix | ipv6-prefix)
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **revertive-timer** number
 - **traffic-rate-delta** number
- **redundant-source-list**
 - **source-prefix** (ipv4-prefix | ipv6-prefix)
- **rpf-select**
 - **core-mvpn** reference
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **group-prefix** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **starg** boolean
- **umh-pe-backup**
 - **umh-pe** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **standby** string
- **umh-selection** keyword
- **vrf-export**
 - **policy** (policy-expr-string | string)
 - **unicast** boolean
- **vrf-import**
 - **policy** (policy-expr-string | string)
 - **unicast** boolean
- **vrf-target**
 - **community** string
 - **export**
 - **community** string
 - **unicast** boolean
 - **import**
 - **community** string
 - **unicast** boolean
 - **unicast** boolean
- **nat**
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **inside**
 - **l2-aware**
 - **force-unique-ip-addresses** boolean
 - **subscribers** string
 - **large-scale**
 - **dnat-only**
 - **source-prefix-list** reference
 - **dual-stack-lite**
 - **admin-state** keyword
 - **deterministic**
 - **prefix-map** string **nat-policy** reference
 - **admin-state** keyword
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **map** string to string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **first-outside-address** string
 - **endpoint** string
 - **apply-groups** reference
 - **apply-groups-exclude** reference
 - **ip-fragmentation** keyword
 - **min-first-fragment-size-rx** number
 - **reassembly** boolean
 - **tunnel-mtu** number

configure service vprn nat inside large-scale dual-stack-lite max-subscriber-limit

```

- max-subscriber-limit number
- subscriber-prefix-length number
- filters
- downstream
  - ipv4 reference
- nat-policy reference
- nat44
- destination-prefix string
- apply-groups reference
- apply-groups-exclude reference
- nat-policy reference
- deterministic
- prefix-map string nat-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - map string to string
    - apply-groups reference
    - apply-groups-exclude reference
    - first-outside-address string
- max-subscriber-limit number
- nat-import reference
- nat64
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- drop-zero-ipv4-checksum boolean
- insert-ipv6-fragment-header boolean
- ip-fragmentation keyword
- ipv6-mtu number
- prefix string
- subscriber-prefix-length number
- tos
  - downstream
    - use-ipv4 boolean
  - upstream
    - set-tos (keyword | number)
- redundancy
- peer string
- peer6 string
- steering-route string
- subscriber-identification
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- attribute
  - type keyword
  - vendor keyword
- description string
- drop-unidentified-traffic boolean
- radius-proxy-server
  - router-instance string
  - server string
- map
- map-domain reference
- outside
- dnat-only
  - route-limit number
- filters
- downstream
  - ipv4 reference
  - ipv6 reference
- upstream
  - ipv4 reference

```

configure service vprn nat outside filters upstream ipv6

- **ipv6** *reference*
- **mtu** *number*
- **pool** *string*
 - **address-pooling** *keyword*
 - **address-range** *string end string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **drain** *boolean*
- **admin-state** *keyword*
- **applications**
 - **agnostic** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **icmp-echo-reply** *boolean*
- **l2-aware**
 - **default-host**
 - **inside-router-instance** *string*
 - **ip-address** *string*
 - **rate-limit** *number*
 - **external-assignment** *boolean*
 - **port-block-extension**
 - **ports** *number*
 - **subscriber**
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **subscriber-limit** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
- **large-scale**
 - **default-host**
 - **inside-router-instance** *string*
 - **ip-address** *string*
 - **rate-limit** *number*
 - **deterministic**
 - **port-reservation** *number*
 - **watermarks**
 - **high** *number*
 - **low** *number*
 - **redundancy**
 - **admin-state** *keyword*
 - **export-route** *string*
 - **follow**
 - **name** *string*
 - **router-instance** *string*
 - **monitor-route** *string*
 - **subscriber-limit** *number*
- **mode** *keyword*
- **nat-group** *reference*
- **port-forwarding**
 - **dynamic-block-reservation** *boolean*
 - **range-end** *number*
 - **range-start** *number*
- **port-reservation**
 - **port-blocks** *number*
 - **ports** *number*
- **type** *keyword*
- **watermarks**
 - **high** *number*
 - **low** *number*
- **wlan-gw-group** *reference*

configure service vprn network

- **network**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **ipv6** *reference*
 - **qos**
 - **fp-redirect-group** *reference*
 - **instance** *number*
 - **network-policy** *reference*
 - **urpf-check** *boolean*
 - **network-interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cflowd-parameters**
 - **sampling** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **direction** *keyword*
 - **sample-profile** (*keyword* | *number*)
 - **type** *keyword*
 - **cpu-protection** *reference*
 - **description** *string*
 - **dist-cpu-protection** *reference*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **ingress-stats** *boolean*
 - **ip-mtu** *number*
 - **ipv4**
 - **allow-directed-broadcasts** *boolean*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **ttl-expired**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*

configure service vprn network-interface ipv4 icmp unreachable

- **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
- **neighbor-discovery**
 - **retry-timer** *number*
 - **static-neighbor** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mac-address** *string*
 - **timeout** *number*
- **primary**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **prefix-length** *number*
- **secondary** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **broadcast** *keyword*
 - **igp-inhibit** *boolean*
 - **prefix-length** *number*
- **tcp-mss** *number*
- **urpf-check**
 - **ignore-default** *boolean*
 - **mode** *keyword*
- **lag**
 - **link-map-profile** *number*
 - **per-link-hash**
 - **class** *number*
 - **weight** *number*
- **load-balancing**
 - **flow-label-load-balancing** *boolean*
 - **ip-load-balancing** *keyword*
 - **lsr-load-balancing** *keyword*
 - **spi-load-balancing** *boolean*
 - **teid-load-balancing** *boolean*
- **loopback**
- **mac** *string*
- **port** *string*
- **qos**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress-instance** *number*
 - **egress-port-redirect-group** *reference*
 - **ingress-fp-redirect-group** *reference*
 - **ingress-instance** *number*
 - **network-policy** *reference*
 - **tos-marking-state** *keyword*
- **ntp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticate** *boolean*
 - **authentication-check** *boolean*
 - **authentication-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key** *string*
 - **type** *keyword*
 - **broadcast** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vprn ntp broadcast key-id

- **key-id** *reference*
- **ttl** *number*
- **version** *number*
- **ospf** *number*
 - **admin-state** *keyword*
 - **advertise-router-capability** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area** *string*
 - **advertise-ne-profile** *reference*
 - **advertise-router-capability** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **area-range** *string*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **blackhole-aggregate** *boolean*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **advertise-router-capability** *boolean*
 - **advertise-subnet** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **bfd-liveness**
 - **remain-down-on-failure** *boolean*
 - **strict** *boolean*
 - **strict-mode-holddown** *number*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **interface-type** *keyword*
 - **load-balancing-weight** *number*
 - **loopfree-alternate**
 - **exclude** *boolean*
 - **policy-map**
 - **route-nh-template** *reference*
 - **lsa-filter-out** *keyword*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
 - **metric** *number*
 - **mtu** *number*
 - **neighbor** *string*
 - **passive** *boolean*
 - **poll-interval** *number*
 - **priority** *number*
 - **retransmit-interval** *number*
 - **rib-priority** *keyword*
 - **transit-delay** *number*
 - **loopfree-alternate-exclude** *boolean*
 - **nssa**
 - **area-range** *string*
 - **advertise** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **originate-default-route**
 - **adjacency-check** *boolean*
 - **type-nssa** *boolean*

configure service vprn ospf area nssa redistribute-external

- **redistribute-external** *boolean*
- **summaries** *boolean*
- **sham-link** *string* **ip-address** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **authentication-type** *keyword*
- **dead-interval** *number*
- **hello-interval** *number*
- **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
- **metric** *number*
- **retransmit-interval** *number*
- **transit-delay** *number*
- **stub**
 - **default-metric** *number*
 - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-keychain** *reference*
 - **authentication-type** *keyword*
 - **dead-interval** *number*
 - **hello-interval** *number*
 - **message-digest-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **md5** *string*
 - **retransmit-interval** *number*
 - **transit-delay** *number*
- **compatible-rfc1583** *boolean*
- **export-limit**
 - **log-percent** *number*
 - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
 - **interval** *number*
 - **limit** *number*
- **external-preference** *number*
- **graceful-restart**
 - **helper-mode** *boolean*
 - **strict-lsa-checking** *boolean*
- **ignore-dn-bit** *boolean*
- **import-policy** *reference*
- **loopfree-alternate**
 - **exclude**
 - **prefix-policy** *reference*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
 - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
 - **high**

configure service vpn ospf rib-priority high prefix-list

```

    - prefix-list reference
  - router-id string
  - rtr-adv-lsa-limit
    - log-only boolean
    - max-lsa-count number
    - overload-timeout (number | keyword)
    - warning-threshold number
  - super-backbone boolean
  - suppress-dn-bit boolean
  - timers
    - incremental-spf-wait number
    - lsa-accumulate number
    - lsa-arrival number
    - lsa-generate
      - lsa-initial-wait number
      - lsa-second-wait number
      - max-lsa-wait number
    - redistribute-delay number
    - spf-wait
      - spf-initial-wait number
      - spf-max-wait number
      - spf-second-wait number
  - unicast-import boolean
  - vpn-domain
    - id string
    - type keyword
  - vpn-tag number
- ospf3 number
  - admin-state keyword
  - advertise-router-capability keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range (ipv4-prefix | ipv6-prefix)
      - advertise boolean
      - apply-groups reference
      - apply-groups-exclude reference
    - blackhole-aggregate boolean
    - export-policy reference
    - import-policy reference
    - interface string
      - admin-state keyword
      - advertise-router-capability boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication
        - inbound reference
        - outbound reference
      - bfd-liveness
        - remain-down-on-failure boolean
        - strict boolean
        - strict-mode-holddown number
      - dead-interval number
      - hello-interval number
      - interface-type keyword
      - load-balancing-weight number
      - loopfree-alternate
        - exclude boolean
      - policy-map
        - route-nh-template reference
      - lsa-filter-out keyword

```

configure service vprn ospf3 area interface metric

```

- metric number
- mtu number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- passive boolean
- poll-interval number
- priority number
- retransmit-interval number
- rib-priority keyword
- transit-delay number
- key-rollover-interval number
- loopfree-alternate-exclude boolean
- nssa
  - area-range (ipv4-prefix | ipv6-prefix)
    - advertise boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - originate-default-route
    - adjacency-check boolean
    - type-nssa boolean
  - redistribute-external boolean
  - summaries boolean
- stub
  - default-metric number
  - summaries boolean
- virtual-link string transit-area reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - inbound reference
    - outbound reference
  - dead-interval number
  - hello-interval number
  - retransmit-interval number
  - transit-delay number
- export-limit
  - log-percent number
  - number number
- export-policy reference
- external-db-overflow
  - interval number
  - limit number
- external-preference number
- graceful-restart
  - helper-mode boolean
  - strict-lsa-checking boolean
- ignore-dn-bit boolean
- import-policy reference
- loopfree-alternate
  - exclude
    - prefix-policy reference
- multicast-import boolean
- overload boolean
- overload-include-ext-1 boolean
- overload-include-ext-2 boolean
- overload-include-stub boolean
- overload-on-boot
  - timeout number
- preference number
- reference-bandwidth number
- rib-priority
  - high
    - prefix-list reference
- router-id string

```

configure service vprn ospf3 rtr-adv-lsa-limit

- **rtr-adv-lsa-limit**
 - **log-only** *boolean*
 - **max-lsa-count** *number*
 - **overload-timeout** (*number* | *keyword*)
 - **warning-threshold** *number*
- **suppress-dn-bit** *boolean*
- **timers**
 - **incremental-spf-wait** *number*
 - **lsa-accumulate** *number*
 - **lsa-arrival** *number*
 - **lsa-generate**
 - **lsa-initial-wait** *number*
 - **lsa-second-wait** *number*
 - **max-lsa-wait** *number*
 - **redistribute-delay** *number*
 - **spf-wait**
 - **spf-initial-wait** *number*
 - **spf-max-wait** *number*
 - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **pcp**
 - **server** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **dual-stack-lite-address** *string*
 - **fwd-inside-router** *string*
 - **interface** *reference*
 - **policy** *reference*
- **pim**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **apply-to** *keyword*
 - **bgp-nh-override** *boolean*
 - **import**
 - **join-policy** *reference*
 - **register-policy** *reference*
 - **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **assert-period** *number*
 - **bfd-liveness**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
 - **bsm-check-rtr-alert** *boolean*
 - **hello-interval** *number*
 - **hello-multiplier** *number*
 - **improved-assert** *boolean*
 - **instant-prune-echo** *boolean*
 - **ipv4**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-oper-group**
 - **name** *reference*
 - **operation** *keyword*
 - **priority-delta** *number*
 - **multicast** *boolean*
 - **ipv6**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **monitor-oper-group**

configure service vprn pim interface ipv6 monitor-oper-group name

- **name** *reference*
- **operation** *keyword*
- **priority-delta** *number*
- **multicast** *boolean*
- **max-groups** *number*
- **mcac**
 - **bandwidth**
 - **mandatory** (*number* | *keyword*)
 - **total** (*number* | *keyword*)
 - **interface-policy** *reference*
 - **mc-constraints**
 - **admin-state** *keyword*
 - **level** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bandwidth** *number*
 - **number-down** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level** *number*
 - **use-lag-port-weight** *boolean*
 - **policy** *reference*
- **multicast-senders** *keyword*
- **p2mp-ldp-tree-join**
 - **ipv4** *boolean*
 - **ipv6** *boolean*
- **priority** *number*
- **sticky-dr**
 - **priority** *number*
- **three-way-hello** *boolean*
- **tracking-support** *boolean*
- **ipv4**
 - **admin-state** *keyword*
 - **grt-extranet**
 - **any**
 - **group-prefix** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **starg** *boolean*
 - **rpf-table** *keyword*
 - **source-address**
 - **register-message** *string*
 - **ssm-assert-compatible-mode** *boolean*
 - **ssm-default-range** *boolean*
- **ipv6**
 - **admin-state** *keyword*
 - **rpf-table** *keyword*
 - **source-address**
 - **register-message** *string*
 - **ssm-default-range** *boolean*
- **mc-ecmp-balance** *boolean*
- **mc-ecmp-balance-hold** *number*
- **mc-ecmp-hashing**
 - **rebalance** *boolean*
- **mtu-over-head** *number*
- **non-dr-attract-traffic** *boolean*
- **rp**
 - **bootstrap**
 - **export** *reference*
 - **import** *reference*
 - **ipv4**
 - **anycast** *string* **rp-set-peer** *string*
 - **auto-rp-discovery** *boolean*
 - **bsr-candidate**

configure service vprn pim rp ipv4 bsr-candidate address

- **address** *string*
- **admin-state** *keyword*
- **hash-mask-len** *number*
- **priority** *number*
- **candidate** *boolean*
- **mapping-agent** *boolean*
- **rp-candidate**
 - **address** *string*
 - **admin-state** *keyword*
 - **group-range** *string*
 - **holdtime** *number*
 - **priority** *number*
- **static**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-prefix** *string*
 - **override** *boolean*
- **ipv6**
 - **anycast** *string* **rp-set-peer** *string*
 - **bsr-candidate**
 - **address** *string*
 - **admin-state** *keyword*
 - **hash-mask-len** *number*
 - **priority** *number*
 - **embedded-rp**
 - **admin-state** *keyword*
 - **group-range** *string*
 - **rp-candidate**
 - **address** *string*
 - **admin-state** *keyword*
 - **group-range** *string*
 - **holdtime** *number*
 - **priority** *number*
 - **static**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-prefix** *string*
 - **override** *boolean*
- **spt-switchover** (*ipv4-prefix* | *ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **threshold** (*number* | *keyword*)
- **ssm-groups**
 - **group-range** (*ipv4-prefix* | *ipv6-prefix*)
- **radius**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **proxy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **attribute-matching**
 - **entry** *number*
 - **accounting-server-policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-server-policy** *string*
 - **prefix-string** *string*
 - **suffix-string** *string*
 - **type** *number*
 - **vendor** (*number* | *keyword*)
 - **cache**

configure service vprn radius proxy cache admin-state

- **admin-state** *keyword*
- **key**
 - **attribute-type** *number*
 - **packet-type** *keyword*
 - **vendor** (*number | keyword*)
- **timeout** *number*
- **track-accounting**
 - **accounting-off** *boolean*
 - **accounting-on** *boolean*
 - **interim-update** *boolean*
 - **start** *boolean*
 - **stop** *boolean*
- **track-authentication**
 - **accept** *boolean*
- **track-delete-hold-time** *number*
- **defaults**
 - **accounting-server-policy** *string*
 - **authentication-server-policy** *string*
- **description** *string*
- **interface** *reference*
- **load-balance-key**
 - **attribute-1**
 - **type** *number*
 - **vendor** (*number | keyword*)
 - **attribute-2**
 - **type** *number*
 - **vendor** (*number | keyword*)
 - **attribute-3**
 - **type** *number*
 - **vendor** (*number | keyword*)
 - **attribute-4**
 - **type** *number*
 - **vendor** (*number | keyword*)
 - **attribute-5**
 - **type** *number*
 - **vendor** (*number | keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
 - **accept-coa** *boolean*
 - **acct-port** *number*
 - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auth-port** *number*
 - **description** *string*
 - **pending-requests-limit** *number*
 - **python-policy** *reference*
 - **secret** *string*
- **reassembly**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **nat-group** *number*
 - **to-base-network** *boolean*
- **redundant-interface** *string*

configure service vprn redundant-interface admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
- **ip-mtu** *number*
- **ipv4**
 - **primary**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **prefix-length** *number*
 - **remote-ip** *string*
- **spoke-sdp** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **control-word** *boolean*
 - **description** *string*
 - **egress**
 - **filter**
 - **ip** *reference*
 - **vc-label** *number*
 - **ingress**
 - **filter**
 - **ip** *reference*
 - **vc-label** *number*
- **rip**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-type** *keyword*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-limit**
 - **log-percent** *number*
 - **number** *number*
 - **export-policy** *reference*
 - **group** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **authentication-type** *keyword*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **message-size** *number*
 - **metric-in** *number*
 - **metric-out** *number*
 - **neighbor** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vprn rip group neighbor authentication-key

- **authentication-key** *string*
- **authentication-type** *keyword*
- **bfd-liveness** *boolean*
- **check-zero** *boolean*
- **description** *string*
- **export-policy** *reference*
- **import-policy** *reference*
- **message-size** *number*
- **metric-in** *number*
- **metric-out** *number*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
 - **flush** *number*
 - **timeout** *number*
 - **update** *number*
- **unicast-address** *string*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
 - **flush** *number*
 - **timeout** *number*
 - **update** *number*
- **import-policy** *reference*
- **message-size** *number*
- **metric-in** *number*
- **metric-out** *number*
- **preference** *number*
- **propagate-metric** *boolean*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
 - **flush** *number*
 - **timeout** *number*
 - **update** *number*
- **ripng**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-limit**
 - **log-percent** *number*
 - **number** *number*
 - **export-policy** *reference*
 - **group** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bfd-liveness** *boolean*
 - **check-zero** *boolean*
 - **description** *string*
 - **export-policy** *reference*
 - **import-policy** *reference*
 - **message-size** *number*
 - **metric-in** *number*
 - **metric-out** *number*
 - **neighbor** *reference*

configure service vprn ripng group neighbor admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bfd-liveness** *boolean*
- **check-zero** *boolean*
- **description** *string*
- **export-policy** *reference*
- **import-policy** *reference*
- **message-size** *number*
- **metric-in** *number*
- **metric-out** *number*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
 - **flush** *number*
 - **timeout** *number*
 - **update** *number*
- **unicast-address** *string*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
 - **flush** *number*
 - **timeout** *number*
 - **update** *number*
- **import-policy** *reference*
- **message-size** *number*
- **metric-in** *number*
- **metric-out** *number*
- **preference** *number*
- **receive** *keyword*
- **send** *keyword*
- **split-horizon** *boolean*
- **timers**
 - **flush** *number*
 - **timeout** *number*
 - **update** *number*
- **router-id** *string*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **end-dt4**
 - **value** *number*
 - **end-dt46**
 - **value** *number*
 - **end-dt6**
 - **value** *number*
- **micro-segment-locator** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **function**
 - **udt4**
 - **value** *number*
 - **udt46**
 - **value** *number*
 - **udt6**
 - **value** *number*

configure service vprn selective-fib

- **selective-fib** *boolean*
- **service-id** *number*
- **sfm-overload**
 - **holdoff-time** *number*
- **sgt-qos**
 - **dot1p**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dot1p** (*keyword | number*)
 - **dscp**
 - **application** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dscp** (*keyword | number*)
 - **dscp-map** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fc** *keyword*
- **snmp**
 - **access** *boolean*
 - **community** *string*
 - **access-permissions** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source-access-list** *reference*
 - **version** *keyword*
- **source-address**
 - **ipv4** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *string*
 - **ipv6** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **spoke-sdp** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **static-routes**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hold-down**
 - **initial** *number*
 - **max-value** *number*
 - **multiplier** *number*
 - **route** (*ipv4-prefix | ipv6-prefix*) **route-type** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **backup-tag** *number*
 - **blackhole**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **description** *string*
 - **generate-icmp** *boolean*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*

configure service vprn static-routes route blackhole tag

- **tag** *number*
- **community** *string*
- **grt**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **metric** *number*
 - **preference** *number*
- **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *string*
 - **destination-class** *number*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **qos**
 - **forwarding-class** *keyword*
 - **priority** *keyword*
 - **source-class** *number*
 - **tag** *number*
- **interface** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **drop-count** *number*
 - **interval** *number*
 - **log** *boolean*
 - **padding-size** *number*
 - **description** *string*
 - **destination-class** *number*
 - **load-balancing-weight** *number*
 - **metric** *number*
 - **preference** *number*
 - **prefix-list**
 - **flag** *keyword*
 - **name** *reference*
 - **qos**
 - **forwarding-class** *keyword*
 - **priority** *keyword*
 - **source-class** *number*
 - **tag** *number*
- **ipsec-tunnel** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **community** *string*
 - **description** *string*

configure service vprn static-routes route ipsec-tunnel destination-class

```

- destination-class number
- metric number
- preference number
- qos
  - forwarding-class keyword
  - priority keyword
- source-class number
- tag number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-next-hop
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - bfd-liveness boolean
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - load-balancing-weight number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
  - source-class number
  - tag number
  - validate-next-hop boolean
  - tag number
- subscriber-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fwd-service reference
  - fwd-subscriber-interface reference
  - group-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bonding-parameters
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection number
      - apply-groups reference
      - apply-groups-exclude reference
    - service string
  - fpe reference
  - multicast
    - connection (number | keyword)
- brg
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure service vprn subscriber-interface group-interface brg authenticated-brg-only

- **authenticated-brg-only** *boolean*
- **default-brg-profile** *reference*
- **cflowd-parameters**
 - **sampling** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **direction** *keyword*
 - **sample-profile** (*keyword* | *number*)
 - **type** *keyword*
- **data-trigger**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **description** *string*
- **dynamic-routes-track-srrp**
 - **hold-time** *number*
- **gtp-parameters**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe** *reference*
- **gx-policy** *reference*
- **ingress**
 - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipoe-linking**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gratuitous-router-advertisement** *boolean*
 - **shared-circuit-id** *boolean*
- **ipoe-session**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **force-auth**
 - **cid-change** *boolean*
 - **rid-change** *boolean*
 - **ipoe-session-policy** *reference*
 - **min-auth-interval** (*keyword* | *number*)
 - **radius-session-timeout** *keyword*
 - **sap-session-limit** *number*
 - **session-limit** *number*
 - **stateless-redundancy** *boolean*
 - **user-db** *reference*
- **ipv4**
 - **arp-host**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **host-limit** *number*
 - **min-auth-interval** *number*
 - **sap-host-limit** *number*
 - **bfd**
 - **admin-state** *keyword*
 - **echo-receive** *number*
 - **multiplier** *number*
 - **receive** *number*
 - **transmit-interval** *number*
 - **type** *keyword*
 - **dhcp**
 - **admin-state** *keyword*

configure service vprn subscriber-interface group-interface ipv4 dhcp apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **client-applications**
 - **dhcp** *boolean*
 - **ppp** *boolean*
- **description** *string*
- **filter** *reference*
- **gi-address** *string*
- **lease-populate**
 - **l2-header**
 - **mac** *string*
 - **max-leases** *number*
- **match-circuit-id** *boolean*
- **offer-selection**
 - **client-mac**
 - **discover-delay** *number*
 - **mac-address** *keyword*
 - **discover-delay** *number*
 - **server** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **discover-delay** *number*
- **option-82**
 - **action** *keyword*
 - **circuit-id**
 - **ascii-tuple**
 - **ifindex**
 - **none**
 - **sap-id**
 - **vlan-ascii-tuple**
 - **remote-id**
 - **ascii-string** *string*
 - **mac**
 - **none**
 - **vendor-specific-option**
 - **client-mac-address** *boolean*
 - **pool-name** *boolean*
 - **sap-id** *boolean*
 - **service-id** *boolean*
 - **string** *string*
 - **system-id** *boolean*
- **proxy-server**
 - **admin-state** *keyword*
 - **emulated-server** *string*
 - **lease-time**
 - **radius-override** *boolean*
 - **value** *number*
- **python-policy** *reference*
- **relay-proxy**
 - **release-update-src-ip** *boolean*
 - **siaddr-override** *string*
- **release-include-gi-address** *boolean*
- **server** *string*
- **src-ip-addr** *keyword*
- **trusted** *boolean*
- **user-db** *reference*
- **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*

configure service vprn subscriber-interface group-interface ipv4 icmp redirects number

```

    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
    - use-matching-address boolean
  - unreachableables
    - admin-state keyword
    - number number
    - seconds number
  - ignore-df-bit boolean
  - neighbor-discovery
    - local-proxy-arp boolean
    - populate boolean
    - proxy-arp-policy reference
    - remote-proxy-arp boolean
    - timeout number
  - qos-route-lookup keyword
  - urpf-check
    - mode keyword
- ipv6
  - allow-multiple-wan-addresses boolean
  - auto-reply
    - neighbor-solicitation boolean
    - router-solicitation boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp6
    - apply-groups reference
    - apply-groups-exclude reference
    - filter reference
    - option
      - apply-groups reference
      - apply-groups-exclude reference
      - interface-id
        - ascii-tuple
        - if-index
        - sap-id
        - string string
      - remote-id boolean
    - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)

```

configure service vprn subscriber-interface group-interface ipv6 dhcp6 python-policy

```

- python-policy reference
- relay
  - admin-state keyword
  - advertise-selection
    - client-mac
      - mac-address keyword
      - preference-option
        - value number
      - solicit-delay number
    - preference-option
      - value number
    - server string
      - apply-groups reference
      - apply-groups-exclude reference
      - preference-option
        - value number
      - solicit-delay number
    - solicit-delay number
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
- snooping
  - admin-state keyword
- user-db reference
- user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdns-lifetime (number | keyword)
  - managed-configuration boolean
  - mtu (number | keyword)
  - other-stateful-configuration boolean
  - reachable-time number
  - retransmit-timer number
  - router-lifetime (number | keyword)
- prefix-options
  - autonomous boolean
  - on-link boolean
  - preferred-lifetime (number | keyword)
  - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword

```

configure service vpm subscriber-interface group-interface ipv6 router-solicit apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **inactivity-timer** (*number* | *keyword*)
- **min-auth-interval** *number*
- **user-db** *reference*
- **urpf-check**
 - **mode** *keyword*
- **local-address-assignment**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4**
 - **client-applications**
 - **ipoe** *boolean*
 - **ppp** *boolean*
 - **default-pool** *string*
 - **server** *reference*
 - **ipv6**
 - **client-applications**
 - **ipoe-slaac** *boolean*
 - **ipoe-wan** *boolean*
 - **ppp-slaac** *boolean*
 - **server** *reference*
- **mac** *string*
- **nasreq-auth-policy** *reference*
- **oper-up-while-empty** *boolean*
- **pppoe**
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **dhcp-client**
 - **client-id** *keyword*
 - **policy** *reference*
 - **python-policy** *reference*
 - **sap-session-limit** *number*
 - **session-limit** *number*
 - **user-db** *reference*
- **radius-auth-policy** *reference*
- **redundant-interface** *reference*
- **sap** *string*
 - **accounting-policy** *reference*
 - **admin-state** *keyword*
 - **anti-spoof** *keyword*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **calling-station-id** *string*
 - **collect-stats** *boolean*
 - **cpu-protection**
 - **eth-cfm-monitoring**
 - **aggregate**
 - **car**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
 - **default-host**
 - **ipv4** *reference* **prefix-length** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **next-hop** *string*
 - **ipv6** *string* **prefix-length** *number*
 - **apply-groups** *reference*

configure service vprn subscriber-interface group-interface sap default-host ipv6 apply-groups-exclude

```

    - apply-groups-exclude reference
      - next-hop string
- description string
- dist-cpu-protection reference
- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy
      - policy-name reference
    - qinq-mark-top-only boolean
    - sap-egress
      - policy-name reference
    - scheduler-policy
      - policy-name reference
- eth-cfm
  - apfly-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais boolean
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - ccm boolean
    - ccm-ltm-priority number
    - ccm-padding-size number
    - csf
      - multiplier decimal-number
    - description string
    - eth-test
      - bit-error-threshold number
      - test-pattern
        - crc-tlv boolean
        - pattern keyword
    - fault-propagation keyword
    - grace
      - eth-ed
        - max-rx-defect-window number
        - priority number
        - rx-eth-ed boolean
        - tx-eth-ed boolean
      - eth-vsm-grace
        - rx-eth-vsm-grace boolean
        - tx-eth-vsm-grace boolean
    - low-priority-defect keyword
    - one-way-delay-threshold number
    - sqlch-ingress-levels number
  - fwd-wholesale
    - pppoe-service reference
  - host-admin-state keyword

```

configure service vprn subscriber-interface group-interface sap host-lockout-policy

```

- host-lockout-policy reference
- igmp-host-tracking
- apply-groups reference
- apply-groups-exclude reference
- expiry-time number
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- router-alert-check boolean
- ingress
- filter
  - ip reference
  - ipv6 reference
- qos
  - match-qinq-dot1p keyword
  - policer-control-policy
    - policy-name reference
  - sap-ingress
    - policy-name reference
    - queuing-type keyword
  - scheduler-policy
    - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference
  - cpe-check
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
    - drop-count number
    - failed-action
      - metric number
      - preference number
      - tag number
      - withdraw boolean
    - interval number
    - log boolean
    - padding-size number
    - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
    - timeout number
  - metric number
  - preference number
  - tag number

```

configure service vprn subscriber-interface group-interface sap static-host ipv4 rip-policy

```

    - rip-policy reference
    - shcv
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - ipv6 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - mac-linking string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
      - cpe-check
        - apply-groups reference
        - apply-groups-exclude reference
        - destination-ip-address (ipv4-address-no-zone | ipv6-address-no-
no-zone)
          - drop-count number
          - failed-action
            - metric number
            - preference number
            - tag number
            - withdraw boolean
          - interval number
          - log boolean
          - padding-size number
          - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
            - timeout number
            - metric number
            - preference number
            - tag number
          - retail-svc-id number
    - shcv
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - string string
      - use-sap-id
  - mac-learning
    - data-triggered boolean
    - single-mac boolean
  - sub-sla-mgmt
    - admin-state keyword
    - defaults
      - app-profile reference
      - int-dest-id
        - string string
        - top-q-tag
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - sap-id
        - string string
  - single-sub-parameters

```

configure service vprn subscriber-interface group-interface sap sub-sla-mgmt single-sub-parameters non-sub-traffic

```

    - non-sub-traffic
      - app-profile reference
      - sla-profile reference
      - sub-profile reference
      - subscriber-id string
      - profiled-traffic-only boolean
    - sub-ident-policy reference
    - subscriber-limit (keyword | number)
  - sap-parameters
    - anti-spoof keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - sub-sla-mgmt
      - defaults
        - app-profile reference
        - sla-profile reference
        - sub-profile reference
        - subscriber-id
          - auto-id
          - string string
      - sub-ident-policy reference
    - shcv-policy reference
    - shcv-policy-ipv4 reference
    - shcv-policy-ipv6 reference
    - srrp number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness
      - apply-groups reference
      - apply-groups-exclude reference
      - dest-ip string
      - interface-name string
      - service-name string
    - description string
    - gw-mac string
    - keep-alive-interval number
    - message-path reference
    - monitor-oper-group
      - group-name reference
      - priority-step number
    - one-garp-per-sap boolean
    - policy reference
    - preempt boolean
    - priority number
    - send-fib-population-packets keyword
    - suppress-aa-sub boolean
    - tos-marking-state keyword
    - type keyword
  - wlan-gw
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - purpose
        - xconnect boolean
    - gateway-router string
    - group-encryption
      - encryption-keygroup-inbound reference
      - encryption-keygroup-outbound reference
    - l2-ap

```

configure service vprn subscriber-interface group-interface wlan-gw l2-ap access-point

```

- access-point string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - encap-type keyword
  - epipe-sap-template reference
- auto-sub-id-fmt keyword
- default-encap-type keyword
- lanext
  - max-bd number
- learn-ap-mac
  - delay-auth boolean
- mobility
  - hold-time number
  - inter-tunnel-type boolean
  - inter-vlan boolean
  - trigger
    - control boolean
    - data boolean
    - iapp boolean
- oper-down-on-group-degrade boolean
- tcp-mss-adjust number
- tunnel-egress-qos
  - admin-state keyword
  - agg-rate-limit (number | keyword)
  - granularity keyword
  - hold-time (number | keyword)
  - multi-client-only boolean
  - qos reference
  - scheduler-policy reference
- tunnel-encaps
  - learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - hold-time number
    - local
      - coa-policy reference
      - default-ue-state keyword
    - on-control-plane boolean
    - policy reference
    - vlan-mismatch-timeout number
  - data-triggered-ue-creation
    - admin-state keyword
    - arp boolean
    - create-proxy-cache-entry
      - mac-format string
      - proxy-server
        - name string
        - router-instance string
  - dhcp4
    - admin-state keyword
    - dns string
    - l2-aware-ip-address (ipv4-unicast-address | keyword)
    - lease-time
      - active number
      - initial number
    - nbns string
  - dhcp6
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - preferred-lifetime

```


configure service vprn subscriber-interface group-interface wlan-gw vlan-range dhcp6 preferred-lifetime active

```

    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- dsm
  - accounting-policy reference
  - accounting-update
    - interval number
  - admin-state keyword
  - application-assurance
    - accounting-statistics boolean
    - profile reference
    - url-parameter string
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - policer reference
  - ingress
    - ip-filter reference
    - policer reference
    - soft-quota-exhausted-filter reference
  - one-time-redirect
    - port number
    - url string
  - volume-quota-direction keyword
- dynamic-service boolean
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assistive-address-resolution boolean
    - bd-mac-prefix string
    - mac-translation boolean

```

configure service vprn subscriber-interface group-interface wlan-gw vlan-range vrgw lanext network

- **network**
 - **admin-state** *keyword*
 - **max-mac** *number*
 - **policer** *reference*
- **xconnect**
 - **accounting**
 - **mobility-updates** *boolean*
 - **policy** *reference*
 - **update-interval** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **wlan-gw-group** *reference*
- **wpp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **initial**
 - **app-profile** *reference*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **lease-time** *number*
 - **portal**
 - **name** *string*
 - **portal-group** *reference*
 - **router-instance** *string*
 - **restore-to-initial-on-disconnect** *boolean*
 - **triggered-hosts** *boolean*
 - **user-db** *reference*
- **hold-time**
 - **ipv4**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
 - **ipv6**
 - **down**
 - **init-only** *boolean*
 - **seconds** *number*
 - **up**
 - **seconds** *number*
- **ipoe-linking**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gratuitous-router-advertisement** *boolean*
- **ipoe-session**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **session-limit** *number*
- **ipv4**
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gateway** *string*
 - **holdup-time** *number*
 - **populate-host-routes** *boolean*
 - **prefix-length** *number*
 - **track-srrp** *number*
 - **allow-unmatching-subnets** *boolean*
 - **arp-host**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure service vprn subscriber-interface ipv4 arp-host host-limit

```

- host-limit number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number
- type keyword
- default-dns string
- dhcp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- client-applications
- dhcp boolean
- ppp boolean
- description string
- gi-address string
- lease-populate
- max-leases number
- offer-selection
- client-mac
- discover-delay number
- mac-address keyword
- discover-delay number
- server string
- apply-groups reference
- apply-groups-exclude reference
- discover-delay number
- option-82
- vendor-specific-option
- client-mac-address boolean
- sap-id boolean
- service-id boolean
- string string
- system-id boolean
- proxy-server
- admin-state keyword
- emulated-server string
- lease-time
- radius-override boolean
- value number
- python-policy reference
- relay-proxy
- release-update-src-ip boolean
- siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- virtual-subnet boolean
- export-host-routes boolean
- unnumbered
- ip-address string
- ip-int-name string
- ipv6
- address string
- apply-groups reference
- apply-groups-exclude reference
- host-type keyword
- prefix-length number
- allow-multiple-wan-addresses boolean
- allow-unmatching-prefixes boolean
- bfd
- admin-state keyword

```

configure service vprn subscriber-interface ipv6 bfd echo-receive

```

- echo-receive number
- multiplier number
- receive number
- transmit-interval number
- type keyword
- default-dns string
- delegated-prefix-length (number | keyword)
- dhcp6
  - apply-groups reference
  - apply-groups-exclude reference
  - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
  - python-policy reference
  - relay
    - admin-state keyword
    - advertise-selection
      - client-mac
        - mac-address keyword
        - preference-option
          - value number
        - solicit-delay number
      - preference-option
        - value number
      - server string
        - apply-groups reference
        - apply-groups-exclude reference
        - preference-option
          - value number
        - solicit-delay number
      - solicit-delay number
    - client-applications
      - dhcp boolean
      - ppp boolean
    - description string
    - lease-split
      - admin-state keyword
      - valid-lifetime number
    - link-address string
    - server string
    - source-address string
- ipoe-bridged-mode boolean
- link-local-address
  - address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - holdup-time number
  - host-type keyword

```

configure service vprn subscriber-interface ipv6 prefix track-srrp

- **track-srrp** *number*
- **router-advertisements**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **force-mcast** *keyword*
 - **max-advertisement-interval** *number*
 - **min-advertisement-interval** *number*
 - **options**
 - **current-hop-limit** *number*
 - **dns**
 - **include-rdnss** *boolean*
 - **rdnss-lifetime** (*number* | *keyword*)
 - **managed-configuration** *boolean*
 - **mtu** (*number* | *keyword*)
 - **other-stateful-configuration** *boolean*
 - **reachable-time** *number*
 - **retransmit-timer** *number*
 - **router-lifetime** (*number* | *keyword*)
 - **prefix-options**
 - **autonomous** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*number* | *keyword*)
 - **valid-lifetime** (*number* | *keyword*)
- **router-solicit**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timer** (*number* | *keyword*)
- **local-address-assignment**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv4**
 - **client-applications**
 - **ppp** *boolean*
 - **default-pool** *string*
 - **server** *reference*
 - **ipv6**
 - **client-applications**
 - **ipoe-slaac** *boolean*
 - **ipoe-wan** *boolean*
 - **ppp-slaac** *boolean*
 - **server** *reference*
- **pppoe**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **session-limit** *number*
- **private-retail-subnets** *boolean*
- **wan-mode** *keyword*
- **wlan-gw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pool-manager**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp6-client**
 - **dhcpv4-nat**
 - **admin-state** *keyword*
 - **link-address** *string*
 - **pool-name** *string*
 - **ia-na**
 - **admin-state** *keyword*
 - **link-address** *string*

configure service vprn subscriber-interface wlan-gw pool-manager dhcp6-client ia-na pool-name

```

    - pool-name string
    - lease-query
      - max-retries number
    - servers string
    - slaac
      - admin-state keyword
      - link-address string
      - pool-name string
    - source-ip (keyword | ipv6-address)
  - watermarks
    - high number
    - low number
  - wlan-gw-group reference
- redundancy
  - admin-state keyword
  - export string
  - monitor string
- subscriber-mgmt
  - apply-groups reference
  - apply-groups-exclude reference
  - dhcpv4
    - apply-groups reference
    - apply-groups-exclude reference
    - routed-subnet-transparent-forward boolean
  - multi-chassis-shunt-id number
  - up-resiliency
    - monitor-oper-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - health-drop number
- ttl-propagate
  - local keyword
  - transit keyword
- twamp-light
  - apply-groups reference
  - apply-groups-exclude reference
- reflector
  - admin-state keyword
  - allow-ipv6-udp-checksum-zero boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - prefix (ipv4-prefix | ipv6-prefix)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - type keyword
  - udp-port number
- video-interface string
  - accounting-policy reference
  - address string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - channel string source string
    - apply-groups reference
    - apply-groups-exclude reference
  - channel-name string
  - description string
  - scte35-action keyword
  - zone-channel string zone-source string
    - adi-channel-name string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vprn video-interface cpu-protection

- **cpu-protection** *reference*
- **description** *string*
- **multicast-service** *number*
- **output-format** *keyword*
- **video-sap**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **egress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter**
 - **ip** *reference*
 - **qos**
 - **policy-name** *reference*
 - **ingress**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **filter**
 - **ip** *reference*
 - **qos**
 - **policy-name** *reference*
 - **video-group-id** *reference*
- **vprn-type** *keyword*
- **vxlan**
 - **tunnel-termination** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fpe-id** *reference*
- **weighted-ecmp** *keyword*
- **wlan-gw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **distributed-subscriber-mgmt**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ipv6-tcp-mss-adjust** *number*
 - **mobility-triggered-accounting**
 - **admin-state** *keyword*
 - **hold-down** *number*
 - **include-counters** *boolean*
 - **xconnect**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel-source-ip** *string*
 - **wlan-gw-group** *reference*
- **wpp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **portal** *string*
 - **ack-auth-retry-count** *number*
 - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ntf-logout-retry-count** *number*
 - **port-format** *keyword*
 - **retry-interval** *number*
 - **secret** *string*
 - **version** *number*

3.43.1 service command descriptions

service

| | |
|------------|----------------------------------|
| Synopsis | Enter the service context |
| Context | configure service |
| Tree | service |
| Introduced | 16.0.R1 |
| Platforms | All |

cpipe [[service-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the cpipe list instance |
| Context | configure service cpipe string |
| Tree | cpipe |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[service-name] *string*

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service cpipe string |
| Tree | cpipe |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the service |
| Context | configure service cpipe string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID
 Context **configure** *service cpipe string customer reference*
 Tree *customer*
 Reference **configure** *service customer string*
 Notes This element is mandatory.
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** *service cpipe string description string*
 Tree *description*
 String Length 1 to 80
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

endpoint [*name*] *string*

Synopsis Enter the **endpoint** list instance
 Context **configure** *service cpipe string endpoint string*
 Tree *endpoint*
 Max. Instances 2
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[name] *string*

| | |
|---------------|--|
| Synopsis | Service endpoint name |
| Context | configure <i>service cpipe string endpoint string</i> |
| Tree | <i>endpoint</i> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure <i>service cpipe string endpoint string description string</i> |
| Tree | <i>description</i> |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

hold-time-active *number*

| | |
|------------|---|
| Synopsis | Time to hold the active state before entering standby when a local MC-LAG SAP goes down |
| Context | configure <i>service cpipe string endpoint string hold-time-active number</i> |
| Tree | <i>hold-time-active</i> |
| Range | 1 to 60 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

revert-time (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint |
| Context | configure <i>service cpipe string endpoint string revert-time (number keyword)</i> |
| Tree | <i>revert-time</i> |

| | |
|------------|--|
| Range | 1 to 600 |
| Default | immediate |
| Units | seconds |
| Options | never, immediate |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

sap [[sap-id](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the sap list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> |
| Tree | sap |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[sap-id] *string*

| | |
|---------------|---|
| Synopsis | SAP ID |
| Context | configure service cpipe <i>string</i> sap <i>string</i> |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Accounting policy |
| Context | configure service cpipe <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SAP |
| Context | configure service cpipe string sap string admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cem

| | |
|------------|---|
| Synopsis | Enter the cem context |
| Context | configure service cpipe string sap string cem |
| Tree | cem |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

packet

| | |
|------------|---|
| Synopsis | Enter the packet context |
| Context | configure service cpipe string sap string cem packet |
| Tree | packet |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

jitter-buffer *number*

| | |
|------------|--|
| Synopsis | Jitter buffer size |
| Context | configure service cpipe string sap string cem packet jitter-buffer <i>number</i> |
| Tree | jitter-buffer |
| Range | 1 to 250 |
| Units | milliseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

payload-size *number*

| | |
|------------|--|
| Synopsis | Size of payload packets transmitted to PSN by CEM SAP |
| Context | configure service cpipe string sap string cem packet payload-size <i>number</i> |
| Tree | payload-size |
| Range | 16 to 1514 |
| Units | bytes |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

report-alarm

| | |
|------------|---|
| Synopsis | Enter the report-alarm context |
| Context | configure service cpipe string sap string cem report-alarm |
| Tree | report-alarm |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

buffer-overflow *boolean*

| | |
|------------|--|
| Synopsis | Report alarm for buffer overflow |
| Context | configure service cpipe string sap string cem report-alarm buffer-overflow <i>boolean</i> |
| Tree | buffer-overflow |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

buffer-underflow *boolean*

| | |
|------------|---|
| Synopsis | Report alarm for buffer underflow |
| Context | configure service cpipe string sap string cem report-alarm buffer-underflow <i>boolean</i> |
| Tree | buffer-underflow |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

malformed-packets *boolean*

| | |
|------------|--|
| Synopsis | Report alarm for malformed packets |
| Context | configure service cpipe string sap string cem report-alarm malformed-packets <i>boolean</i> |
| Tree | malformed-packets |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

packet-loss *boolean*

| | |
|------------|--|
| Synopsis | Report remote peer is currently in packet loss status |
| Context | configure service cpipe string sap string cem report-alarm packet-loss <i>boolean</i> |
| Tree | packet-loss |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

remote-fault *boolean*

| | |
|------------|---|
| Synopsis | Report remote TDM interface is currently not in service |
| Context | configure service cpipe string sap string cem report-alarm remote-fault <i>boolean</i> |
| Tree | remote-fault |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

remote-packet-loss *boolean*

| | |
|------------|---|
| Synopsis | Report remote peer is currently in packet loss status |
| Context | configure service cpipe string sap string cem report-alarm remote-packet-loss <i>boolean</i> |
| Tree | remote-packet-loss |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

remote-rdi *boolean*

| | |
|------------|---|
| Synopsis | Report remote TDM interface is currently in RDI status |
| Context | configure service cpipe string sap string cem report-alarm remote-rdi <i>boolean</i> |
| Tree | remote-rdi |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

stray-packets *boolean*

| | |
|------------|--|
| Synopsis | Report alarm for stray packets |
| Context | configure service cpipe string sap string cem report-alarm stray-packets <i>boolean</i> |
| Tree | stray-packets |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rtp-header *boolean*

| | |
|------------|--|
| Synopsis | Use RTP header for transmitted packets to the PSN |
| Context | configure service cpipe string sap string cem rtp-header <i>boolean</i> |
| Tree | rtp-header |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect accounting statistics |
| Context | configure service cpipe string sap string collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service cpipe <i>string</i> sap <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dist-cpu-protection *reference*

| | |
|------------|---|
| Synopsis | Distributed CPU protection policy for SAP |
| Context | configure service cpipe <i>string</i> sap <i>string</i> dist-cpu-protection <i>reference</i> |
| Tree | dist-cpu-protection |
| Reference | configure system security dist-cpu-protection <i>policy</i> <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress |
| Tree | egress |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

agg-rate

| | |
|------------|--|
| Synopsis | Enter the agg-rate context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate |
| Tree | agg-rate |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

adaptation-rule *keyword*

| | |
|------------|---|
| Synopsis | Adaptation rule to compute the operational PIR value when an aggregate shaper is used |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i> |
| Tree | adaptation-rule |
| Default | closest |
| Options | max, min, closest |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|--|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rate *number*

| | |
|----------|---|
| Synopsis | Enforced aggregate rate for all queues |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |

| | |
|------------|--|
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service cpipe string sap string egress qos |
| Tree | qos |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service cpipe string sap string egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service cpipe string sap string egress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

root

| | |
|----------|---|
| Synopsis | Enter the root context |
| Context | configure service cpipe string sap string egress qos policer-control-policy overrides root |
| Tree | root |

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)
[max-rate](#) (*number* | *keyword*)
 Tree [max-rate](#)
 Range 1 to 6400000000
 Options max
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)
[priority-mbs-thresholds](#)
 Tree [priority-mbs-thresholds](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)
[priority-mbs-thresholds](#) [min-thresh-separation](#) (*number* | *keyword*)
 Tree [min-thresh-separation](#)
 Range 0 to 16777216
 Units bytes
 Options auto
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

priority [*priority-level*] *number*

| | |
|------------|---|
| Synopsis | Enter the priority list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

[priority-level] *number*

| | |
|------------|---|
| Synopsis | Priority level |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

mbs-contribution (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

policy-name *reference*

| | |
|----------|--|
| Synopsis | Policer control policy name |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |

| | |
|------------|---|
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

sap-egress

| | |
|------------|--|
| Synopsis | Enter the sap-egress context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policer [[policer-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

[[policer-id](#)] *reference*

| | |
|----------|---|
| Synopsis | Policer unique ID |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |

| | |
|------------|--|
| Reference | configure qos sap-egress <i>string</i> policer <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

packet-byte-offset *number*

| | |
|----------|--|
| Synopsis | Packet size modification for policing information |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -64 to 31 |

| | |
|------------|---|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

percent-rate

| | |
|------------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir decimal-number

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir decimal-number

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

rate

| | |
|----------|-------------------------------|
| Synopsis | Enter the rate context |
|----------|-------------------------------|

| | |
|------------|---|
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir (number | keyword)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference rate cir (number keyword) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir (number | keyword)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference rate pir (number keyword) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

stat-mode keyword

| | |
|----------|--|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service cpipe string sap string egress qos sap-egress overrides policer reference stat-mode keyword |

| | |
|------------|--|
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

queue [[queue-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[queue-id] *reference*

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-egress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

adaptation-rule

| | |
|------------|---|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
reference adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
reference adaptation-rule pir keyword |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

avg-frame-overhead decimal-number

| | |
|------------|---|
| Synopsis | Average packet-to-frame encapsulation overhead |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
reference avg-frame-overhead decimal-number |
| Tree | avg-frame-overhead |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

burst-limit (number | keyword)

| | |
|----------|--|
| Synopsis | Explicit shaping burst size for the queue |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
reference burst-limit (number keyword) |
| Tree | burst-limit |
| Range | 1 to 14000000 |

| | |
|------------|--|
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
<i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

drop-tail

| | |
|------------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
<i>reference</i> drop-tail |
| Tree | drop-tail |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low

| | |
|------------|--|
| Synopsis | Enter the low context |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue
<i>reference</i> drop-tail low |
| Tree | low |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

hs-class-weight *number*

| | |
|------------|--|
| Synopsis | Class weight override for the queue |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wred-queue

| | |
|------------|--|
| Synopsis | Enter the hs-wred-queue context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue |
| Tree | hs-wred-queue |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

policy *reference*

| | |
|-----------|--|
| Synopsis | Slope policy applied to the HSQ queue group queue |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue policy <i>reference</i> |
| Tree | policy |
| Reference | configure qos slope-policy <i>string</i> |

Introduced 20.10.R1
 Platforms 7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference **hs-wrr-weight** *number*
 Tree [hs-wrr-weight](#)
 Range 1 to 127
 Default 1
 Introduced 20.10.R1
 Platforms 7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis MBS
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference **mbs** (*number* | *keyword*)
 Tree [mbs](#)
 Range 0 to 1073741824
 Units bytes
 Options auto
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference **monitor-queue-depth**
 Tree [monitor-queue-depth](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fast-polling *boolean*

| | |
|-------------|---|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Description | When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to false , fast queue polling is not enabled. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

violation-threshold *decimal-number*

| | |
|-------------|---|
| Synopsis | Threshold for queue depth before violation is raised |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i> |
| Tree | violation-threshold |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered. |
| Range | 0.01 to 99.99 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference parent |
| Tree | parent |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir-weight *number*

| | |
|----------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
|----------|---|

| | |
|------------|---|
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference parent cir-weight number |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

weight number

| | |
|------------|---|
| Synopsis | PIR parameter that overrides parent for queue group |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference parent weight number |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir decimal-number

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir *decimal-number*

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|----------|----------|
| Synopsis | PIR rate |
|----------|----------|

| | |
|------------|---|
| Context | configure service cpipe string sap string egress qos sap-egress overrides queue reference rate pir (<i>number keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service cpipe string sap string egress qos sap-egress policy-name reference |
| Tree | policy-name |
| Reference | configure qos sap-egress string |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service cpipe string sap string egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service cpipe string sap string egress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

scheduler [[scheduler-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the scheduler list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides
scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string parent cir-weight number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string parent weight number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string rate*

Tree [rate](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** *service cpipe string sap string egress qos scheduler-policy overrides scheduler string rate cir (number | keyword)*

Tree [cir](#)

| | |
|------------|--|
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service cpipe <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

endpoint *reference*

| | |
|------------|--|
| Synopsis | Endpoint name |
| Context | configure service cpipe <i>string</i> sap <i>string</i> endpoint <i>reference</i> |
| Tree | endpoint |
| Reference | configure service cpipe <i>string</i> endpoint <i>string</i> |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ingress

Synopsis Enter the **ingress** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#)

Tree [ingress](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis Enter the **qos** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#)

Tree [qos](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#)

Tree [policer-control-policy](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

overrides

Synopsis Enable the **overrides** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#)

Tree [overrides](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

root

| | |
|------------|---|
| Synopsis | Enter the root context |
| Context | configure service cpipe string sap string ingress qos policer-control-policy overrides
root |
| Tree | root |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service cpipe string sap string ingress qos policer-control-policy overrides
root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service cpipe string sap string ingress qos policer-control-policy overrides
root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

min-thresh-separation (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service cpipe string sap string ingress qos policer-control-policy overrides
root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |

| | |
|------------|---|
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority [[priority-level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

[priority-level] *number*

| | |
|------------|--|
| Synopsis | Priority level |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

mbs-contribution (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

sap-ingress

| | |
|------------|--|
| Synopsis | Enter the sap-ingress context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress |
| Tree | sap-ingress |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ip-criteria

| | |
|------------|--|
| Synopsis | Enter the ip-criteria context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria |
| Tree | ip-criteria |
| Introduced | 20.10.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

activate-entry-tag *number*

| | |
|------------|---|
| Synopsis | Tag ID activated for IPv4 criteria |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i> |
| Tree | activate-entry-tag |
| Range | 1 to 255 |
| Introduced | 20.10.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv6-criteria

| | |
|------------|--|
| Synopsis | Enter the ipv6-criteria context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ipv6-criteria |
| Tree | ipv6-criteria |
| Introduced | 20.10.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

activate-entry-tag *number*

| | |
|------------|---|
| Synopsis | Tag ID activated for IPv6 criteria |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag <i>number</i> |
| Tree | activate-entry-tag |
| Range | 1 to 255 |
| Introduced | 20.10.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policer [[policer-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

[policer-id] reference

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> |
| Tree | policer |
| Reference | configure qos sap-ingress <i>string</i> policer <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

cbs (number | keyword)

| | |
|------------|---|
| Synopsis | CBS |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

mbs (number | keyword)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet size modification for policing information |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -32 to 31 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir *decimal-number*

| | |
|----------|---|
| Synopsis | PIR percent rate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |

| | |
|------------|---|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides policer
reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides policer
reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides policer
reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

stat-mode *keyword*

| | |
|------------|--|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS |

queue [[queue-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the queue list instance |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference |
| Tree | queue |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[queue-id] *reference*

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

adaptation-rule

| | |
|----------|---|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference adaptation-rule |

| | |
|------------|--|
| Tree | adaptation-rule |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
<i>reference</i> adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
<i>reference</i> adaptation-rule pir keyword |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cbs (number | keyword)

| | |
|------------|---|
| Synopsis | CBS |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
<i>reference</i> cbs (number keyword) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

drop-tail

| | |
|------------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
reference drop-tail |
| Tree | drop-tail |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low

| | |
|------------|---|
| Synopsis | Enter the low context |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
reference drop-tail low |
| Tree | low |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mbs (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | MBS |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue
reference mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |

| | |
|------------|--|
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

monitor-queue-depth

| | |
|------------|---|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fast-polling *boolean*

| | |
|------------|---|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference parent |
| Tree | parent |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir-weight *number*

| | |
|----------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
|----------|---|

| | |
|------------|---|
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference parent cir-weight number |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

weight *number*

| | |
|------------|---|
| Synopsis | PIR parameter that overrides parent for queue group |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference parent weight number |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir *decimal-number*

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir *decimal-number*

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service cpipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|----------|----------|
| Synopsis | PIR rate |
|----------|----------|

| | |
|------------|---|
| Context | configure service cpipe string sap string ingress qos sap-ingress overrides queue reference rate pir (<i>number keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID |
| Context | configure service cpipe string sap string ingress qos sap-ingress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress string |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

queuing-type *keyword*

| | |
|------------|--|
| Synopsis | Queuing type |
| Context | configure service cpipe string sap string ingress qos sap-ingress queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e |

scheduler-policy

| | |
|------------|---|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service cpipe string sap string ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service cpipe string sap string ingress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

scheduler [[scheduler-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the scheduler list instance |
| Context | configure service cpipe string sap string ingress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[[scheduler-name](#)] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service cpipe string sap string ingress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

parent

Synopsis Enter the **parent** context

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **parent**

Tree [parent](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **parent** **cir-weight** *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **parent** **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rate

Synopsis Enter the **rate** context

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **rate**

Tree [rate](#)

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) **cir** (*number* | *keyword*)
 Tree [cir](#)
 Range 0 to 6400000000
 Units kilobps
 Options sum, max
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pir (*number* | *keyword*)

Synopsis PIR at which the queue is to operate
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) **pir** (*number* | *keyword*)
 Tree [pir](#)
 Range 1 to 6400000000
 Units kilobps
 Options max
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis Scheduler policy name
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos](#) [scheduler-policy](#) *string*
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lag

| | |
|------------|---|
| Synopsis | Enter the lag context |
| Context | configure service cpipe <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multi-service-site *reference*

| | |
|------------|---|
| Synopsis | Multi service site name |
| Context | configure service cpipe <i>string</i> sap <i>string</i> multi-service-site <i>reference</i> |
| Tree | multi-service-site |
| Reference | configure service customer <i>string</i> multi-service-site <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service ID |
| Context | configure service cpipe <i>string</i> service-id <i>number</i> |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

service-mtu *number*

| | |
|----------|---|
| Synopsis | MTU size |
| Context | configure service cpipe <i>string</i> service-mtu <i>number</i> |
| Tree | service-mtu |
| Range | 1 to 9194 |

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

spoke-sdp [**sdp-bind-id**] *string*

Synopsis Enter the **spoke-sdp** list instance
 Context **configure** *service cpipe string spoke-sdp string*
 Tree *spoke-sdp*
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[sdp-bind-id] *string*

Synopsis SDP binding ID
 Context **configure** *service cpipe string spoke-sdp string*
 Tree *spoke-sdp*
 String Length 3 to 16
 Notes This element is part of a list key.
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service
 Context **configure** *service cpipe string spoke-sdp string admin-state keyword*
 Tree *admin-state*
 Default enable
 Options enable, disable
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bandwidth (*number* | *keyword*)

Synopsis Bandwidth that is reserved for this SDP binding
 Context **configure** *service cpipe string spoke-sdp string bandwidth (number | keyword)*

| | |
|------------|--|
| Tree | bandwidth |
| Range | 0 to 1000000000 |
| Default | 0 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

encap *keyword*

| | |
|------------|--|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i> |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bfd-template *reference*

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-template <i>reference</i> |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template <i>string</i> |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Use control word as part of packet encapsulation |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

qos

Synopsis Enter the **qos** context

Context **configure** [service cpipe](#) [string spoke-sdp](#) [string egress](#) **qos**

Tree [qos](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

network

Synopsis Enter the **network** context

Context **configure** [service cpipe](#) [string spoke-sdp](#) [string egress](#) **qos** [network](#)

Tree [network](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policy-name *reference*

Synopsis Network policy ID

Context **configure** [service cpipe](#) [string spoke-sdp](#) [string egress](#) **qos** [network](#) **policy-name** *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [network](#) *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service cpipe](#) [string spoke-sdp](#) [string egress](#) **qos** [network](#) **port-redirect-group**

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

group-name *reference*

| | |
|------------|---|
| Synopsis | Name of the egress port queue group |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

instance *number*

| | |
|------------|--|
| Synopsis | Queue-group instance ID |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

endpoint

| | |
|----------|-----------------------------------|
| Synopsis | Enter the endpoint context |
|----------|-----------------------------------|

| | |
|------------|---|
| Context | configure service cpipe string spoke-sdp string endpoint |
| Tree | endpoint |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

icb boolean



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Bind the SDP as the Inter-Chassis Backup (ICB) type |
| Context | configure service cpipe string spoke-sdp string endpoint icb boolean |
| Tree | icb |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

name reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Endpoint name to which SDP bind is attached |
| Context | configure service cpipe string spoke-sdp string endpoint name reference |
| Tree | name |
| Reference | configure service cpipe string endpoint string |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

precedence (number | keyword)

| | |
|----------|---|
| Synopsis | Precedence when multiple SDP binds are on one endpoint |
| Context | configure service cpipe string spoke-sdp string endpoint precedence (number keyword) |
| Tree | precedence |

| | |
|------------|--|
| Range | 1 to 4 |
| Default | 4 |
| Options | primary |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service cpipe string spoke-sdp string ingress |
| Tree | ingress |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service cpipe string spoke-sdp string ingress qos |
| Tree | qos |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service cpipe string spoke-sdp string ingress qos network |
| Tree | network |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fp-redirect-group

| | |
|----------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service cpipe string spoke-sdp string ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |

| | |
|------------|--|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

instance *number*

| | |
|------------|---|
| Synopsis | Instance of the forwarding-plane ingress Queue Group for this SDP binding |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Network policy ID |
| Context | configure service cpipe <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Ingress MPLS VC label to send packets to the far end |
| Context | configure <i>service cpipe string spoke-sdp string ingress vc-label number</i> |
| Tree | <i>vc-label</i> |
| Range | 1 to 1048575 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Designate as a test service |
| Context | configure <i>service cpipe string test boolean</i> |
| Tree | <i>test</i> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vc-switching *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use PW switching signaling for spoke SDPs in service |
| Context | configure <i>service cpipe string vc-switching boolean</i> |
| Tree | <i>vc-switching</i> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vc-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Circuit emulation service type |
| Context | configure <i>service cpipe string vc-type keyword</i> |
| Tree | <i>vc-type</i> |
| Options | satop-e1, satop-t1, cesopsn, cesopsn-cas |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VPN identifier for the service |
| Context | configure <i>service cpipe string vpn-id number</i> |
| Tree | <i>vpn-id</i> |
| Range | 1 to 2147483647 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

customer [*customer-name*] *string*

| | |
|------------|---|
| Synopsis | Enter the customer list instance |
| Context | configure <i>service customer string</i> |
| Tree | <i>customer</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[customer-name] *string*

| | |
|----------|-----------------------------|
| Synopsis | Customer name for a service |
|----------|-----------------------------|

| | |
|---------------|--|
| Context | configure service customer string |
| Tree | customer |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

contact string

| | |
|---------------|---|
| Synopsis | Service customer contact information |
| Context | configure service customer string contact string |
| Tree | contact |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

customer-id number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Customer ID |
| Context | configure service customer string customer-id number |
| Tree | customer-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service customer string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms All

multi-service-site [[multi-service-site-name](#)] *string*

Synopsis Enter the **multi-service-site** list instance
 Context **configure service customer** *string multi-service-site string*
 Tree [multi-service-site](#)
 Introduced 16.0.R1
 Platforms All

[multi-service-site-name] *string*

Synopsis Customer site name
 Context **configure service customer** *string multi-service-site string*
 Tree [multi-service-site](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

assignment

Synopsis Enter the **assignment** context
 Context **configure service customer** *string multi-service-site string assignment*
 Tree [assignment](#)
 Introduced 16.0.R1
 Platforms All

card *number*

Synopsis Multi-service-site assignment to the card slot
 Context **configure service customer** *string multi-service-site string assignment card number*
 Tree [card](#)
 Range 1 to 20
 Notes The following elements are part of a choice: **card**, **fpe**, or **port**.

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

fpe reference

| | |
|-------------|--|
| Synopsis | Multi-service-site assignment to the FPE object |
| Context | configure service customer string multi-service-site string assignment fpe reference |
| Tree | fpe |
| Description | <p>When configured to true, this command identifies the MSS assignment to an FPE object to allow the creation of a scheduling hierarchy used to control bandwidth over a set of PW SAPs belonging to multiple PW ports. These PW ports must be associated with the same FPE to which MSS is assigned.</p> <p>When configured to false, this command has no effect and returns no warnings or messages.</p> |
| Reference | configure fwd-path-ext fpe number |
| Notes | The following elements are part of a choice: card , fpe , or port . |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port string

| | |
|------------|---|
| Synopsis | Multi-service-site assignment to the port |
| Context | configure service customer string multi-service-site string assignment port string |
| Tree | port |
| Notes | The following elements are part of a choice: card , fpe , or port . |
| Introduced | 16.0.R1 |
| Platforms | All |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service customer string multi-service-site string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service customer string multi-service-site string egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

agg-rate

| | |
|------------|--|
| Synopsis | Enter the agg-rate context |
| Context | configure service customer string multi-service-site string egress agg-rate |
| Tree | agg-rate |
| Introduced | 16.0.R1 |
| Platforms | All |

limit-unused-bandwidth *boolean*

| | |
|------------|---|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service customer string multi-service-site string egress agg-rate limit-unused-bandwidth boolean |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-frame-based-accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure service customer string multi-service-site string egress agg-rate queue-frame-based-accounting boolean |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rate number

| | |
|------------|---|
| Synopsis | Rate limit |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress agg-rate <i>rate number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy reference

| | |
|------------|---|
| Synopsis | Policer control policy |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress policer-control-policy <i>reference</i> |
| Tree | policer-control-policy |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |

Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Introduced 16.0.R1

Platforms All

[scheduler-name] *string*

Synopsis Scheduler name

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (**#**, **\$**, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context does not change.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

parent

Synopsis Enter the **parent** context

| | |
|------------|---|
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR for the scheduler |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR for the scheduler |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> egress scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|----------|----------------------------------|
| Synopsis | Enter the ingress context |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy *reference*

| | |
|------------|---|
| Synopsis | Policer control policy |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress policer-control-policy <i>reference</i> |
| Tree | policer-control-policy |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [[scheduler-name](#)] *string*

| | |
|----------|--|
| Synopsis | Enter the scheduler list instance |
|----------|--|

| | |
|------------|---|
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|---|
| Synopsis | Scheduler name |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|---|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR for the scheduler |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | PIR for the scheduler |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |

| | |
|------------|-----------------|
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure service customer <i>string</i> multi-service-site <i>string</i> ingress scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

phone *string*

| | |
|---------------|---|
| Synopsis | Service customer telephone number information |
| Context | configure service customer <i>string</i> phone <i>string</i> |
| Tree | phone |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

epipe [[service-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the epipe list instance |
| Context | configure service epipe <i>string</i> |
| Tree | epipe |
| Introduced | 16.0.R1 |
| Platforms | All |

[service-name] *string*

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service epipe <i>string</i> |
| Tree | epipe |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the service |
| Context | configure service epipe <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp [[bgp-instance](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the bgp list instance |
| Context | configure service epipe <i>string</i> bgp <i>number</i> |
| Tree | bgp |
| Introduced | 16.0.R1 |
| Platforms | All |

[bgp-instance] *number*

| | |
|------------|---|
| Synopsis | BGP instance |
| Context | configure service epipe <i>string</i> bgp <i>number</i> |
| Tree | bgp |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

adv-service-mtu *number*

Synopsis Advertised service MTU value

Context **configure** *service* *epipe* *string* *bgp* *number* **adv-service-mtu** *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.

Range 0 to 9782

Introduced 22.2.R1

Platforms All

pw-template-binding [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure** *service* *epipe* *string* *bgp* *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

[pw-template-name] *reference*

Synopsis Policy name

Context **configure** *service* *epipe* *string* *bgp* *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Reference **configure** *service* **pw-template** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

bfd-liveness *boolean*

| | |
|------------|---|
| Synopsis | Enable BFD |
| Context | configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-template *reference*

| | |
|------------|---|
| Synopsis | BFD template name for PW-Template binding |
| Context | configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> bfd-template <i>reference</i> |
| Tree | bfd-template |
| Reference | configure bfd bfd-template <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

endpoint *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Endpoint name associated with the BGP PW template |
| Context | configure service epipe <i>string</i> bgp <i>number</i> pw-template-binding <i>reference</i> endpoint <i>reference</i> |
| Tree | endpoint |
| Description | This command specifies the endpoint name associated with the BGP PW template. When an endpoint is associated to the PW template binding of a BGP VPWS service, EVPN MPLS can also be configured and associated to the same endpoint in the same Epipe service. |
| Reference | configure service epipe <i>string</i> endpoint <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

import-rt string

| | |
|----------------|--|
| Synopsis | Import route-target communities |
| Context | configure service epipe string bgp number pw-template-binding reference import-rt string |
| Tree | import-rt |
| String Length | 10 to 28 |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

route-distinguisher (*keyword* | *vpn-route-distinguisher*)

| | |
|------------|---|
| Synopsis | High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI |
| Context | configure service epipe string bgp number route-distinguisher (<i>keyword</i> <i>vpn-route-distinguisher</i>) |
| Tree | route-distinguisher |
| Options | auto-rd |
| Introduced | 16.0.R1 |
| Platforms | All |

route-target

| | |
|------------|--|
| Synopsis | Enter the route-target context |
| Context | configure service epipe string bgp number route-target |
| Tree | route-target |
| Introduced | 16.0.R1 |
| Platforms | All |

export string

| | |
|---------------|--|
| Synopsis | Extended community name for default import policy |
| Context | configure service epipe string bgp number route-target export string |
| Tree | export |
| String Length | 10 to 28 |

Introduced 16.0.R1
Platforms All

import *string*

Synopsis Extended community name for default import policy
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [route-target](#) [import](#) *string*
Tree [import](#)
String Length 10 to 28
Introduced 16.0.R1
Platforms All

vsi-export *reference*

Synopsis VSI export policies
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [vsi-export](#) *reference*
Tree [vsi-export](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

vsi-import *reference*

Synopsis VSI import policies
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [vsi-import](#) *reference*
Tree [vsi-import](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 19.10.R1
Platforms All

bgp-evpn

| | |
|------------|--|
| Synopsis | Enable the bgp-evpn context |
| Context | configure service epipe string bgp-evpn |
| Tree | bgp-evpn |
| Introduced | 16.0.R1 |
| Platforms | All |

evi number

| | |
|-------------|--|
| Synopsis | EVPN ID |
| Context | configure service epipe string bgp-evpn evi number |
| Tree | evi |
| Description | <p>This command configures an EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>The following options are supported:</p> <p>If this EVPN identifier is not specified, the value is zero and no route distinguisher or route target is automatically derived from it. If the specified EVPN identifier is lower than 65535 and no other route distinguisher or route target is configured in the service, the following applies:</p> <ul style="list-style-type: none"> the route distinguisher is derived from <system_ip>:evi the route target is derived from <autonomous-system>:evi <p>If the specified EVPN identifier is higher than 65535 and no other route distinguisher or route target is configured in the service, the following applies.</p> <ul style="list-style-type: none"> The route distinguisher cannot be automatically derived. An error is generated if enabling EVPN is attempted without a route distinguisher. A manual or an auto-rd route distinguisher must be configured. The route target can only be automatically derived if the evi-three-byte-auto-rt command is configured. If configured, the route target is automatically derived in accordance with the rules described in RFC8365. |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

local-attachment-circuit [name] string

| | |
|----------|---|
| Synopsis | Enter the local-attachment-circuit list instance |
|----------|---|

| | |
|----------------|--|
| Context | configure service epipe string bgp-evpn local-attachment-circuit string |
| Tree | local-attachment-circuit |
| Max. Instances | 2 |
| Introduced | 20.10.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Attachment circuit name |
| Context | configure service epipe string bgp-evpn local-attachment-circuit string |
| Tree | local-attachment-circuit |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

endpoint *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Endpoint name |
| Context | configure service epipe string bgp-evpn local-attachment-circuit string endpoint reference |
| Tree | endpoint |
| Reference | configure service epipe string endpoint string |
| Introduced | 20.10.R1 |
| Platforms | All |

eth-tag *number*

| | |
|----------|---|
| Synopsis | Ethernet tag of the attachment circuit |
| Context | configure service epipe string bgp-evpn local-attachment-circuit string eth-tag number |
| Tree | eth-tag |

| | |
|-------------|--|
| Description | <p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p> |
| Range | 1 to 16777215 |
| Introduced | 20.10.R1 |
| Platforms | All |

mpls [*bgp-instance*] *number*

| | |
|------------|---|
| Synopsis | Enter the mpls list instance |
| Context | configure <i>service epipe string bgp-evpn mpls number</i> |
| Tree | <i>mpls</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[bgp-instance] *number*

| | |
|------------|---|
| Synopsis | BGP instance |
| Context | configure <i>service epipe string bgp-evpn mpls number</i> |
| Tree | <i>mpls</i> |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BGP EVPN MPLS |
| Context | configure <i>service epipe string bgp-evpn mpls number admin-state keyword</i> |
| Tree | <i>admin-state</i> |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

auto-bind-tunnel

Synopsis Enter the **auto-bind-tunnel** context

Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) **auto-bind-tunnel**

Tree [auto-bind-tunnel](#)

Introduced 16.0.R1

Platforms All

allow-flex-algo-fallback *boolean*

Synopsis Enable flexible algorithm fallback

Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [auto-bind-tunnel](#) **allow-flex-algo-fallback** *boolean*

Tree [allow-flex-algo-fallback](#)

Description When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.

When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.

Default false

Introduced 20.10.R1

Platforms All

ecmp *number*

Synopsis Maximum ECMP routes information

Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [auto-bind-tunnel](#) **ecmp** *number*

Tree [ecmp](#)

Range 1 to 32

Default 1

Introduced 19.10.R1

Platforms All

enforce-strict-tunnel-tagging *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable enforcement of strict tunnel tagging |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i> |
| Tree | enforce-strict-tunnel-tagging |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

resolution *keyword*

| | |
|------------|---|
| Synopsis | Resolution method for tunnel selection |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution <i>keyword</i> |
| Tree | resolution |
| Default | none |
| Options | none, filter, any |
| Introduced | 16.0.R1 |
| Platforms | All |

resolution-filter

| | |
|------------|---|
| Synopsis | Enter the resolution-filter context |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter |
| Tree | resolution-filter |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp *boolean*

| | |
|-------------|--|
| Synopsis | Use BGP tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter bgp <i>boolean</i> |
| Tree | bgp |
| Description | When configured to true , BGP searches the BGP LSP for the address of the BGP next hop. |

When configured to **false**, BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ldp *boolean*

| | |
|-------------|---|
| Synopsis | Use LDP tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
ldp <i>boolean</i> |
| Tree | ldp |
| Description | When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.
When configured to false , LDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mpls-fwd-policy *boolean*

| | |
|-------------|---|
| Synopsis | Use MPLS forwarding policy for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
mpls-fwd-policy <i>boolean</i> |
| Tree | mpls-fwd-policy |
| Description | When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.
When configured to false , the MPLS forwarding policy is not used for next-hop resolution. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

rib-api *boolean*

| | |
|----------|--|
| Synopsis | Use RIB API gRPC service for next-hop resolution |
|----------|--|

| | |
|-------------|---|
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rib-api <i>boolean</i> |
| Tree | rib-api |
| Description | When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.
When configured to false , the RIB API service tunnels are not used for next-hop resolution. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

rsvp *boolean*

| | |
|-------------|---|
| Synopsis | Use RSVP tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter rsvp <i>boolean</i> |
| Tree | rsvp |
| Description | When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.
When configured to false , the RSVP LSP is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-isis *boolean*

| | |
|-------------|---|
| Synopsis | Use IS-IS SR tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-isis <i>boolean</i> |
| Tree | sr-isis |
| Description | When configured to true , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.
The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.
When configured to false , IS-IS tunneling is not used for next-hop resolution. |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-ospf *boolean*

| | |
|-------------|---|
| Synopsis | Use OSPF SR tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf <i>boolean</i> |
| Tree | sr-ospf |
| Description | <p>When configured to true, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.</p> <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-ospf3 *boolean*

| | |
|-------------|--|
| Synopsis | Use OSPFv3 SR tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-ospf3 <i>boolean</i> |
| Tree | sr-ospf3 |
| Description | <p>When configured to true, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.</p> <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

sr-policy *boolean*

| | |
|----------|---|
| Synopsis | Use SR policies for next-hop resolution |
|----------|---|

| | |
|-------------|--|
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-policy <i>boolean</i> |
| Tree | sr-policy |
| Description | When configured to true , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.

When configured to false , SR policies are not used for next-hop resolution. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

sr-te *boolean*

| | |
|-------------|--|
| Synopsis | Use SR-TE tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter sr-te <i>boolean</i> |
| Tree | sr-te |
| Description | When configured to true , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.

When configured to false , SR-TE tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

udp *boolean*

| | |
|-------------|--|
| Synopsis | Use MPLS over UDP tunneling for next-hop resolution |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter udp <i>boolean</i> |
| Tree | udp |
| Description | When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.

When configured to false , MPLS over UDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

weighted-ecmp *boolean*

Synopsis Allow weighted load balancing

Context **configure** *service* *epipe string* *bgp-evpn mpls number* *auto-bind-tunnel* *weighted-ecmp boolean*

Tree [weighted-ecmp](#)

Description When configured to **true**, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.

When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.

Default false

Introduced 22.7.R1

Platforms All

control-word *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the CW bit in the label message

Context **configure** *service* *epipe string* *bgp-evpn mpls number* *control-word boolean*

Tree [control-word](#)

Default false

Introduced 16.0.R1

Platforms All

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default route tag

| | |
|-------------|--|
| Context | configure <i>service epipe string bgp-evpn mpls number default-route-tag string</i> |
| Tree | default-route-tag |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag X and proxy-arp evpn-route-tag Y, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the default-route-tag, then EVPN keeps tag A when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

dynamic-egress-label-limit *boolean*

| | |
|-------------|---|
| Synopsis | Enables dynamic egress label limit |
| Context | configure <i>service epipe string bgp-evpn mpls number dynamic-egress-label-limit boolean</i> |
| Tree | dynamic-egress-label-limit |
| Description | <p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p> |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

ecmp number

| | |
|------------|--|
| Synopsis | Maximum ECMP routes information |
| Context | configure service epipe string bgp-evpn mpls number ecmp number |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label boolean

| | |
|------------|--|
| Synopsis | Enable use of entropy-labels |
| Context | configure service epipe string bgp-evpn mpls number entropy-label boolean |
| Tree | entropy-label |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

evi-three-byte-auto-rt boolean**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Auto-derive the BGP EVPN route target |
| Context | configure service epipe string bgp-evpn mpls number evi-three-byte-auto-rt boolean |
| Tree | evi-three-byte-auto-rt |
| Description | When configured to true , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).
Where: <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) |

- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

| | |
|------------|----------|
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

force-vc-forwarding *keyword*

| | |
|------------|--|
| Synopsis | VC forwarding action |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 16.0.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group identifier |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 19.5.R1 |
| Platforms | All |

route-next-hop

| | |
|-------------|--|
| Synopsis | Enter the route-next-hop context |
| Context | configure service epipe <i>string</i> bgp-evpn mpls <i>number</i> route-next-hop |
| Tree | route-next-hop |
| Description | Commands in this context configure the next hop of the EVPN routes. |
| Introduced | 19.10.R1 |
| Platforms | All |

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP address of the next-hop for the service EVPN route |
| Context | configure service epipe <i>string</i> bgp-evpn mpls number route-next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ip-address |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 19.10.R1 |
| Platforms | All |

system-ipv4

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | System IPv4 address for service EVPN route next hop |
| Context | configure service epipe <i>string</i> bgp-evpn mpls number route-next-hop system-ipv4 |
| Tree | system-ipv4 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 19.10.R1 |
| Platforms | All |

system-ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | System IPv6 address for service EVPN route next hop |
| Context | configure service epipe <i>string</i> bgp-evpn mpls number route-next-hop system-ipv6 |
| Tree | system-ipv6 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |

| | |
|------------|----------|
| Introduced | 19.10.R1 |
| Platforms | All |

send-tunnel-encap

| | |
|------------|--|
| Synopsis | Enter the send-tunnel-encap context |
| Context | configure service epipe string bgp-evpn mpls number send-tunnel-encap |
| Tree | send-tunnel-encap |
| Introduced | 16.0.R1 |
| Platforms | All |

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable MPLS encapsulation |
| Context | configure service epipe string bgp-evpn mpls number send-tunnel-encap mpls <i>boolean</i> |
| Tree | mpls |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable MPLS over UDP encapsulation |
| Context | configure service epipe string bgp-evpn mpls number send-tunnel-encap mpls-over-udp <i>boolean</i> |
| Tree | mpls-over-udp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-attachment-circuit [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the remote-attachment-circuit list instance |
| Context | configure <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>remote-attachment-circuit</i> <i>string</i> |
| Tree | <i>remote-attachment-circuit</i> |
| Max. Instances | 2 |
| Introduced | 20.10.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | Attachment circuit name |
| Context | configure <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>remote-attachment-circuit</i> <i>string</i> |
| Tree | <i>remote-attachment-circuit</i> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

endpoint *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Endpoint name |
| Context | configure <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>remote-attachment-circuit</i> <i>string</i> <i>endpoint</i> <i>reference</i> |
| Tree | <i>endpoint</i> |
| Reference | configure <i>service</i> <i>epipe</i> <i>string</i> <i>endpoint</i> <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

eth-tag *number*

| | |
|-------------|---|
| Synopsis | Ethernet tag of the attachment circuit |
| Context | configure service epipe <i>string</i> bgp-evpn remote-attachment-circuit <i>string</i> eth-tag <i>number</i> |
| Tree | eth-tag |
| Description | This command configures the Ethernet tag value of the attachment circuit.

When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.

When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe. |
| Range | 1 to 16777215 |
| Introduced | 20.10.R1 |
| Platforms | All |

segment-routing-v6 [[bgp-instance](#)] *number*

| | |
|-------------|--|
| Synopsis | Enter the segment-routing-v6 list instance |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Description | Commands in this context configure the SRv6 instance that is used in the service. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[bgp-instance] *number*

| | |
|------------|--|
| Synopsis | BGP instance |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of segment routing over IPv6 |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-route-tag *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> default-route-tag <i>string</i> |
| Tree | default-route-tag |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

ecmp number

| | |
|------------|--|
| Synopsis | Maximum ECMP value configured on the service |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> ecmp <i>number</i> |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

evi-three-byte-auto-rt boolean**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Auto-derive the BGP EVPN route target |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> evi-three-byte-auto-rt <i>boolean</i> |
| Tree | evi-three-byte-auto-rt |
| Description | <p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).
Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p> |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

force-vc-forwarding *keyword*

| | |
|-------------|--|
| Synopsis | Datapath forwarding to force vlan-vc-type |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Description | <p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the sap ingress vlan-translation command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p> |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

oper-group *reference*

| | |
|-------------|--|
| Synopsis | Operational group |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Description | <p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> <p>The operational group will be down when it is applied on a BGP EVPN instance as well as:</p> <ul style="list-style-type: none"> • the service is admin-state disable • the BGP EVPN MPLS and VXLAN are admin-state disable • all the EVPN destinations in the instance are removed <p>When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. The ES operational group should be monitored on the LAG associated to the ES, along with single-active multi-homing, so that the NDF state can be signaled to the CE by LAG standby signaling.</p> |

| | |
|------------|---|
| Reference | configure service oper-group <i>string</i> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

resolution *keyword*

| | |
|------------|--|
| Synopsis | Resolution options for routes |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> resolution <i>keyword</i> |
| Tree | resolution |
| Default | route-table |
| Options | route-table, tunnel-table, fallback-tunnel-to-route-table |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

route-next-hop

| | |
|-------------|---|
| Synopsis | Enter the route-next-hop context |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop |
| Tree | route-next-hop |
| Description | Commands in this context configure the next hop of the EVPN routes. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP address of the next-hop for the service EVPN route |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ip-address |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | System IPv4 address for service EVPN route next hop |
| Context | configure service epipe string bgp-evpn segment-routing-v6 number route-next-hop system-ipv4 |
| Tree | system-ipv4 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | System IPv6 address for service EVPN route next hop |
| Context | configure service epipe string bgp-evpn segment-routing-v6 number route-next-hop system-ipv6 |
| Tree | system-ipv6 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

source-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Source IPv6 address |
| Context | configure service epipe string bgp-evpn segment-routing-v6 number source-address string |
| Tree | source-address |

| | |
|-------------|--|
| Description | <p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

srv6

| | |
|------------|---|
| Synopsis | Enter the srv6 context |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 |
| Tree | srv6 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-locator *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Default route locator |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 default-locator <i>string</i> |
| Tree | default-locator |
| Description | This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

instance *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Segment Routing SRv6 instance |
| Context | configure service epipe <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 <i>instance reference</i> |
| Tree | instance |
| Reference | configure service epipe <i>string</i> segment-routing-v6 <i>number</i> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vxlan [[bgp-instance](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the vxlan list instance |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> |
| Tree | vxlan |
| Introduced | 16.0.R1 |
| Platforms | All |

[bgp-instance] *number*

| | |
|------------|---|
| Synopsis | BGP instance |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> |
| Tree | vxlan |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of BGP EVPN VXLAN |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> default-route-tag <i>string</i> |
| Tree | default-route-tag |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

ecmp *number*

| | |
|----------|---|
| Synopsis | Maximum ECMP routes information |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> ecmp <i>number</i> |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

evi-three-byte-auto-rt *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Auto-derive the BGP EVPN route target |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> evi-three-byte-auto-rt <i>boolean</i> |
| Tree | evi-three-byte-auto-rt |
| Description | When configured to true , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).
Where: <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI When configured to false , route target derivation is not allowed. |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

send-tunnel-encap *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Send VXLAN value in encapsulation extended community |
| Context | configure service epipe <i>string</i> bgp-evpn vxlan <i>number</i> send-tunnel-encap <i>boolean</i> |
| Tree | send-tunnel-encap |

| | |
|-------------|--|
| Description | When configured to true , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities.
When configured to false , no encapsulation extended community is sent. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

vxlan-instance *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VXLAN instance |
| Context | configure service epipe string bgp-evpn vxlan number vxlan-instance reference |
| Tree | vxlan-instance |
| Reference | configure service epipe string vxlan instance number |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-mh-site [[site-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the bgp-mh-site list instance |
| Context | configure service epipe string bgp-mh-site string |
| Tree | bgp-mh-site |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[site-name] *string*

| | |
|----------|--|
| Synopsis | Name for the specific site |
| Context | configure service epipe string bgp-mh-site string |
| Tree | bgp-mh-site |

| | |
|---------------|-------------------------------------|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

activation-timer *number*

| | |
|------------|---|
| Synopsis | Time that the local sites are in standby status, waiting for BGP updates |
| Context | configure service epipe <i>string</i> bgp-mh-site <i>string</i> activation-timer <i>number</i> |
| Tree | activation-timer |
| Range | 0 to 100 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the site |
| Context | configure service epipe <i>string</i> bgp-mh-site <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

boot-timer *number*

| | |
|------------|---|
| Synopsis | Wait time after reboot to run the DF election algorithm |
| Context | configure service epipe <i>string</i> bgp-mh-site <i>string</i> boot-timer <i>number</i> |
| Tree | boot-timer |
| Range | 0 to 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

id number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Site ID for the service |
| Context | configure service epipe <i>string bgp-mh-site string id number</i> |
| Tree | id |
| Description | This command configures the ID for the site. The ID must match between services but is local to the service. |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

min-down-timer number

| | |
|------------|---|
| Synopsis | Minimum downtime for BGP multi-homing site after transition from up to down |
| Context | configure service epipe <i>string bgp-mh-site string min-down-timer number</i> |
| Tree | min-down-timer |
| Range | 0 to 100 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

preference number

| | |
|------------|---|
| Synopsis | Preference value to advertise in the NLRI L2 extended community |
| Context | configure service epipe <i>string bgp-mh-site string preference number</i> |
| Tree | preference |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

sap string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | SAP to be associated with this site |
| Context | configure service epipe string bgp-mh-site string sap string |
| Tree | sap |
| String Length | 1 to 45 |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-vpws

| | |
|------------|--|
| Synopsis | Enable the bgp-vpws context |
| Context | configure service epipe string bgp-vpws |
| Tree | bgp-vpws |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of the VPWS edge instance |
| Context | configure service epipe string bgp-vpws admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

local-ve

| | |
|------------|---|
| Synopsis | Enter the local-ve context |
| Context | configure service epipe string bgp-vpws local-ve |
| Tree | local-ve |
| Introduced | 16.0.R1 |

Platforms All

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local VPWS edge ID
 Context **configure service epipe string** *bgp-vpws local-ve id number*
 Tree *id*
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

name string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local VPWS instance name
 Context **configure service epipe string** *bgp-vpws local-ve name string*
 Tree *name*
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms All

remote-ve [name] string

Synopsis Enter the **remote-ve** list instance
 Context **configure service epipe string** *bgp-vpws remote-ve string*
 Tree *remote-ve*
 Max. Instances 2
 Introduced 16.0.R1
 Platforms All

[name] *string*

| | |
|---------------|---|
| Synopsis | Remote PE name to which a PW is to be signaled |
| Context | configure service epipe <i>string</i> bgp-vpws remote-ve <i>string</i> |
| Tree | remote-ve |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

id *number*

| | |
|------------|---|
| Synopsis | Remote VPWS edge ID |
| Context | configure service epipe <i>string</i> bgp-vpws remote-ve <i>string</i> id <i>number</i> |
| Tree | id |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

customer *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Service customer ID |
| Context | configure service epipe <i>string</i> customer <i>reference</i> |
| Tree | customer |
| Reference | configure service customer <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|---|
| Context | configure service epipe <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

endpoint [*name*] *string*

| | |
|----------------|--|
| Synopsis | Enter the endpoint list instance |
| Context | configure service epipe <i>string</i> endpoint <i>string</i> |
| Tree | endpoint |
| Max. Instances | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Service endpoint name |
| Context | configure service epipe <i>string</i> endpoint <i>string</i> |
| Tree | endpoint |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service epipe <i>string</i> endpoint <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time-active *number*

| | |
|------------|--|
| Synopsis | Time to hold the active state before entering standby when a local MC-LAG SAP goes down |
| Context | configure service epipe <i>string</i> endpoint <i>string</i> hold-time-active <i>number</i> |
| Tree | hold-time-active |
| Range | 1 to 60 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

revert-time (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint |
| Context | configure service epipe <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>) |
| Tree | revert-time |
| Range | 1 to 600 |
| Default | immediate |
| Units | seconds |
| Options | never, immediate |
| Introduced | 16.0.R1 |
| Platforms | All |

standby-signaling *keyword*

| | |
|------------|--|
| Synopsis | Endpoint behavior to handle the PW standby bit |
| Context | configure service epipe <i>string</i> endpoint <i>string</i> standby-signaling <i>keyword</i> |
| Tree | standby-signaling |
| Options | master, slave |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|----------|----------------------------------|
| Synopsis | Enter the eth-cfm context |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service epipe <i>string eth-cfm</i> |
| Tree | eth-cfm |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ignore-l2vpn-mtu-mismatch *boolean*

| | |
|-------------|---|
| Synopsis | Ignore the L2 VPN MTU mismatch with local service MTU |
| Context | configure service epipe <i>string ignore-l2vpn-mtu-mismatch</i> <i>boolean</i> |
| Tree | ignore-l2vpn-mtu-mismatch |
| Description | <p>When configured to true, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPWS service regardless of any MTU mismatch.</p> <p>When configured to false, an MTU mismatch prevents the system from bringing up a BGP-VPWS service.</p> |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

load-balancing

| | |
|------------|---|
| Synopsis | Enter the load-balancing context |
| Context | configure service epipe <i>string load-balancing</i> |
| Tree | load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

lbl-eth-or-ip-l4-teid *boolean*

| | |
|-------------|--|
| Synopsis | Enable hashing of MPLS ethernet and IP packets on SAPs |
| Context | configure service epipe <i>string load-balancing lbl-eth-or-ip-l4-teid</i> <i>boolean</i> |
| Tree | lbl-eth-or-ip-l4-teid |
| Description | <p>When configured to true, this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.</p> |

| | |
|------------|--|
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

per-service-hashing *boolean*

| | |
|------------|--|
| Synopsis | Enable per-service hashing for Ethernet services |
| Context | configure service epipe <i>string</i> load-balancing per-service-hashing <i>boolean</i> |
| Tree | per-service-hashing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

nat-outside [[nat-group](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the nat-outside list instance |
| Context | configure service epipe <i>string</i> nat-outside <i>number</i> |
| Tree | nat-outside |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[nat-group] *number*

| | |
|------------|--|
| Synopsis | NAT group |
| Context | configure service epipe <i>string</i> nat-outside <i>number</i> |
| Tree | nat-outside |
| Max. Range | 0 to 4294967295 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of Epipe as a NAT outside service |
| Context | configure service epipe <i>string</i> nat-outside <i>number</i> admin-state <i>keyword</i> |

| | |
|------------|--|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

oper-group *reference*

| | |
|------------|--|
| Synopsis | Oper-group name |
| Context | configure service epipe <i>string</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

pbb

| | |
|------------|--|
| Synopsis | Enter the pbb context |
| Context | configure service epipe <i>string</i> pbb |
| Tree | pbb |
| Introduced | 16.0.R1 |
| Platforms | All |

force-qtag-forwarding *boolean*

| | |
|------------|--|
| Synopsis | Add an IEEE 802.1q tag after CMAC addresses PBB header |
| Context | configure service epipe <i>string</i> pbb force-qtag-forwarding <i>boolean</i> |
| Tree | force-qtag-forwarding |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

local-switch-service-state *keyword*

| | |
|----------|--|
| Synopsis | Endpoint state used to determine PBB-Epipe state |
|----------|--|

| | |
|-------------|--|
| Context | configure service epipe <i>string pbb local-switch-service-state keyword</i> |
| Tree | local-switch-service-state |
| Description | In a PBB Epipe with two SAPs and a PBB tunnel, this command controls whether the operational state of the PBB-Epipe service depends on the state of the PBB tunnel only, or on the state of two of the three endpoints (PBB tunnel and two SAPs). The second case implies that at least one of the SAPs must be up for the PBB-Epipe service to be operationally up. |
| Default | sap |
| Options | sap, pbb-tunnel |
| Introduced | 21.7.R1 |
| Platforms | All |

tunnel

| | |
|------------|---|
| Synopsis | Enable the tunnel context |
| Context | configure service epipe <i>string pbb tunnel</i> |
| Tree | tunnel |
| Introduced | 16.0.R1 |
| Platforms | All |

backbone-dest-mac *string*

| | |
|------------|--|
| Synopsis | Backbone Destination MAC address |
| Context | configure service epipe <i>string pbb tunnel backbone-dest-mac string</i> |
| Tree | backbone-dest-mac |
| Notes | The following elements are part of a mandatory choice: backbone-dest-mac or backbone-dest-mac-name . |
| Introduced | 16.0.R1 |
| Platforms | All |

backbone-dest-mac-name *reference*

| | |
|-----------|--|
| Synopsis | Backbone destination MAC name for PBB packets |
| Context | configure service epipe <i>string pbb tunnel backbone-dest-mac-name reference</i> |
| Tree | backbone-dest-mac-name |
| Reference | configure service pbb mac <i>string</i> |

| | |
|------------|--|
| Notes | The following elements are part of a mandatory choice: backbone-dest-mac or backbone-dest-mac-name . |
| Introduced | 16.0.R1 |
| Platforms | All |

backbone-vpls-service-name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Backbone VPLS service |
| Context | configure service epipe <i>string</i> pbb tunnel backbone-vpls-service-name <i>reference</i> |
| Tree | backbone-vpls-service-name |
| Reference | configure service vpls <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

isid *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Service instance ID |
| Context | configure service epipe <i>string</i> pbb tunnel isid <i>number</i> |
| Tree | isid |
| Range | 0 to 16777215 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

sap [[sap-id](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the sap list instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> |

| | |
|----------------|---------------------|
| Tree | sap |
| Max. Instances | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

[sap-id] string

| | |
|---------------|--|
| Synopsis | SAP ID |
| Context | configure service epipe string sap string |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aarp

| | |
|------------|---|
| Synopsis | Enable the aarp context |
| Context | configure service epipe string sap string aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference

| | |
|------------|--|
| Synopsis | AARP instance ID |
| Context | configure service epipe string sap string aarp id reference |
| Tree | id |
| Reference | configure application-assurance aarp number |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|--|
| Synopsis | Role referenced by the AARP |
| Context | configure service epipe <i>string</i> sap <i>string</i> aarp <i>type</i> <i>keyword</i> |
| Tree | type |
| Options | dual-homed, dual-homed-secondary |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy reference

| | |
|------------|---|
| Synopsis | Accounting policy |
| Context | configure service epipe <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the SAP |
| Context | configure service epipe <i>string</i> sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

app-profile reference

| | |
|------------|---|
| Synopsis | Application profile name |
| Context | configure service epipe <i>string</i> sap <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis SAP bandwidth
Context **configure service epipe** *string sap string bandwidth number*
Tree [bandwidth](#)
Range 1 to 6400000000
Units kilobps
Introduced 16.0.R1
Platforms All

cflowd *boolean*

Synopsis Enable Cflowd collection and analysis on this SAP
Context **configure service epipe** *string sap string cflowd boolean*
Tree [cflowd](#)
Default false
Introduced 16.0.R1
Platforms All

collect-stats *boolean*

Synopsis Collect accounting statistics
Context **configure service epipe** *string sap string collect-stats boolean*
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure service epipe** *string sap string cpu-protection*
Tree [cpu-protection](#)

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm-monitoring

| | |
|------------|--|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service epipe string sap string cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

aggregate

| | |
|------------|--|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service epipe string sap string cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

car

| | |
|------------|--|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
| Context | configure service epipe string sap string cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mac-monitoring

| | |
|------------|--|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service epipe string sap string cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
 Context **configure** [service epipe](#) *string* [sap](#) *string* [cpu-protection](#) [policy-id](#) *reference*
 Tree [policy-id](#)
 Reference **configure** [system security](#) [cpu-protection](#) [policy](#) *number*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** [service epipe](#) *string* [sap](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 160
 Introduced 16.0.R1
 Platforms All

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP
 Context **configure** [service epipe](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*
 Tree [dist-cpu-protection](#)
 Reference **configure** [system security](#) [dist-cpu-protection](#) [policy](#) *string*
 Introduced 16.0.R1
 Platforms All

egress

Synopsis Enter the **egress** context
 Context **configure** [service epipe](#) *string* [sap](#) *string* [egress](#)
 Tree [egress](#)
 Introduced 16.0.R1

Platforms All

agg-rate

Synopsis Enter the **agg-rate** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#)

Tree [agg-rate](#)

Notes The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.

Introduced 16.0.R1

Platforms All

adaptation-rule *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#) [adaptation-rule](#) *keyword*

Tree [adaptation-rule](#)

Default closest

Options max, min, closest

Introduced 22.10.R1

Platforms 7750 SR-1, 7750 SR-s

burst-limit (*number* | *keyword*)

Synopsis Shaping burst size when an aggregate shaper is used

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#) [burst-limit](#) (*number* | *keyword*)

Tree [burst-limit](#)

Range 1 to 14000000

Default auto

Units bytes

Options auto

Introduced 22.10.R1

Platforms 7750 SR-1, 7750 SR-s

limit-unused-bandwidth *boolean*

| | |
|------------|--|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-frame-based-accounting *boolean*

| | |
|------------|--|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rate *number*

| | |
|------------|---|
| Synopsis | Enforced aggregate rate for all queues |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |

Platforms All

ip reference

Synopsis IPv4 filter policy name
 Context **configure** [service epipe](#) *string* [sap](#) *string* [egress filter ip reference](#)
 Tree [ip](#)
 Reference **configure** [filter ip-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
 Context **configure** [service epipe](#) *string* [sap](#) *string* [egress filter ipv6 reference](#)
 Tree [ipv6](#)
 Reference **configure** [filter ipv6-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

mac reference

Synopsis MAC filter policy name
 Context **configure** [service epipe](#) *string* [sap](#) *string* [egress filter mac reference](#)
 Tree [mac](#)
 Reference **configure** [filter mac-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

qos

Synopsis Enter the **qos** context
 Context **configure** [service epipe](#) *string* [sap](#) *string* [egress qos](#)
 Tree [qos](#)
 Introduced 16.0.R1

Platforms All

policer-control-policy

Synopsis Enter the **policer-control-policy** context
 Context **configure service epipe string sap string egress qos policer-control-policy**
 Tree [policer-control-policy](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

overrides

Synopsis Enable the **overrides** context
 Context **configure service epipe string sap string egress qos policer-control-policy overrides**
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

root

Synopsis Enter the **root** context
 Context **configure service epipe string sap string egress qos policer-control-policy overrides root**
 Tree [root](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit
 Context **configure service epipe string sap string egress qos policer-control-policy overrides root max-rate** (*number* | *keyword*)
 Tree [max-rate](#)
 Range 1 to 6400000000
 Options max
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#)

Tree [priority-mbs-thresholds](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [min-thresh-separation](#) (*number* | *keyword*)

Tree [min-thresh-separation](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*

Tree [priority](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[[priority-level](#)] *number*

Synopsis Priority level

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*

| | |
|------------|--|
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policer control policy name |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

qinq-mark-top-only *boolean*

| | |
|------------|---|
| Synopsis | Mark top Q-tags |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i> |
| Tree | qinq-mark-top-only |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

sap-egress

Synopsis Enter the **sap-egress** context
 Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#)
 Tree [sap-egress](#)
 Introduced 16.0.R1
 Platforms All

overrides

Synopsis Enter the **overrides** context
 Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#)
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms All

hs-secondary-shaper *string*

Synopsis HS Secondary Shaper
 Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-secondary-shaper](#) [string](#)
 Tree [hs-secondary-shaper](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7750 SR-7/12/12e

hs-wrr-group [[group-id](#)] *reference*

Synopsis Enter the **hs-wrr-group** list instance
 Context **configure** [service](#) [epipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#) [reference](#)
 Tree [hs-wrr-group](#)
 Introduced 16.0.R1
 Platforms 7750 SR-7/12/12e

[group-id] reference

| | |
|------------|--|
| Synopsis | HS WRR group identifier |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> |
| Tree | hs-wrr-group |
| Reference | configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-class-weight number

| | |
|------------|--|
| Synopsis | Class weight override of the WRR group |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

percent-rate decimal-number

| | |
|------------|---|
| Synopsis | Percent rate override applied to the HS WRR group |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> percent-rate <i>decimal-number</i> |
| Tree | percent-rate |
| Range | 0.01 to 100.00 |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

rate (number | keyword)

| | |
|----------|--|
| Synopsis | Scheduling rate override applied to the HS WRR group |
|----------|--|

| | |
|------------|--|
| Context | configure service epipe string sap string egress qos sap-egress overrides hs-wrr-group reference rate (<i>number keyword</i>) |
| Tree | rate |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policer [[policer-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the policer list instance |
| Context | configure service epipe string sap string egress qos sap-egress overrides policer reference |
| Tree | policer |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] *reference*

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service epipe string sap string egress qos sap-egress overrides policer reference |
| Tree | policer |
| Reference | configure qos sap-egress string policer number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cbs (*number | keyword*)

| | |
|----------|--|
| Synopsis | CBS |
| Context | configure service epipe string sap string egress qos sap-egress overrides policer reference cbs (<i>number keyword</i>) |
| Tree | cbs |

| | |
|------------|--|
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet size modification for policing information |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -64 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
reference [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis PIR percent rate

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
reference [percent-rate](#) [pir](#) *decimal-number*

Tree [pir](#)

Range 0.01 to 100.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#)
reference [rate](#)

Tree [rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate

| | |
|------------|--|
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference rate cir</i> (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference rate pir</i> (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|--|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer
<i>reference stat-mode</i> <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir,
offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed,
offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|----------|--------------------------------------|
| Synopsis | Enter the queue list instance |
|----------|--------------------------------------|

| | |
|------------|--|
| Context | configure service epipe string sap string egress qos sap-egress overrides queue reference |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] reference

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service epipe string sap string egress qos sap-egress overrides queue reference |
| Tree | queue |
| Reference | configure qos sap-egress string queue number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service epipe string sap string egress qos sap-egress overrides queue reference adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service epipe string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

pir *keyword*

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> adaptation-rule pir <i>keyword</i> |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

avg-frame-overhead *decimal-number*

| | |
|------------|---|
| Synopsis | Average packet-to-frame encapsulation overhead |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> avg-frame-overhead <i>decimal-number</i> |
| Tree | avg-frame-overhead |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

burst-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Explicit shaping burst size for the queue |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

cbs (*number* | *keyword*)

| | |
|----------|-----|
| Synopsis | CBS |
|----------|-----|

| | |
|------------|---|
| Context | configure service epipe <i>string sap string egress qos sap-egress overrides queue reference cbs</i> (<i>number keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-tail

| | |
|------------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service epipe <i>string sap string egress qos sap-egress overrides queue reference drop-tail</i> |
| Tree | drop-tail |
| Introduced | 16.0.R1 |
| Platforms | All |

low

| | |
|------------|---|
| Synopsis | Enter the low context |
| Context | configure service epipe <i>string sap string egress qos sap-egress overrides queue reference drop-tail low</i> |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number | keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service epipe <i>string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs</i> (<i>number keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |

Platforms All

hs-class-weight *number*

Synopsis Class weight override for the queue

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [hs-class-weight](#) *number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

hs-wred-queue

Synopsis Enter the **hs-wred-queue** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [hs-wred-queue](#)

Tree [hs-wred-queue](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

policy *reference*

Synopsis Slope policy applied to the HSQ queue group queue

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [hs-wred-queue](#) [policy](#) *reference*

Tree [policy](#)

Reference **configure** [qos](#) [slope-policy](#) *string*

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis Weighted Round Robin (WRR) weight to parent with this queue into the scheduler

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [hs-wrr-weight](#) *number*

| | |
|------------|-------------------------------|
| Tree | hs-wrr-weight |
| Range | 1 to 127 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|--|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 20.10.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|-------------|--|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Description | When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to false , fast queue polling is not enabled. |

| | |
|------------|----------|
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

violation-threshold *decimal-number*

| | |
|-------------|---|
| Synopsis | Threshold for queue depth before violation is raised |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i> |
| Tree | violation-threshold |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered. |
| Range | 0.01 to 99.99 |
| Introduced | 20.10.R1 |
| Platforms | All |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|---|
| Synopsis | PIR parameter that overrides parent for queue group |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-rate

| | |
|------------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir *decimal-number*

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

pir *decimal-number*

| | |
|----------|--|
| Synopsis | PIR percent rate |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |

Introduced 16.0.R1
 Platforms All

rate

Synopsis Enter the **rate** context
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
[reference](#) **rate**
 Tree [rate](#)
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 16.0.R1
 Platforms All

cir (*number* | *keyword*)

Synopsis CIR rate
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
[reference](#) **rate** **cir** (*number* | *keyword*)
 Tree [cir](#)
 Range 0 to 6400000000
 Units kilobps
 Options max
 Introduced 16.0.R1
 Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
[reference](#) **rate** **pir** (*number* | *keyword*)
 Tree [pir](#)
 Range 1 to 6400000000
 Units kilobps
 Options max
 Introduced 16.0.R1
 Platforms All

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

port-redirect-group

| | |
|------------|--|
| Synopsis | Enter the port-redirect-group context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group |
| Tree | port-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the queue group redirect list policy |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Instance of port queue group |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |

Platforms All

scheduler-policy

Synopsis Enter the **scheduler-policy** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#)

Tree [scheduler-policy](#)

Introduced 16.0.R1

Platforms All

overrides

Synopsis Enter the **overrides** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#)

Tree [overrides](#)

Introduced 16.0.R1

Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*

Tree [scheduler](#)

Introduced 16.0.R1

Platforms All

[scheduler-name] *string*

Synopsis Scheduler name

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can

be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.

| | |
|---------------|-------------------------------------|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service epipe <i>string sap string egress qos scheduler-policy overrides scheduler string parent</i> |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|---|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service epipe <i>string sap string egress qos scheduler-policy overrides scheduler string parent cir-weight number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|----------|---|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service epipe <i>string sap string egress qos scheduler-policy overrides scheduler string parent weight number</i> |

| | |
|------------|------------------------|
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR at which the queue it to operate |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service epipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |

Platforms All

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [scheduler-policy](#) *string*

Introduced 16.0.R1

Platforms All

endpoint *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the endpoint

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [endpoint](#) *reference*

Tree [endpoint](#)

Reference **configure** [service](#) [epipe](#) *string* [endpoint](#) *string*

Introduced 16.0.R1

Platforms All

eth-cfm

Synopsis Enter the **eth-cfm** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#)

Tree [eth-cfm](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ais *boolean*

Synopsis Enable the generation and the reception of AIS messages

| | |
|------------|---|
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm ais <i>boolean</i> |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile *keyword*

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

| | |
|------------|---|
| Synopsis | Enter the mep list instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> association <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|---|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the MEP |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais

| | |
|------------|---|
| Synopsis | Enable the ais context |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais |
| Tree | ais |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

client-meg-level *number*

| | |
|------------|--|
| Synopsis | Client MEG level for AIS message generation |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i> |
| Tree | client-meg-level |
| Range | 1 to 7 |
| Max. | 7 |
| Instances | |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interface-support *boolean*

| | |
|----------|--|
| Synopsis | Enable generation of AIS PDUs based on endpoint state |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i> |

| | |
|------------|--|
| Tree | interface-support |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|------------|--|
| Synopsis | Transmission interval for AIS messages |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i> |
| Tree | interval |
| Range | 1 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | all-def |
| Options | all-def, mac-rem-err-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|----------|--|
| Synopsis | Priority of the AIS messages generated by the node |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Default | 7 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|---|
| Synopsis | Enter the alarm-notification context |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|------------|--|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|------------|--|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm boolean

Synopsis Generate CCM messages

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm](#) *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority number

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm-ltm-priority](#) *number*

Tree [ccm-ltm-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-padding-size number

Synopsis Number of octets of padding to insert in CCM packets

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm-padding-size](#) *number*

Tree [ccm-padding-size](#)

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-vlan-tag *string*

Synopsis VLAN tags to apply to CFM PDUs for egress processing

Context **configure service epipe** *string* **sap** *string* **eth-cfm mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **cfm-vlan-tag** *string*

Tree **cfm-vlan-tag**

String Length 1 to 9

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis Enable the **csf** context

Context **configure service epipe** *string* **sap** *string* **eth-cfm mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **csf**

Tree **csf**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition

Context **configure service epipe** *string* **sap** *string* **eth-cfm mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **csf multiplier** *decimal-number*

Tree **multiplier**

Range 0.0 | 2.0 to 30.0

Default 3.5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description

Context **configure service epipe** *string* **sap** *string* **eth-cfm mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **description** *string*

| | |
|---------------|--|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Direction the MEP faces |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i> |
| Tree | direction |
| Default | down |
| Options | down, up |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|--|
| Synopsis | Enable the eth-test context |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|----------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |

| | |
|------------|--|
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|--|
| Synopsis | Enter the test-pattern context |
| Context | configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|-------------|---|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |

| | |
|------------|--|
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|------------|---|
| Synopsis | Fault propagation for the MEP |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|--|
| Synopsis | Enter the grace context |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|------------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed *boolean*

| | |
|----------|-----------------------------------|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
|----------|-----------------------------------|

| | |
|------------|--|
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name</i> <i>reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed</i> <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|-------------|--|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name</i> <i>reference ma-admin-name reference mep-id number grace eth-vsm-grace</i> |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name</i> <i>reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace</i> <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|----------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name</i> <i>reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace</i> <i>boolean</i> |
| Tree | tx-eth-vsm-grace |

| | |
|-------------|---|
| Description | <p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

lbm-svc-act-responder *boolean*

| | |
|------------|---|
| Synopsis | Process service activation streams in ETH-CFM LBM |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> lbm-svc-act-responder <i>boolean</i> |
| Tree | lbm-svc-act-responder |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|----------|------------------------|
| Synopsis | MAC address of the MEP |
|----------|------------------------|

| | |
|-------------|--|
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i> |
| Tree | mac-address |
| Description | This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|------------|--|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | MEP provisioned using MA primary VLAN ID |
| Context | configure service epipe <i>string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean</i> |
| Tree | primary-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mip primary-vlan (*number* | *keyword*)

| | |
|-------------|---|
| Synopsis | Enter the mip list instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) |
| Tree | mip |
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan (*number* | *keyword*)

| | |
|-------------|---|
| Synopsis | VLAN ID to which the MIP is attached |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) |
| Tree | mip |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan. |
| Range | 1 to 4094 |
| Options | none |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|-------------|---|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>)
cfm-vlan-tag <i>string</i> |
| Tree | cfm-vlan-tag |
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM |

PDU's arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.

| | |
|---------------|--|
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|------------|--|
| Synopsis | MAC address of the MIP |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>)
mac-address <i>string</i> |
| Tree | mac-address |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-ctag-levels *number*

| | |
|-------------------|--|
| Synopsis | Squelch levels using additional VLAN C-Tag space |
| Context | configure service epipe <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-ctag-levels <i>number</i> |
| Tree | squelch-ingress-ctag-levels |
| Description | This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped. |
| Range | 0 to 7 |
| Max.
Instances | 8 |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|----------|---|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
|----------|---|

| | |
|----------------|--|
| Context | configure service epipe <i>string sap string eth-cfm squelch-ingress-levels number</i> |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ethernet

| | |
|------------|--|
| Synopsis | Enter the ethernet context |
| Context | configure service epipe <i>string sap string ethernet</i> |
| Tree | ethernet |
| Introduced | 20.5.R1 |
| Platforms | All |

llf

| | |
|-------------|--|
| Synopsis | Enter the llf context |
| Context | configure service epipe <i>string sap string ethernet llf</i> |
| Tree | llf |
| Description | <p>Commands in this context enable Link Loss Forwarding (LLF) on an Ethernet port. This feature provides an end-to-end OAM fault notification for Ethernet VLL service. It brings down the Ethernet port (Ethernet LLF) or sends a SONET/SDH Path AIS (ATM LLF) toward the attached CE when there is a local fault on the pseudowire or service, or a remote fault on the SAP or pseudowire, signaled with label withdrawal or T-LDP status bits. It ceases when the fault disappears.</p> <p>The Ethernet port must be configured for null encapsulation.</p> <p>This feature is also supported in Epipes with BGP-EVPN enabled. In this case, upon removal of the EVPN destination, the port transitions to an operationally down state, however the AD per-EVI route for the SAP is still advertised (the SAP remains</p> |

operationally up). The port transitions to the operationally up state when the EVPN destination is created.

| | |
|------------|---------|
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Link Loss Forwarding |
| Context | configure service epipe <i>string</i> sap <i>string</i> ethernet l1f admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

ignore-oper-down *boolean*

| | |
|-------------|--|
| Synopsis | Ignore operational down state of the SAP on SAP failure |
| Context | configure service epipe <i>string</i> sap <i>string</i> ignore-oper-down <i>boolean</i> |
| Tree | ignore-oper-down |
| Description | <p>When configured to true, the Epipe service does not transition to the operational down state when the SAP fails. This command can only be set to true for a single SAP in an Epipe. The command can be used in Epipes with or without EVPN enabled.</p> <p>When configured to false, the Epipe service transitions to the operational down state when SAP fails.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|--|
| Synopsis | MAC filter policy name |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

match-qinq-dot1p *keyword*

| | |
|------------|--|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i> |
| Tree | match-qinq-dot1p |
| Options | top, bottom |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|---|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|---|
| Synopsis | Enable the overrides context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|--|
| Synopsis | Enter the root context |
| Context | configure service epipe string sap string ingress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service epipe string sap string ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|--|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service epipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service epipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |

| | |
|------------|--|
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[priority-level] *number*

| | |
|------------|--|
| Synopsis | Priority level |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides
root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

sap-ingress

| | |
|------------|--|
| Synopsis | Enter the sap-ingress context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress |
| Tree | sap-ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Queue group template name created on forwarding plane |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Queue group instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-criteria

| | |
|------------|--|
| Synopsis | Enter the ip-criteria context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria |
| Tree | ip-criteria |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

activate-entry-tag *number*

| | |
|------------|---|
| Synopsis | Tag ID activated for IPv4 criteria |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i> |
| Tree | activate-entry-tag |
| Range | 1 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv6-criteria

| | |
|------------|--|
| Synopsis | Enter the ipv6-criteria context |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides ipv6-criteria |
| Tree | ipv6-criteria |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

activate-entry-tag number

| | |
|------------|--|
| Synopsis | Tag ID activated for IPv6 criteria |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number |
| Tree | activate-entry-tag |
| Range | 1 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policer [policer-id] reference

| | |
|------------|--|
| Synopsis | Enter the policer list instance |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides policer reference |
| Tree | policer |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] reference

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides policer reference |
| Tree | policer |
| Reference | configure qos sap-ingress string policer number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure service epipe** *string sap string ingress qos sap-ingress overrides policer*
reference cbs (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis MBS

Context **configure service epipe** *string sap string ingress qos sap-ingress overrides policer*
reference mbs (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis Packet size modification for policing information

Context **configure service epipe** *string sap string ingress qos sap-ingress overrides policer*
reference packet-byte-offset *number*

Tree [packet-byte-offset](#)

Range -32 to 31

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir decimal-number

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir decimal-number

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|----------|---|
| Synopsis | Enter the rate context |
| Context | configure service epipe string sap string ingress qos sap-ingress overrides policer reference rate |
| Tree | rate |

| | |
|------------|---|
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|----------|--|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> stat-mode <i>keyword</i> |
| Tree | stat-mode |

| | |
|------------|---|
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [\[queue-id\]](#) *reference*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|---|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> adaptation-rule cir <i>keyword</i> |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

pir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> adaptation-rule pir <i>keyword</i> |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

cbs (number | keyword)

| | |
|------------|---|
| Synopsis | CBS |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-tail

| | |
|----------|--|
| Synopsis | Enter the drop-tail context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> drop-tail |

| | |
|------------|---------------------------|
| Tree | drop-tail |
| Introduced | 16.0.R1 |
| Platforms | All |

low

| | |
|------------|--|
| Synopsis | Enter the low context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|--|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 21.7.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|------------|--|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | CIR parameter that overrides parent for queue group |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |

Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [parent](#) **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)
reference [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms All

pir *decimal-number*

Synopsis PIR percent rate

| | |
|------------|---|
| Context | configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference rate</i> |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference rate cir (number keyword)</i> |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | PIR rate |
| Context | configure service epipe <i>string sap string ingress qos sap-ingress overrides queue reference rate pir (number keyword)</i> |
| Tree | pir |
| Range | 1 to 6400000000 |

| | |
|------------|---------|
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policy ID |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

queuing-type *keyword*

| | |
|------------|---|
| Synopsis | Queuing type |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|----------|---|
| Synopsis | Enter the overrides context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides |

| | |
|------------|---------------------------|
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [[scheduler-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the scheduler list instance |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<code>#</code>, <code>\$</code>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR at which the queue it to operate |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure service epipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qtag-manipulation

| | |
|------------|--|
| Synopsis | Enter the qtag-manipulation context |
| Context | configure service epipe <i>string sap string ingress</i> qtag-manipulation |
| Tree | qtag-manipulation |
| Introduced | 16.0.R1 |
| Platforms | All |

c-tag (*number | keyword*)

| | |
|------------|--|
| Synopsis | Inner ingress VLAN translation for two service delimiting VLAN values |
| Context | configure service epipe <i>string sap string ingress</i> qtag-manipulation c-tag (<i>number keyword</i>) |
| Tree | c-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag). |
| Introduced | 16.0.R1 |
| Platforms | All |

push-dot1q-vlan (*number | keyword*)

| | |
|------------|--|
| Synopsis | VLAN translation information |
| Context | configure service epipe <i>string sap string ingress</i> qtag-manipulation push-dot1q-vlan (<i>number keyword</i>) |
| Tree | push-dot1q-vlan |
| Range | 0 to 4094 |
| Options | use-sap-svlan |
| Notes | The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag). |
| Introduced | 16.0.R1 |
| Platforms | All |

s-tag *number*

| | |
|----------|--|
| Synopsis | Outer ingress VLN translation for two service delimiting VLAN values |
| Context | configure service epipe <i>string sap string ingress</i> qtag-manipulation s-tag <i>number</i> |

| | |
|------------|---|
| Tree | s-tag |
| Range | 0 to 4094 |
| Notes | The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag). |
| Introduced | 16.0.R1 |
| Platforms | All |

I2tpv3-session

| | |
|------------|---|
| Synopsis | Enable the I2tpv3-session context |
| Context | configure service epipe <i>string</i> sap <i>string</i> I2tpv3-session |
| Tree | I2tpv3-session |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the session for the service |
| Context | configure service epipe <i>string</i> sap <i>string</i> I2tpv3-session admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

pseudo-wire



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the pseudo-wire context |
| Context | configure service epipe <i>string</i> sap <i>string</i> I2tpv3-session pseudo-wire |
| Tree | pseudo-wire |
| Introduced | 16.0.R4 |
| Platforms | All |

ethernet



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the Ethernet PW-type for the L2TPv3 session |
| Context | configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session pseudo-wire ethernet |
| Tree | ethernet |
| Notes | The following elements are part of a choice: ethernet or ethernet-vlan-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

ethernet-vlan-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Ethernet-VLAN PW-type ID for the L2TPv3 session |
| Context | configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session pseudo-wire ethernet-vlan-id <i>number</i> |
| Tree | ethernet-vlan-id |
| Range | 0 to 4095 |
| Notes | The following elements are part of a choice: ethernet or ethernet-vlan-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

router



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enter the router context |
| Context | configure service epipe <i>string</i> sap <i>string</i> l2tpv3-session router |
| Tree | router |

Introduced 16.0.R4
 Platforms All

group *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel group name
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [router](#) [group](#) *string*
 Tree [group](#)
 String Length 1 to 32
 Introduced 16.0.R4
 Platforms All

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name used to identify the router instance
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [router](#) [router-instance](#) *string*
 Tree [router-instance](#)
 String Length 1 to 64
 Introduced 16.0.R4
 Platforms All

vc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ID for the L2TPv3 session
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [vc-id](#) *number*
 Tree [vc-id](#)

| | |
|------------|-----------------|
| Range | 1 to 4294967295 |
| Introduced | 16.0.R4 |
| Platforms | All |

lag

| | |
|------------|---|
| Synopsis | Enter the lag context |
| Context | configure service epipe <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 16.0.R1 |
| Platforms | All |

link-map-profile *number*

| | |
|------------|--|
| Synopsis | LAG link map profile |
| Context | configure service epipe <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i> |
| Tree | link-map-profile |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

per-link-hash

| | |
|------------|---|
| Synopsis | Enter the per-link-hash context |
| Context | configure service epipe <i>string</i> sap <i>string</i> lag per-link-hash |
| Tree | per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | All |

class *number*

| | |
|----------|---|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
| Context | configure service epipe <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i> |
| Tree | class |
| Range | 1 to 3 |

| | |
|------------|---------|
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service epipe string sap string lag per-link-hash weight <i>number</i> |
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-ring

| | |
|------------|---|
| Synopsis | Enable the mc-ring context |
| Context | configure service epipe string sap string mc-ring |
| Tree | mc-ring |
| Introduced | 16.0.R1 |
| Platforms | All |

ring-node *string*

| | |
|---------------|---|
| Synopsis | Name for the ring node associated with this SAP |
| Context | configure service epipe string sap string mc-ring ring-node <i>string</i> |
| Tree | ring-node |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*

| | |
|----------|---------------------------|
| Synopsis | Monitor operational group |
|----------|---------------------------|

| | |
|------------|--|
| Context | configure service epipe <i>string</i> sap <i>string</i> monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

multi-service-site *reference*

| | |
|------------|--|
| Synopsis | Multi service site name |
| Context | configure service epipe <i>string</i> sap <i>string</i> multi-service-site <i>reference</i> |
| Tree | multi-service-site |
| Reference | configure service customer <i>string</i> multi-service-site <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|--|
| Synopsis | Operational group |
| Context | configure service epipe <i>string</i> sap <i>string</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure service epipe <i>string</i> sap <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP transit policy ID |
| Context | configure service epipe <i>string</i> sap <i>string</i> transit-policy ip <i>reference</i> |
| Tree | ip |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP prefix policy ID |
| Context | configure service epipe <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

segment-routing-v6 [[instance](#)] *number*

| | |
|-------------|---|
| Synopsis | Enter the segment-routing-v6 list instance |
| Context | configure service epipe <i>string</i> segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Description | Commands in this context configure the SRv6 instance that is used in the service. |
| Introduced | 21.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[instance] *number*

Synopsis Segment routing v6 instance
 Context **configure service epipe** *string segment-routing-v6 number*
 Tree [segment-routing-v6](#)
 Range 1
 Notes This element is part of a list key.
 Introduced 21.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

locator [[locator-name](#)] *reference*

Synopsis Enter the **locator** list instance
 Context **configure service epipe** *string segment-routing-v6 number locator reference*
 Tree [locator](#)
 Max. 1
 Instances
 Introduced 21.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[locator-name] *reference*

Synopsis SRv6 locator name
 Context **configure service epipe** *string segment-routing-v6 number locator reference*
 Tree [locator](#)
 Reference **configure router** *string segment-routing segment-routing-v6 locator string*
 Notes This element is part of a list key.
 Introduced 21.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis Enter the **function** context

| | |
|-------------|---|
| Context | configure service epipe string segment-routing-v6 number locator reference function |
| Tree | function |
| Description | Commands in this context configure SRv6 SID function values and parameters for the locator. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

end-dx2

| | |
|------------|--|
| Synopsis | Enable the end-dx2 context |
| Context | configure service epipe string segment-routing-v6 number locator reference function end-dx2 |
| Tree | end-dx2 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service epipe string segment-routing-v6 number locator reference function end-dx2 value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.

When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

micro-segment-locator [*locator-name*] reference

| | |
|----------------|---|
| Synopsis | Enter the micro-segment-locator list instance |
| Context | configure service epipe string segment-routing-v6 number micro-segment-locator reference |
| Tree | micro-segment-locator |
| Max. Instances | 1 |

| | |
|------------|---|
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[locator-name] *reference*

| | |
|-------------|---|
| Synopsis | Micro-segment SRv6 locator name |
| Context | configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> |
| Tree | micro-segment-locator |
| Description | This command associates a pre-defined micro-segment SRv6 locator (defined in the configure router segment-routing segment-routing-v6 context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN. |
| Reference | configure router <i>string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

function

| | |
|------------|--|
| Synopsis | Enter the function context |
| Context | configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function |
| Tree | function |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

udx2

| | |
|-------------|--|
| Synopsis | Enable the udx2 context |
| Context | configure service epipe <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udx2 |
| Tree | udx2 |
| Description | Commands in this context configure the SRv6 micro-segment uDX2 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and cross-connect to the egress SAP occurs in the Epipe service. |

| | |
|------------|---|
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service epipe string segment-routing-v6 number micro-segment-locator reference function udx2 value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

service-id number**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Service ID |
| Context | configure service epipe string service-id number |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

service-mtu number

| | |
|-------------|---|
| Synopsis | MTU size |
| Context | configure service epipe string service-mtu number |
| Tree | service-mtu |
| Description | This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type. |

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

| | |
|------------|-----------|
| Range | 1 to 9782 |
| Introduced | 16.0.R1 |
| Platforms | All |

spoke-sdp [**sdp-bind-id**] *string*

| | |
|------------|---|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-bind-id] *string*

| | |
|----------|----------------|
| Synopsis | SDP binding ID |
|----------|----------------|

| | |
|---------------|--|
| Context | configure service epipe string spoke-sdp string |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aarp

| | |
|------------|---|
| Synopsis | Enable the aarp context |
| Context | configure service epipe string spoke-sdp string aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference

| | |
|------------|--|
| Synopsis | AARP instance ID |
| Context | configure service epipe string spoke-sdp string aarp id reference |
| Tree | id |
| Reference | configure application-assurance aarp number |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|--|
| Synopsis | Role referenced by the AARP |
| Context | configure service epipe string spoke-sdp string aarp type keyword |
| Tree | type |
| Options | dual-homed, dual-homed-secondary |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Policy to collect accounting statistics |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SDP binding to the service |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

adv-service-mtu *number*

| | |
|-------------|---|
| Synopsis | Service MTU used in signaling |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> adv-service-mtu <i>number</i> |
| Tree | adv-service-mtu |
| Description | <p>This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP, instead of the service MTU. However, the configuration does not affect the locally enforced value, which is still based on the service MTU.</p> <p>This MTU value cannot be configured on a spoke-SDP that is bound to an SDP with the adv-mtu-override command (configure service sdp context).</p> <p>When unconfigured, an adjusted service MTU is used (service-mtu command).</p> |
| Range | 0 to 9782 |
| Introduced | 21.5.R1 |
| Platforms | All |

app-profile *reference*

| | |
|----------|---------------------------------------|
| Synopsis | Application profile name for this SDP |
|----------|---------------------------------------|

| | |
|------------|---|
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bandwidth (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Bandwidth that is reserved for this SDP binding |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bandwidth (<i>number</i> <i>keyword</i>) |
| Tree | bandwidth |
| Range | 0 to 1000000000 |
| Default | 0 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | All |

encap *keyword*

| | |
|------------|---|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i> |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-template *reference*

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-template <i>reference</i> |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template <i>string</i> |
| Introduced | 21.2.R1 |
| Platforms | All |

failure-action *keyword*

| | |
|-------------|---|
| Synopsis | VCCV BFD action taken on the SDP binding |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd failure-action <i>keyword</i> |
| Tree | failure-action |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Default | none |
| Options | none, down |
| Introduced | 21.2.R1 |
| Platforms | All |

wait-for-up-timer *number*

| | |
|-------------|--|
| Synopsis | Time waited for BFD up status |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i> |
| Tree | wait-for-up-timer |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.

This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range | 1 to 60 |
| Units | seconds |
| Introduced | 21.2.R1 |
| Platforms | All |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Allow agent to collect accounting statistics |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Use the control word as preferred |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

cpu-protection

| | |
|------------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure service epipe string spoke-sdp string cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm-monitoring

| | |
|------------|---|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

aggregate

| | |
|------------|--|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

car

| | |
|------------|--|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
| Context | configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mac-monitoring

| | |
|------------|--|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy-id *reference*

| | |
|------------|--|
| Synopsis | CPM protection policy |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> cpu-protection policy-id <i>reference</i> |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

l2tpv3

| | |
|------------|--|
| Synopsis | Enter the l2tpv3 context |
| Context | configure service epipe string spoke-sdp string egress l2tpv3 |
| Tree | l2tpv3 |
| Introduced | 16.0.R1 |
| Platforms | All |

cookie string

| | |
|---------------|--|
| Synopsis | Cookie parameters |
| Context | configure service epipe string spoke-sdp string egress l2tpv3 cookie string |
| Tree | cookie |
| String Length | 18 to 23 |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service epipe string spoke-sdp string egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|---|
| Synopsis | Enter the network context |
| Context | configure service epipe string spoke-sdp string egress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name reference

| | |
|----------|-------------------|
| Synopsis | Network policy ID |
|----------|-------------------|

| | |
|------------|--|
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress qos network policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

port-redirect-group

| | |
|------------|---|
| Synopsis | Enter the port-redirect-group context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group |
| Tree | port-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|---|
| Synopsis | Name of the egress port queue group |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|--|
| Synopsis | Queue-group instance ID |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> egress qos network port-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service epipe <i>string spoke-sdp string egress vc-label number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

endpoint

| | |
|------------|--|
| Synopsis | Enter the endpoint context |
| Context | configure service epipe <i>string spoke-sdp string endpoint</i> |
| Tree | endpoint |
| Introduced | 16.0.R1 |
| Platforms | All |

icb *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Bind SDP as type Inter-Chassis Backup (ICB) |
| Context | configure service epipe <i>string spoke-sdp string endpoint icb boolean</i> |
| Tree | icb |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

name *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service endpoint name |
| Context | configure service epipe string spoke-sdp string endpoint name reference |
| Tree | name |
| Reference | configure service epipe string endpoint string |
| Introduced | 16.0.R1 |
| Platforms | All |

precedence (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Precedence when multiple SDP binds are on one endpoint |
| Context | configure service epipe string spoke-sdp string endpoint precedence (<i>number</i> <i>keyword</i>) |
| Tree | precedence |
| Range | 1 to 4 |
| Default | 4 |
| Options | primary |
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label

| | |
|------------|--|
| Synopsis | Enable the use of entropy labels for spoke SDPs |
| Context | configure service epipe string spoke-sdp string entropy-label |
| Tree | entropy-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|----------|----------------------------------|
| Synopsis | Enter the eth-cfm context |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service epipe string spoke-sdp string eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service epipe string spoke-sdp string eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service epipe string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile *keyword*

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

| | |
|----------|------------------------------------|
| Synopsis | Enter the mep list instance |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string association string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|----------|---|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais

| | |
|------------|--|
| Synopsis | Enable the ais context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais |
| Tree | ais |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

client-meg-level *number*

| | |
|----------------|--|
| Synopsis | Client MEG level for AIS message generation |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i> |
| Tree | client-meg-level |
| Range | 1 to 7 |
| Max. Instances | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interface-support *boolean*

| | |
|------------|--|
| Synopsis | Enable generation of AIS PDUs based on endpoint state |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i> |
| Tree | interface-support |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|------------|--|
| Synopsis | Transmission interval for AIS messages |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i> |
| Tree | interval |
| Range | 1 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | all-def |
| Options | all-def, mac-rem-err-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|----------|--|
| Synopsis | Priority of the AIS messages generated by the node |
|----------|--|

| | |
|------------|---|
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i> |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|------------|--|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|----------|--|
| Synopsis | Time that must expire before an FNG alarm is reset |
|----------|--|

| | |
|------------|--|
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm boolean

| | |
|------------|---|
| Synopsis | Generate CCM messages |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</i> |
| Tree | ccm |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority number

| | |
|------------|---|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size number

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU. |

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

| | |
|------------|--|
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|---------------|---|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string</i> |
| Tree | cfm-vlan-tag |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|------------|---|
| Synopsis | Enable the csf context |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i> |
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *decimal-number*

| | |
|------------|---|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Direction the MEP faces

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [direction](#) *keyword*

Tree [direction](#)

Default down

Options down, up

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis Enable the **eth-test** context

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#)

Tree [eth-test](#)

Description Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **bit-error-threshold** *number*

Tree [bit-error-threshold](#)

Range 0 to 11840

Default 1

Units bit errors

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

test-pattern

Synopsis Enter the **test-pattern** context

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **test-pattern**

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

crc-tlv *boolean*

Synopsis Generate a CRC checksum

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) [test-pattern](#) **crc-tlv** *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pattern keyword

| | |
|-------------|--|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation keyword

| | |
|------------|--|
| Synopsis | Fault propagation for the MEP |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|---|
| Synopsis | Enter the grace context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|----------|---------------------------------|
| Synopsis | Enter the eth-ed context |
|----------|---------------------------------|

| | |
|-------------|--|
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</i> |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|------------|--|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</i> |
| Tree | max-rx-defect-window |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|--|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed *boolean*

| | |
|-------------|--|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |

| | |
|------------|--|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed *boolean*

| | |
|------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|-------------|---|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-vsm-grace](#) [tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [lbm-svc-act-responder](#) *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [low-priority-defect](#) *keyword*

Tree [low-priority-defect](#)

| | |
|------------|--|
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|-------------|--|
| Synopsis | MAC address of the MEP |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>string</i> |
| Tree | mac-address |
| Description | This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|------------|--|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | MEP provisioned using MA primary VLAN ID |
|----------|--|

| | |
|------------|--|
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean</i> |
| Tree | primary-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mip primary-vlan (*number | keyword*)

| | |
|------------|---|
| Synopsis | Enter the mip list instance |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword)</i> |
| Tree | mip |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan (*number | keyword*)

| | |
|-------------|---|
| Synopsis | VLAN ID to which the MIP is attached |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword)</i> |
| Tree | mip |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan. |
| Range | 1 to 4094 |
| Options | none |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|----------|---|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service epipe <i>string spoke-sdp string eth-cfm mip primary-vlan (number keyword) cfm-vlan-tag string</i> |
| Tree | cfm-vlan-tag |

| | |
|---------------|--|
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|------------|---|
| Synopsis | MAC address of the MIP |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) mac-address <i>string</i> |
| Tree | mac-address |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-ctag-levels *number*

| | |
|----------------|---|
| Synopsis | Squelch levels using additional VLAN C-Tag space |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> eth-cfm squelch-ingress-ctag-levels <i>number</i> |
| Tree | squelch-ingress-ctag-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 21.2.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch-gress-levels *number*

Synopsis Levels for which ETH-CFM packets are silently discarded

Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **snelch-gress-levels** *number*

Tree [snelch-gress-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

Range 0 to 7

Max. 8

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

force-vc-forwarding *keyword*

Synopsis VC forwarding action

Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **force-vc-forwarding** *keyword*

Tree [force-vc-forwarding](#)

Options vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag

Introduced 16.0.R1

Platforms All

hash-label

Synopsis Enable the **hash-label** context

Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **hash-label**

Tree [hash-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 16.0.R1

Platforms All

signal-capability

Synopsis Enable the signaling of the hash label between PE nodes

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [hash-label](#) [signal-capability](#)

Tree [signal-capability](#)

Introduced 16.0.R1

Platforms All

ingress

Synopsis Enter the **ingress** context

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [ingress](#)

Tree [ingress](#)

Introduced 16.0.R1

Platforms All

filter

Synopsis Enter the **filter** context

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)

Tree [filter](#)

Introduced 16.0.R1

Platforms All

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip reference](#)

Tree [ip](#)

Reference **configure** [filter](#) [ip-filter](#) *string*

Introduced 16.0.R1

Platforms All

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|--|
| Synopsis | MAC filter policy name |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

I2tpv3

| | |
|------------|---|
| Synopsis | Enter the I2tpv3 context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress I2tpv3 |
| Tree | I2tpv3 |
| Introduced | 16.0.R1 |
| Platforms | All |

cookie

| | |
|------------|--|
| Synopsis | Enter the cookie context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress I2tpv3 cookie |
| Tree | cookie |
| Introduced | 16.0.R1 |
| Platforms | All |

cookie1 string

| | |
|---------------|---|
| Synopsis | Value of cookie-1 for the tunnel |
| Context | configure service epipe string spoke-sdp string ingress l2tpv3 cookie cookie1 string |
| Tree | cookie1 |
| String Length | 18 to 23 |
| Introduced | 16.0.R1 |
| Platforms | All |

cookie2 string

| | |
|---------------|---|
| Synopsis | Value of cookie-1 for the tunnel |
| Context | configure service epipe string spoke-sdp string ingress l2tpv3 cookie cookie2 string |
| Tree | cookie2 |
| String Length | 18 to 23 |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service epipe string spoke-sdp string ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service epipe string spoke-sdp string ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Instance of the forwarding-plane ingress Queue Group for this SDP binding |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Network policy ID |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |

Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end
 Context **configure** *service epipe string spoke-sdp string ingress vc-label number*
 Tree [vc-label](#)
 Range 1 to 1048575
 Introduced 16.0.R1
 Platforms All

monitor-oper-group *reference*

Synopsis Operational group identifier that affect the state of this SDP bind
 Context **configure** *service epipe string spoke-sdp string monitor-oper-group reference*
 Tree [monitor-oper-group](#)
 Reference **configure** *service oper-group string*
 Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
 Introduced 16.0.R1
 Platforms All

oper-group *reference*

Synopsis Operational group identifier
 Context **configure** *service epipe string spoke-sdp string oper-group reference*
 Tree [oper-group](#)
 Reference **configure** *service oper-group string*
 Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.
 Introduced 16.0.R1
 Platforms All

pw-status

| | |
|------------|---|
| Synopsis | Enter the pw-status context |
| Context | configure service epipe <i>string spoke-sdp string pw-status</i> |
| Tree | pw-status |
| Introduced | 16.0.R1 |
| Platforms | All |

block-on-peer-fault *boolean*

| | |
|------------|---|
| Synopsis | Block the user traffic on this SDP bind when peer PW status has fault bits set |
| Context | configure service epipe <i>string spoke-sdp string pw-status block-on-peer-fault boolean</i> |
| Tree | block-on-peer-fault |
| Default | false |
| Notes | The following elements are part of a choice: block-on-peer-fault or standby-signaling-slave . |
| Introduced | 16.0.R1 |
| Platforms | All |

signaling *boolean*

| | |
|------------|---|
| Synopsis | Allow SDP binding to support pseudowire status signaling |
| Context | configure service epipe <i>string spoke-sdp string pw-status signaling boolean</i> |
| Tree | signaling |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

standby-signaling-slave *boolean*

| | |
|----------|---|
| Synopsis | Block spoke transmission when the spoke receives standby status notification from peer |
| Context | configure service epipe <i>string spoke-sdp string pw-status standby-signaling-slave boolean</i> |
| Tree | standby-signaling-slave |
| Default | false |
| Notes | The following elements are part of a choice: block-on-peer-fault or standby-signaling-slave . |

Introduced 16.0.R1
 Platforms All

source-bmac

Synopsis Enter the **source-bmac** context
 Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [source-bmac](#)
 Tree [source-bmac](#)
 Introduced 16.0.R1
 Platforms All

use-sdp-bmac-lsb *boolean*

Synopsis Allow the spoke SDP to be part of a redundant pseudo-wire within PBB Epipe service
 Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [source-bmac](#) [use-sdp-bmac-lsb](#) *boolean*
 Tree [use-sdp-bmac-lsb](#)
 Default false
 Introduced 16.0.R1
 Platforms All

transit-policy

Synopsis Enable the **transit-policy** context
 Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [transit-policy](#)
 Tree [transit-policy](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP transit policy ID

| | |
|------------|---|
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> transit-policy ip <i>reference</i> |
| Tree | ip |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP prefix policy ID |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Type of virtual circuit (VC) associated with the SDP binding |
| Context | configure service epipe <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i> |
| Tree | vc-type |
| Default | ether |
| Options | ether, vlan |
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-vc-tag *number*

| | |
|------------|---|
| Synopsis | SDP bind VC tag |
| Context | configure <i>service epipe</i> <i>string spoke-sdp</i> <i>string vlan-vc-tag</i> <i>number</i> |
| Tree | <i>vlan-vc-tag</i> |
| Range | 0 to 4094 |
| Introduced | 16.0.R1 |
| Platforms | All |

test *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Designate as a test service |
| Context | configure <i>service epipe</i> <i>string test</i> <i>boolean</i> |
| Tree | <i>test</i> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-switching *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use PW switching signaling for spoke SDPs in service |
| Context | configure <i>service epipe</i> <i>string vc-switching</i> <i>boolean</i> |
| Tree | <i>vc-switching</i> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VPN identifier for the service |
| Context | configure <i>service epipe string vpn-id number</i> |
| Tree | <i>vpn-id</i> |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

vxlan

| | |
|------------|--|
| Synopsis | Enter the vxlan context |
| Context | configure <i>service epipe string vxlan</i> |
| Tree | <i>vxlan</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance [*vxlan-instance*] *number*

| | |
|-------------------|--|
| Synopsis | Enter the instance list instance |
| Context | configure <i>service epipe string vxlan instance number</i> |
| Tree | <i>instance</i> |
| Max.
Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[vxlan-instance] *number*

| | |
|----------|--|
| Synopsis | VXLAN instance |
| Context | configure <i>service epipe string vxlan instance number</i> |
| Tree | <i>instance</i> |
| Range | 1 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

egress-vtep

| | |
|------------|--|
| Synopsis | Enter the egress-vtep context |
| Context | configure service epipe <i>string vxlan instance number</i> egress-vtep |
| Tree | egress-vtep |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | VTEP IP address used when originating VXLAN packets |
| Context | configure service epipe <i>string vxlan instance number</i> egress-vtep ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|--|
| Synopsis | Operational group associated with egress VTEP address |
| Context | configure service epipe <i>string vxlan instance number</i> egress-vtep oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

vni *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | VNI of the VXLAN |
| Context | configure service epipe <i>string vxlan instance number vni number</i> |
| Tree | vni |
| Range | 1 to 16777215 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

source-vtep (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Vxlan source virtual tunnel endpoint information |
| Context | configure service epipe <i>string vxlan source-vtep (ipv4-address-no-zone ipv6-address-no-zone)</i> |
| Tree | source-vtep |
| Introduced | 16.0.R1 |
| Platforms | All |

ies [[service-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the ies list instance |
| Context | configure service ies <i>string</i> |
| Tree | ies |
| Introduced | 16.0.R1 |
| Platforms | All |

[service-name] *string*

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service ies <i>string</i> |
| Tree | ies |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aa-interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the aa-interface list instance |
| Context | configure service ies string aa-interface string |
| Tree | aa-interface |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[interface-name] *string*

| | |
|---------------|---|
| Synopsis | Interface name |
| Context | configure service ies string aa-interface string |
| Tree | aa-interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service ies string aa-interface string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies string aa-interface string description string |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets

Context **configure** *service ies string aa-interface string ip-mtu number*

Tree [ip-mtu](#)

Range 512 to 9786

Units bytes

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure** *service ies string aa-interface string ipv4*

Tree [ipv4](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis Enable the **primary** context

Context **configure** *service ies string aa-interface string ipv4 primary*

Tree [primary](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis Primary IPv4 address assigned to the interface

Context **configure** *service ies string aa-interface string ipv4 primary address string*

Tree [address](#)

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis IPv4 address prefix length
 Context **configure service ies** *string aa-interface string ipv4 primary prefix-length number*
 Tree [prefix-length](#)
 Range 0 to 32
 Notes This element is mandatory.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance
 Context **configure service ies** *string aa-interface string sap string*
 Tree [sap](#)
 Max. 1
 Instances
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis SAP ID
 Context **configure service ies** *string aa-interface string sap string*
 Tree [sap](#)
 String Length 1 to 45
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the SAP

| | |
|------------|---|
| Context | configure service ies <i>string aa-interface string sap string admin-state keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string aa-interface string sap string description string</i> |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service ies <i>string aa-interface string sap string egress</i> |
| Tree | egress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string aa-interface string sap string egress filter</i> |
| Tree | filter |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|----------|-------------------------|
| Synopsis | IPv4 filter policy name |
|----------|-------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string aa-interface string sap string egress filter ip reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string aa-interface string sap string egress qos</i> |
| Tree | qos |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sap-egress

| | |
|------------|---|
| Synopsis | Enter the sap-egress context |
| Context | configure service ies <i>string aa-interface string sap string egress qos sap-egress</i> |
| Tree | sap-egress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service ies <i>string aa-interface string sap string egress qos sap-egress policy-name reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fwd-wholesale

| | |
|----------|--|
| Synopsis | Enter the fwd-wholesale context |
|----------|--|

| | |
|------------|---|
| Context | configure service ies <i>string aa-interface string sap string fwd-wholesale</i> |
| Tree | fwd-wholesale |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pppoe-service *reference*

| | |
|------------|---|
| Synopsis | PPPoE service name |
| Context | configure service ies <i>string aa-interface string sap string fwd-wholesale pppoe-service reference</i> |
| Tree | pppoe-service |
| Reference | configure service epipe <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string aa-interface string sap string ingress</i> |
| Tree | ingress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string aa-interface string sap string ingress qos</i> |
| Tree | qos |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sap-ingress

| | |
|----------|---|
| Synopsis | Enter the sap-ingress context |
| Context | configure service ies <i>string aa-interface string sap string ingress qos sap-ingress</i> |

Tree [sap-ingress](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
 Context **configure** [service ies](#) *string* [aa-interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides](#)
 Tree [overrides](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policy ID
 Context **configure** [service ies](#) *string* [aa-interface](#) *string* [sap](#) *string* [ingress qos sap-ingress policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos sap-ingress](#) *string*
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lag

Synopsis Enter the **lag** context
 Context **configure** [service ies](#) *string* [aa-interface](#) *string* [sap](#) *string* [lag](#)
 Tree [lag](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

aarp-interface [[interface-name](#)] *string*

Synopsis Enter the **aarp-interface** list instance
 Context **configure** [service ies](#) *string* [aarp-interface](#) *string*
 Tree [aarp-interface](#)

Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis Interface name
Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string*
Tree [aarp-interface](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the interface
Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string* **admin-state** *keyword*
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string* **description** *string*
Tree [description](#)
String Length 1 to 255
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets

| | |
|------------|--|
| Context | configure service ies <i>string aarp-interface string ip-mtu number</i> |
| Tree | ip-mtu |
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

spoke-sdp [[sdp-bind-id](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service ies <i>string aarp-interface string spoke-sdp string</i> |
| Tree | spoke-sdp |
| Max. Instances | 1 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[sdp-bind-id] *string*

| | |
|---------------|---|
| Synopsis | SDP binding ID |
| Context | configure service ies <i>string aarp-interface string spoke-sdp string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aarp

| | |
|------------|--|
| Synopsis | Enable the aarp context |
| Context | configure service ies <i>string aarp-interface string spoke-sdp string aarp</i> |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | AARP instance ID |
| Context | configure service ies <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string aarp id reference</i> |
| Tree | id |
| Reference | configure application-assurance aarp <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Role of the spoke SDP referenced by the AARP |
| Context | configure service ies <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string aarp type keyword</i> |
| Tree | type |
| Options | subscriber-side-shunt, network-side-shunt |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of this service SDP binding |
| Context | configure service ies <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string admin-state keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|--|
| Synopsis | IP filter ID |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VC egress value that indicates a specific connection |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip *reference*

| | |
|-----------|--|
| Synopsis | IP filter name |
| Context | configure service ies <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ingress value that indicates a specific connection
 Context **configure** [service](#) [ies](#) *string* [aarp-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*
 Tree [vc-label](#)
 Range 1 to 1048575
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the service
 Context **configure** [service](#) [ies](#) *string* [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service customer ID
 Context **configure** [service](#) [ies](#) *string* [customer](#) *reference*
 Tree [customer](#)
 Reference **configure** [service](#) [customer](#) *string*

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure service ies <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

igmp-host-tracking

| | |
|------------|---|
| Synopsis | Enter the igmp-host-tracking context |
| Context | configure service ies <i>string</i> igmp-host-tracking |
| Tree | igmp-host-tracking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of IGMP host tracking |
| Context | configure service ies <i>string</i> igmp-host-tracking admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|---|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

expiry-time *number*

| | |
|------------|---|
| Synopsis | Time that the system continues to track inactive hosts |
| Context | configure service ies <i>string</i> igmp-host-tracking expiry-time <i>number</i> |
| Tree | expiry-time |
| Range | 1 to 65535 |
| Default | 260 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface [**interface-name**] *string*

| | |
|-------------|--|
| Synopsis | Enter the interface list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> |
| Tree | interface |
| Description | Commands in this context create a logical IP routing interface. When created, attributes such as an IP address and SAP ID can be associated with the IP interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

[**interface-name**] *string*

| | |
|---------------|---|
| Synopsis | Interface name |
| Context | configure service ies <i>string</i> interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the interface |
| Context | configure service ies string interface string admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

cflowd-parameters

| | |
|------------|---|
| Synopsis | Enter the cflowd-parameters context |
| Context | configure service ies string interface string cflowd-parameters |
| Tree | cflowd-parameters |
| Introduced | 16.0.R1 |
| Platforms | All |

sampling [[sampling-type](#)] *keyword*

| | |
|------------|--|
| Synopsis | Enter the sampling list instance |
| Context | configure service ies string interface string cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Introduced | 16.0.R1 |
| Platforms | All |

[[sampling-type](#)] *keyword*

| | |
|-------------|--|
| Synopsis | Traffic sampling type |
| Context | configure service ies string interface string cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Description | This command configures the type of traffic to be sampled on the associated IP interface. |
| Options | unicast, multicast, both |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

direction *keyword*

| | |
|-------------|--|
| Synopsis | Direction of traffic for cflowd sampling |
| Context | configure service ies string interface string cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i> |
| Tree | direction |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces. |
| Default | ingress-only |
| Options | ingress-only, egress-only, both |
| Introduced | 16.0.R1 |
| Platforms | All |

sample-profile (*keyword* | *number*)

| | |
|-------------|--|
| Synopsis | Sample profile ID |
| Context | configure service ies string interface string cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>) |
| Tree | sample-profile |
| Description | This command defines the sampling rate profile associated with this interface. |
| Max. Range | 0 to 4294967295 |
| Options | 1 |
| Introduced | 19.5.R1 |
| Platforms | All |

type *keyword*

| | |
|-------------|---|
| Synopsis | Type of cflowd analysis |
| Context | configure service ies string interface string cflowd-parameters sampling <i>keyword</i> type <i>keyword</i> |
| Tree | type |
| Description | This command configures the cflowd sampling type on the associated IP interface. |
| Options | acl, interface |

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

cpu-protection *reference*

| | |
|------------|--|
| Synopsis | CPU protection policy |
| Context | configure service ies <i>string</i> interface <i>string</i> cpu-protection <i>reference</i> |
| Tree | cpu-protection |
| Reference | configure system security cpu-protection <i>policy</i> <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-tunnel-redundant-nexthop *string*

| | |
|-------------|--|
| Synopsis | Redundant next-hop address for the dynamic IPsec tunnel |
| Context | configure service ies <i>string</i> interface <i>string</i> dynamic-tunnel-redundant-nexthop <i>string</i> |
| Tree | dynamic-tunnel-redundant-nexthop |
| Description | This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service. |
| Notes | The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop) . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time

| | |
|------------|--|
| Synopsis | Enter the hold-time context |
| Context | configure service ies string interface string hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service ies string interface string hold-time ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure service ies string interface string hold-time ipv4 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | All |

init-only *boolean*

| | |
|-------------|---|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service ies string interface string hold-time ipv4 down init-only boolean |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Down hold time for the IP interface |
| Context | configure <i>service ies string interface string hold-time ipv4 down seconds number</i> |
| Tree | <i>seconds</i> |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure <i>service ies string interface string hold-time ipv4 up</i> |
| Tree | <i>up</i> |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Up hold time for the IP interface |
| Context | configure <i>service ies string interface string hold-time ipv4 up seconds number</i> |
| Tree | <i>seconds</i> |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

down

| | |
|-------------|---|
| Synopsis | Enter the down context |
| Context | configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | All |

init-only *boolean*

| | |
|-------------|--|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 down init-only <i>boolean</i> |
| Tree | init-only |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|----------|---|
| Synopsis | Down hold time for the IP interface |
| Context | configure service ies <i>string</i> interface <i>string</i> hold-time ipv6 down seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |

| | |
|------------|---------|
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service ies string interface string hold-time ipv6 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service ies string interface string hold-time ipv6 up seconds number |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

if-attribute

| | |
|------------|---|
| Synopsis | Enter the if-attribute context |
| Context | configure service ies string interface string if-attribute |
| Tree | if-attribute |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-group *reference*

| | |
|----------|---|
| Synopsis | Administrative group name for the interface |
|----------|---|

| | |
|----------------|--|
| Context | configure service ies <i>string interface string if-attribute admin-group reference</i> |
| Tree | admin-group |
| Reference | configure routing-options <i>if-attribute admin-group string</i> |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

srlg-group [*name*] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for srlg-group |
| Context | configure service ies <i>string interface string if-attribute srlg-group reference</i> |
| Tree | srlg-group |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *reference*

| | |
|------------|---|
| Synopsis | SRLG name |
| Context | configure service ies <i>string interface string if-attribute srlg-group reference</i> |
| Tree | srlg-group |
| Reference | configure routing-options <i>if-attribute srlg-group string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string interface string ingress</i> |
| Tree | ingress |
| Introduced | 19.7.R1 |
| Platforms | All |

destination-class-lookup *boolean*

| | |
|-------------|---|
| Synopsis | Enable BGP destination class lookup |
| Context | configure service ies <i>string</i> interface <i>string</i> ingress destination-class-lookup <i>boolean</i> |
| Tree | destination-class-lookup |
| Description | When configured to true , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the destination-class match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.

When configured to false , destination class lookup is not enabled. |
| Default | false |
| Introduced | 20.7.R1 |
| Platforms | All |

policy-accounting *reference*

| | |
|------------|---|
| Synopsis | Ingress policy accounting template name |
| Context | configure service ies <i>string</i> interface <i>string</i> ingress policy-accounting <i>reference</i> |
| Tree | policy-accounting |
| Reference | configure routing-options policy-accounting policy-acct-template <i>string</i> |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

ingress-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect ingress statistics |
| Context | configure service ies <i>string</i> interface <i>string</i> ingress-stats <i>boolean</i> |
| Tree | ingress-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-mtu *number*

| | |
|----------|---|
| Synopsis | IP MTU applied to outgoing packets |
| Context | configure service ies <i>string</i> interface <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |

| | |
|------------|-------------|
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

ipsec

| | |
|-------------|--|
| Synopsis | Enable the ipsec context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec |
| Tree | ipsec |
| Description | Commands in this context configure an IPsec secured interface. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IPsec secured interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ip-exception *reference*

| | |
|-------------|--|
| Synopsis | IP exception filter |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ip-exception <i>reference</i> |
| Tree | ip-exception |
| Description | This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing. |
| Reference | configure filter ip-exception <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipsec-tunnel *[name] string*

| | |
|-------------|---|
| Synopsis | Enter the ipsec-tunnel list instance |
| Context | configure service ies string interface string ipsec ipsec-tunnel string |
| Tree | ipsec-tunnel |
| Description | Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | IPsec tunnel name |
| Context | configure service ies string interface string ipsec ipsec-tunnel string |
| Tree | ipsec-tunnel |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the IPsec tunnel |
| Context | configure service ies string interface string ipsec ipsec-tunnel string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

bfd

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string bfd |
| Tree | bfd |
| Introduced | 22.7.R1 |
| Platforms | VSR |

bfd-designate *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Designate IPsec tunnel to carry BFD traffic |
| Context | configure service ies string interface string ipsec ipsec-tunnel string bfd bfd-designate boolean |
| Tree | bfd-designate |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness |
| Tree | bfd-liveness |
| Description | Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. |

BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1
 Platforms VSR

dest-ip string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session
 Context **configure service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string**
 Tree **dest-ip**
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

interface string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session
 Context **configure service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string**
 Tree **interface**
 String Length 1 to 32
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

service-name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Administrative service name |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> bfd bfd-liveness service-name <i>string</i> |
| Tree | service-name |
| Description | This command configures the name of the service where BFD traffic is forwarded to. |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Reset the DF bit to 0 in all payload IP packets |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> clear-df-bit <i>boolean</i> |
| Tree | clear-df-bit |
| Description | When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs. |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

copy-traffic-class-upon-decapsulation *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enable traffic class copy upon decapsulation |
|----------|--|

| | |
|-------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> copy-traffic-class-upon-decapsulation <i>boolean</i> |
| Tree | copy-traffic-class-upon-decapsulation |
| Description | When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum size of the encapsulated tunnel packet |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i> |
| Tree | encapsulated-ip-mtu |
| Description | This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 22.7.R1 |
| Platforms | VSR |

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the icmp-generation context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string icmp-generation |
| Tree | icmp-generation |
| Description | Commands in this context configure settings for ICMPv4 message generation. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the frag-required context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string icmp-generation frag-required |
| Tree | frag-required |
| Description | Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Administrative state of sending ICMP messages |
| Context | configure service ies string interface string ipsec ipsec-tunnel string icmp-generation frag-required admin-state <i>keyword</i> |

| | |
|-------------|--|
| Tree | admin-state |
| Description | This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Default | enable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Interval for sending ICMP messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i> |
| Tree | interval |
| Description | This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4). |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | VSR |

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Maximum number of ICMP messages that can be sent |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i> |
| Tree | message-count |

| | |
|-------------|--|
| Description | This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the icmp6-generation context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string icmp6-generation |
| Tree | icmp6-generation |
| Description | Commands in this context configure settings for ICMPv6 message generation. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enter the packet-too-big context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big |
| Tree | packet-too-big |
| Description | <p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p> |
| Introduced | 22.7.R1 |

Platforms VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of Packet Too Big message sends |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Interval for sending Packet Too Big messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i> |
| Tree | interval |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | VSR |

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum number of ICMPv6 PTB messages that can be sent |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big message-count <i>number</i> |
| Tree | message-count |
| Description | This command configures the maximum number of PTB messages that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Private MTU of the IPsec tunnel |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Description | This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 22.7.R1 |
| Platforms | VSR |

key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the key-exchange context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string key-exchange |
| Tree | key-exchange |
| Introduced | 22.7.R1 |
| Platforms | VSR |

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable the dynamic context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic |
| Tree | dynamic |
| Notes | The following elements are part of a choice: dynamic or manual . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Attempt to establish a phase 1 exchange automatically |
| Context | configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic auto-establish <i>boolean</i> |
| Tree | auto-establish |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the cert context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert |
| Tree | cert |
| Description | Commands in this context configure the attributes of the dynamic keying certificate. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

cert-profile *reference*

| | |
|------------|---|
| Synopsis | Certificate profile name |
| Context | configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert cert-profile reference |
| Tree | cert-profile |
| Reference | configure ipsec cert-profile string |
| Introduced | 22.7.R1 |
| Platforms | VSR |

status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the status-verify context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert status-verify |
| Tree | status-verify |
| Description | Commands in this context configure attributes of Certificate Status Verification (CSV). |
| Introduced | 22.7.R1 |
| Platforms | VSR |

default-result *keyword*

| | |
|-------------|---|
| Synopsis | Default result for Certificate Status Verification |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i> |
| Tree | default-result |
| Description | This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result. |
| Default | revoked |
| Options | revoked, good |
| Introduced | 22.7.R1 |
| Platforms | VSR |

primary *keyword*

| | |
|-------------|--|
| Synopsis | Primary method of CSV to verify the revocation status |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i> |
| Tree | primary |
| Description | This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer. |
| Default | crl |
| Options | crl, ocsp |
| Introduced | 22.7.R1 |
| Platforms | VSR |

secondary *keyword*

| | |
|-------------|--|
| Synopsis | Secondary method used to verify certificate revocation |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i> |
| Tree | secondary |
| Description | This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate. |
| Default | none |
| Options | none, crl, ocsp |

Introduced 22.7.R1
 Platforms VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
 Context **configure** [service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference](#)
 Tree [trust-anchor-profile](#)
 Reference **configure ipsec trust-anchor-profile string**
 Introduced 22.7.R1
 Platforms VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
 Context **configure** [service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic id](#)
 Tree [id](#)
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1
 Platforms VSR

fqdn *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

| | |
|---------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id fqdn <i>string</i> |
| Tree | fqdn |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipv4 *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv4 as the local ID type |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv4 <i>string</i> |
| Tree | ipv4 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv6 used as the local IKE ID type |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ipv6 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | IKE policy ID |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ike-policy <i>reference</i> |
| Tree | ike-policy |
| Description | This command specifies the ID of the IKE policy used for IKE negotiation.
The ipsec-transport-mode-profile configuration only supports IKEv2. |
| Reference | configure ipsec ike-policy <i>number</i> |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|---|
| Synopsis | IPsec transform IDs used by the dynamic key |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i> |
| Tree | ipsec-transform |
| Description | This command specifies IPsec transform IDs used for CHILD_SA negotiation. |
| Reference | configure ipsec ipsec-transform <i>number</i> |
| Max. Instances | 4 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Pre-shared key for authentication |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic pre-shared-key <i>string</i> |
| Tree | pre-shared-key |
| String Length | 1 to 115 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable the manual context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual |
| Tree | manual |
| Description | Commands in this context configure settings for manually configured security associations for the IPsec tunnel. |
| Notes | The following elements are part of a choice: dynamic or manual . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

keys [[security-association](#)] *number* *direction* *keyword*

| | |
|-------------|--|
| Synopsis | Enter the keys list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> <i>direction</i> <i>keyword</i> |
| Tree | keys |
| Description | Commands in this context configure the security association list for the tunnel. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

[[security-association](#)] *number*

| | |
|----------|-------------|
| Synopsis | SA entry ID |
|----------|-------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> |
| Tree | keys |
| Range | 1 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

direction *keyword*

| | |
|------------|---|
| Synopsis | Direction of the IPsec tunnel |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> |
| Tree | keys |
| Options | inbound, outbound |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Key used for the authentication algorithm |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 130 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Key used for the encryption algorithm |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>string</i> |
| Tree | encryption-key |
| String Length | 1 to 66 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipsec-transform *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Transform entry used by manual SAs |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> ipsec-transform <i>reference</i> |
| Tree | ipsec-transform |
| Reference | configure ipsec ipsec-transform <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

spi *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | SPI of inbound and outbound packets |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i> |
| Tree | spi |

| | |
|-------------|--|
| Description | This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.
The remote node can use the SPI to look up the instruction to verify and decrypt the packet. |
| Range | 256 to 16383 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Local IPsec tunnel endpoint address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> local-gateway-address-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-gateway-address-override |
| Description | This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enter the max-history-key-records context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> max-history-key-records |
| Tree | max-history-key-records |
| Description | Commands in this context configure the settings for recording historical IPsec keys. |
| Introduced | 22.7.R1 |

Platforms VSR

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of recent records

Context **configure** service ies string interface string ipsec ipsec-tunnel string max-history-key-records esp number

Tree esp

Range 1 to 48

Introduced 22.7.R1

Platforms VSR

ike number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of historical IKE key records

Context **configure** service ies string interface string ipsec ipsec-tunnel string max-history-key-records ike number

Tree ike

Range 1 to 3

Introduced 22.7.R1

Platforms VSR

pmtu-discovery-aging number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Aging out time of the learned path MTU

Context **configure** service ies string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number

| | |
|-------------|--|
| Tree | pmtu-discovery-aging |
| Description | This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation. |
| Range | 900 to 3600 |
| Default | 900 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | VSR |

private-sap *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Private SAP ID |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-sap <i>number</i> |
| Tree | private-sap |
| Range | 0 to 4094 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

private-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|----------------------|
| Synopsis | Private service name |
|----------|----------------------|

| | |
|---------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-service <i>string</i> |
| Tree | private-service |
| Description | This command configures the private service name.
If unconfigured, the private service is the service where the secured interface resides. |
| String Length | 1 to 64 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | TCP maximum segment size (MSS) adjustment |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i> |
| Tree | private-tcp-mss-adjust |
| Description | This command specifies the TCP MSS to adjust for the tunnel on the private side.
When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 22.7.R1 |
| Platforms | VSR |

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Enable propagation of the path MTU to IPv4 hosts |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i> |
| Tree | propagate-pmtu-v4 |

| | |
|-------------|--|
| Description | When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts). |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | VSR |

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable propagation of the path MTU to IPv6 hosts |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v6 <i>boolean</i> |
| Tree | propagate-pmtu-v6 |
| Description | When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts). |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | VSR |

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | TCP maximum segment size (MSS) on the public network |
| Context | configure service ies <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | public-tcp-mss-adjust |
| Description | This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Options | auto |

Introduced 22.7.R1
 Platforms VSR

remote-gateway-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Remote IPsec tunnel endpoint address
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [remote-gateway-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)
 Tree [remote-gateway-address](#)
 Introduced 22.7.R1
 Platforms VSR

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Anti-replay window size
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [replay-window](#) *number*
 Tree [replay-window](#)
 Description This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
 Range 32 | 64 | 128 | 256 | 512
 Units packets
 Introduced 22.7.R1
 Platforms VSR

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the security-policy context |
| Context | configure service ies string interface string ipsec ipsec-tunnel string security-policy |
| Tree | security-policy |
| Description | Commands in this context specify a security policy used by the tunnel. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Security policy ID for use by the tunnel |
| Context | configure service ies string interface string ipsec ipsec-tunnel string security-policy id number |
| Tree | id |
| Max. Range | 0 to 4294967295 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable strict match of the security policy entry |
| Context | configure service ies string interface string ipsec ipsec-tunnel string security-policy strict-match boolean |
| Tree | strict-match |
| Description | When configured to true , this command enables strict match of the security policy entry. |

When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.

If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.

| | |
|------------|---------|
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipv6-exception *reference*

| | |
|-------------|---|
| Synopsis | IPv6 filter exception used to bypass encryption |
| Context | configure service ies string interface string ipsec ipv6-exception reference |
| Tree | ipv6-exception |
| Description | This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface. |
| Reference | configure filter ipv6-exception string |
| Introduced | 22.7.R1 |
| Platforms | VSR |

public-sap *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Public SAP ID |
| Context | configure service ies string interface string ipsec public-sap number |
| Tree | public-sap |
| Range | 0 to 4094 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |

Platforms VSR

tunnel-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tunnel group ID

Context **configure service ies** *string* **interface** *string* **ipsec tunnel-group** *reference*

Tree [tunnel-group](#)

Reference **configure isa tunnel-group** *number*

Notes This element is mandatory.

Introduced 22.7.R1

Platforms VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure service ies** *string* **interface** *string* **ipv4**

Tree [ipv4](#)

Introduced 16.0.R1

Platforms All

addresses

Synopsis Enter the **addresses** context

Context **configure service ies** *string* **interface** *string* **ipv4 addresses**

Tree [addresses](#)

Introduced 16.0.R1

Platforms All

address [[ipv4-address](#)] *string*

Synopsis Enter the **address** list instance

Context **configure service ies** *string* **interface** *string* **ipv4 addresses** **address** *string*

| | |
|------------|-------------------------|
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|---|
| Synopsis | IPv4 address for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 addresses address <i>string</i> |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv4 address prefix length |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 addresses address <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-directed-broadcasts *boolean*

| | |
|------------|--|
| Synopsis | Forward directed broadcasts |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i> |
| Tree | allow-directed-broadcasts |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 bfd |
| Tree | bfd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

echo-receive *number*

| | |
|------------|--|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |

| | |
|------------|---------|
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

receive number

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service ies string interface string ipv4 bfd receive number |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transmit-interval number

| | |
|-------------|---|
| Synopsis | BFD transmit interval over this interface |
| Context | configure service ies string interface string ipv4 bfd transmit-interval number |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

type keyword

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure service ies string interface string ipv4 bfd type keyword |
| Tree | type |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dhcp

| | |
|------------|--|
| Synopsis | Enter the dhcp context |
| Context | configure service ies string interface string ipv4 dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of DHCP |
| Context | configure service ies string interface string ipv4 dhcp admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

gi-address *string*

| | |
|-------------|---|
| Synopsis | GI address for the DHCP relay |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp gi-address <i>string</i> |
| Tree | gi-address |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

lease-populate

| | |
|------------|---|
| Synopsis | Enter the lease-populate context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

max-leases *number*

| | |
|----------|--|
| Synopsis | Maximum number of DHCPv4 leases allowed |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i> |

| | |
|------------|----------------------------|
| Tree | max-leases |
| Range | 0 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | All |

option-82

| | |
|-------------|---|
| Synopsis | Enter the option-82 context |
| Context | configure service ies string interface string ipv4 dhcp option-82 |
| Tree | option-82 |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |
| Platforms | All |

action keyword

| | |
|------------|---|
| Synopsis | Action to take with received DHCP Option 82 |
| Context | configure service ies string interface string ipv4 dhcp option-82 action keyword |
| Tree | action |
| Default | keep |
| Options | replace, drop, keep |
| Introduced | 16.0.R1 |
| Platforms | All |

circuit-id

| | |
|------------|---|
| Synopsis | Enter the circuit-id context |
| Context | configure service ies string interface string ipv4 dhcp option-82 circuit-id |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-tuple

| | |
|------------|---|
| Synopsis | Use the ASCII-encoded tuple for the circuit ID |
| Context | configure service ies string interface string ipv4 dhcp option-82 circuit-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

ifindex

| | |
|------------|---|
| Synopsis | Use the interface index for the circuit ID |
| Context | configure service ies string interface string ipv4 dhcp option-82 circuit-id ifindex |
| Tree | ifindex |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

none

| | |
|------------|--|
| Synopsis | Do not include the circuit ID |
| Context | configure service ies string interface string ipv4 dhcp option-82 circuit-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id

| | |
|----------|--|
| Synopsis | Use the SAP ID |
| Context | configure service ies string interface string ipv4 dhcp option-82 circuit-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-ascii-tuple

| | |
|-------------|---|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple |
| Context | configure service ies string interface string ipv4 dhcp option-82 circuit-id vlan-ascii-tuple |
| Tree | vlan-ascii-tuple |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-id

| | |
|-------------|--|
| Synopsis | Enter the remote-id context |
| Context | configure service ies string interface string ipv4 dhcp option-82 remote-id |
| Tree | remote-id |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client). |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-string *string*

| | |
|---------------|--|
| Synopsis | User-defined ASCII string for the remote ID |
| Context | configure service ies string interface string ipv4 dhcp option-82 remote-id ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |

Platforms All

mac

Synopsis Use the MAC address for the remote ID

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [dhcp](#) [option-82](#) [remote-id](#) [mac](#)

Tree [mac](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

none

Synopsis Do not include the remote ID

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [dhcp](#) [option-82](#) [remote-id](#) [none](#)

Tree [none](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [dhcp](#) [option-82](#) [vendor-specific-option](#)

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms All

client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv4](#) [dhcp](#) [option-82](#) [vendor-specific-option](#) [client-mac-address](#) *boolean*

Tree [client-mac-address](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pool-name *boolean*

| | |
|------------|--|
| Synopsis | Send the pool name in the VSO |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i> |
| Tree | pool-name |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id *boolean*

| | |
|------------|---|
| Synopsis | Send SAP ID in the sub-option of the DHCP relay packet |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

service-id *boolean*

| | |
|------------|---|
| Synopsis | Send the service ID in the Vendor Specific Option |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

string *string*

| | |
|---------------|---|
| Synopsis | User-defined ASCII string for the VSO |
| Context | configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option string string |
| Tree | string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

system-id *boolean*

| | |
|------------|---|
| Synopsis | Send the system ID in the VSO |
| Context | configure service ies string interface string ipv4 dhcp option-82 vendor-specific-option system-id boolean |
| Tree | system-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-server

| | |
|------------|---|
| Synopsis | Enter the proxy-server context |
| Context | configure service ies string interface string ipv4 dhcp proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCP proxy server |
| Context | configure service ies string interface string ipv4 dhcp proxy-server admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

emulated-server *string*

Synopsis IP address used as the DHCP server address for the SAP

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server emulated-server](#) *string*

Tree [emulated-server](#)

Description This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.

Introduced 16.0.R1

Platforms All

lease-time

Synopsis Enter the **lease-time** context

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server lease-time](#)

Tree [lease-time](#)

Introduced 16.0.R1

Platforms All

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server lease-time radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms All

value *number*

Synopsis DHCP lease time

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server lease-time value](#) *number*

| | |
|------------|-----------------------|
| Tree | value |
| Range | 300 to 315446399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy |
| Context | configure service ies string interface string ipv4 dhcp python-policy reference |
| Tree | python-policy |
| Reference | configure python python-policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

relay-plain-bootp *boolean*

| | |
|------------|--|
| Synopsis | Enable relaying of plain BOOTP packets |
| Context | configure service ies string interface string ipv4 dhcp relay-plain-bootp boolean |
| Tree | relay-plain-bootp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

relay-proxy

| | |
|------------|--|
| Synopsis | Enable the relay-proxy context |
| Context | configure service ies string interface string ipv4 dhcp relay-proxy |
| Tree | relay-proxy |
| Introduced | 16.0.R1 |
| Platforms | All |

release-update-src-ip *boolean*

| | |
|----------|--|
| Synopsis | Update the source IP address of a DHCP RELEASE message |
|----------|--|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i> |
| Tree | release-update-src-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

siaddr-override *string*

| | |
|------------|--|
| Synopsis | DHCP server IP address for address hiding function |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i> |
| Tree | siaddr-override |
| Introduced | 16.0.R1 |
| Platforms | All |

release-include-gi-address *boolean*

| | |
|------------|--|
| Synopsis | Include gateway IP address in DHCP Release messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i> |
| Tree | release-include-gi-address |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|--|
| Synopsis | IP addresses for DHCP server requests |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp server <i>string</i> |
| Tree | server |
| Description | This command configures a list of servers that this interface forwards requests to.
The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8 |

| | |
|------------|--------------------------------------|
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

src-ip-addr *keyword*

| | |
|------------|---|
| Synopsis | Type of source address to use for DHCP relay |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i> |
| Tree | src-ip-addr |
| Default | auto |
| Options | auto, gi-address |
| Introduced | 16.0.R1 |
| Platforms | All |

trusted *boolean*

| | |
|-------------|---|
| Synopsis | Relay untrusted packets |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp trusted <i>boolean</i> |
| Tree | trusted |
| Description | <p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

use-arp *boolean*

| | |
|----------|---|
| Synopsis | Use ARP to determine the destination hardware address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 dhcp use-arp <i>boolean</i> |
| Tree | use-arp |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

icmp

| | |
|------------|--|
| Synopsis | Enter the icmp context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | All |

mask-reply *boolean*

| | |
|------------|--|
| Synopsis | Allow responses to ICMP mask requests on the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp mask-reply <i>boolean</i> |
| Tree | mask-reply |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

param-problem

| | |
|-------------|--|
| Synopsis | Enter the param-problem context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem |
| Tree | param-problem |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of sent Parameter Problem messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem admin-state <i>keyword</i> |

| | |
|------------|-----------------------------|
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of Parameter Problem messages to send |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit number of Parameter Problem messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

redirects

| | |
|-------------|---|
| Synopsis | Enter the redirects context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp redirects |
| Tree | redirects |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending ICMP redirect messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of ICMP redirect messages to send |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit the number of ICMP redirect messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ttl-expired

| | |
|-------------|---|
| Synopsis | Enter the ttl-expired context |
| Context | configure service ies string interface string ipv4 icmp ttl-expired |
| Tree | ttl-expired |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of sending TTL expired messages |
| Context | configure service ies string interface string ipv4 icmp ttl-expired admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number number

| | |
|------------|--|
| Synopsis | Maximum number of TTL expired messages to send |
| Context | configure service ies string interface string ipv4 icmp ttl-expired number number |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds number

| | |
|----------|---|
| Synopsis | Time used to limit the number of TTL expired messages |
| Context | configure service ies string interface string ipv4 icmp ttl-expired seconds number |
| Tree | seconds |
| Range | 1 to 60 |

| | |
|------------|---------|
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

unreachables

| | |
|-------------|--|
| Synopsis | Enter the unreachables context |
| Context | configure service ies string interface string ipv4 icmp unreachables |
| Tree | unreachables |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of sending unreachable messages |
| Context | configure service ies string interface string ipv4 icmp unreachables admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|---|
| Synopsis | Maximum number of unreachable messages to send |
| Context | configure service ies string interface string ipv4 icmp unreachables number number |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time to limit the number of ICMP unreachable messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 icmp unreachable <i>seconds</i> <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-helper-address *string*

| | |
|------------|---|
| Synopsis | Gateway address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 ip-helper-address <i>string</i> |
| Tree | ip-helper-address |
| Introduced | 16.0.R1 |
| Platforms | All |

local-dhcp-server *reference*

| | |
|------------|--|
| Synopsis | DHCP server for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 local-dhcp-server <i>reference</i> |
| Tree | local-dhcp-server |
| Reference | configure router <i>string</i> dhcp-server dhcpv4 <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|--|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | All |

host-route

| | |
|------------|---|
| Synopsis | Enter the host-route context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route |
| Tree | host-route |
| Introduced | 19.10.R1 |
| Platforms | All |

populate [[route-type](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the populate list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> |
| Tree | populate |
| Introduced | 19.10.R1 |
| Platforms | All |

[[route-type](#)] *keyword*

| | |
|------------|---|
| Synopsis | Type of ARP or ND entries that generate host routes |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> |
| Tree | populate |
| Options | static, dynamic, evpn |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Tag value used with the host route from an ARP/ND entry |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i> |

| | |
|-------------|--|
| Tree | route-tag |
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies. |
| Range | 1 to 255 |
| Introduced | 19.10.R1 |
| Platforms | All |

learn-unsolicited *boolean*

| | |
|-------------|--|
| Synopsis | Learn new entries from any received NA message |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i> |
| Tree | learn-unsolicited |
| Description | <p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

limit

| | |
|------------|---|
| Synopsis | Enter the limit context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit |
| Tree | limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|------------|--|
| Synopsis | Generate log entries only if limit is reached |
| Context | configure service ies string interface string ipv4 neighbor-discovery limit log-only <i>boolean</i> |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

max-entries *number*

| | |
|------------|--|
| Synopsis | Maximum number of entries learned on an IP interface |
| Context | configure service ies string interface string ipv4 neighbor-discovery limit max-entries <i>number</i> |
| Tree | max-entries |
| Range | 0 to 524288 |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|--|
| Synopsis | Threshold value that triggers a warning message |
| Context | configure service ies string interface string ipv4 neighbor-discovery limit threshold <i>number</i> |
| Tree | threshold |
| Range | 1 to 100 |
| Default | 90 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

local-proxy-arp *boolean*

| | |
|----------|---|
| Synopsis | Enable local proxy ARP on interface |
| Context | configure service ies string interface string ipv4 neighbor-discovery local-proxy-arp <i>boolean</i> |

| | |
|-------------|--|
| Tree | local-proxy-arp |
| Description | When configured to true , the router enables local proxy ARP on the interface.
When configured to false , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced | 16.0.R1 |
| Platforms | All |

populate *boolean*

| | |
|------------|--|
| Synopsis | Allow static and dynamic hosts to be populated in system ARP cache |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i> |
| Tree | populate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proactive-refresh *boolean*

| | |
|-------------|--|
| Synopsis | Send a single refresh message before entry timeout |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i> |
| Tree | proactive-refresh |
| Description | When configured to true , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).
When configured to false , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-arp-policy *reference*

| | |
|----------|-----------------------|
| Synopsis | Proxy ARP policy name |
|----------|-----------------------|

| | |
|----------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i> |
| Tree | proxy-arp-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-proxy-arp *boolean*

| | |
|------------|--|
| Synopsis | Enable remote proxy ARP on the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i> |
| Tree | remote-proxy-arp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

retry-timer *number*

| | |
|------------|--|
| Synopsis | ARP retry interval |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery retry-timer <i>number</i> |
| Tree | retry-timer |
| Range | 1 to 300 |
| Default | 50 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor [[ipv4-address](#)] *string*

| | |
|----------|--|
| Synopsis | Enter the static-neighbor list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> |

| | |
|------------|---------------------------------|
| Tree | static-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|--|
| Synopsis | IPv4 address that corresponds to the physical address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|------------|--|
| Synopsis | MAC address for the static neighbor |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor-unnumbered

| | |
|------------|---|
| Synopsis | Enable the static-neighbor-unnumbered context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered |
| Tree | static-neighbor-unnumbered |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|----------|-------------------------------------|
| Synopsis | MAC address for the static neighbor |
|----------|-------------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|-------------|---|
| Synopsis | Timeout for an ARP entry learned on the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i> |
| Tree | timeout |
| Description | This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table. |
| Range | 0 to 65535 |
| Default | 14400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

primary

| | |
|------------|---|
| Synopsis | Enable the primary context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 primary |
| Tree | primary |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|----------|---|
| Synopsis | Primary IPv4 address assigned to the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 primary address <i>string</i> |
| Tree | address |
| Notes | This element is mandatory. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast *keyword*

| | |
|------------|---|
| Synopsis | Broadcast address format |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 primary broadcast <i>keyword</i> |
| Tree | broadcast |
| Default | host-ones |
| Options | all-ones, host-ones |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 address prefix length |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 primary prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

track-srrp *number*

| | |
|------------|---|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 primary track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

qos-route-lookup *keyword*

| | |
|----------|------------------|
| Synopsis | QoS Route lookup |
|----------|------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination, source |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

secondary [**address**] *string*

| | |
|------------|---|
| Synopsis | Enter the secondary list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> |
| Tree | secondary |
| Introduced | 16.0.R1 |
| Platforms | All |

[address] *string*

| | |
|------------|---|
| Synopsis | Secondary IPv4 address assigned to the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> |
| Tree | secondary |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast *keyword*

| | |
|------------|---|
| Synopsis | Broadcast address format |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i> |
| Tree | broadcast |
| Default | host-ones |
| Options | all-ones, host-ones |
| Introduced | 16.0.R1 |
| Platforms | All |

igp-inhibit *boolean*

| | |
|-------------|--|
| Synopsis | Disable the running IGP from recognizing secondary IP |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> igp-inhibit <i>boolean</i> |
| Tree | igp-inhibit |
| Description | When configured to true , the running IGP does not recognize the secondary IP address as a local interface. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv4 address prefix length |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

track-srrp *number*

| | |
|------------|--|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

tcp-mss *number*

| | |
|----------|---|
| Synopsis | TCP maximum segment size for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 tcp-mss <i>number</i> |
| Tree | tcp-mss |
| Range | 384 to 9746 |

Introduced 16.0.R1
Platforms All

unnumbered

Synopsis Enter the **unnumbered** context
Context **configure service ies string interface string ipv4 unnumbered**
Tree [unnumbered](#)
Introduced 16.0.R1
Platforms All

ip-address string

Synopsis IP address of the unnumbered interface
Context **configure service ies string interface string ipv4 unnumbered ip-address string**
Tree [ip-address](#)
Notes The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced 16.0.R1
Platforms All

ip-int-name string

Synopsis IP interface name
Context **configure service ies string interface string ipv4 unnumbered ip-int-name string**
Tree [ip-int-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **ip-address**, **ip-int-name**, or **system**.
Introduced 16.0.R1
Platforms All

system

Synopsis IP interface as an unnumbered interface
Context **configure service ies string interface string ipv4 unnumbered system**
Tree [system](#)

| | |
|------------|--|
| Notes | The following elements are part of a choice: ip-address , ip-int-name , or system . |
| Introduced | 16.0.R1 |
| Platforms | All |

urpf-check

| | |
|------------|--|
| Synopsis | Enable the urpf-check context |
| Context | configure service ies string interface string ipv4 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-default *boolean*

| | |
|------------|---|
| Synopsis | Ignore default route when performing a uRPF check |
| Context | configure service ies string interface string ipv4 urpf-check ignore-default boolean |
| Tree | ignore-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mode *keyword*

| | |
|------------|---|
| Synopsis | Unicast RPF check mode |
| Context | configure service ies string interface string ipv4 urpf-check mode keyword |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | All |

vrrp [[virtual-router-id](#)] *number*

| | |
|----------|---|
| Synopsis | Enter the vrrp list instance |
| Context | configure service ies string interface string ipv4 vrrp number |

| | |
|------------|----------------------|
| Tree | vrrp |
| Introduced | 16.0.R1 |
| Platforms | All |

[virtual-router-id] *number*

| | |
|------------|--|
| Synopsis | Virtual Router Identifier (VRID) for the IP interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> |
| Tree | vrrp |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|--|
| Synopsis | Administrative state of VRRP |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p> |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|--|
| Synopsis | Password for simple text authentication |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.

If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time. |
| String Length | 1 to 38 |
| Introduced | 16.0.R1 |
| Platforms | All |

backup *string*

| | |
|----------------|---|
| Synopsis | Virtual router IP addresses for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> backup <i>string</i> |
| Tree | backup |
| Description | This command associates virtual router IP addresses with those of the parental IP interface.

This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.

Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances. |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service ies string interface string ipv4 vrrp number bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |
| Platforms | All |

dest-ip *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Destination IP address to use for BFD session |
| Context | configure service ies string interface string ipv4 vrrp number bfd-liveness dest-ip string |
| Tree | dest-ip |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-name *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Name of the interface running BFD |
| Context | configure service ies string interface string ipv4 vrrp number bfd-liveness interface-name string |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Administrative service name |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp number bfd-liveness service-name <i>string</i> |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

init-delay *number*

| | |
|------------|---|
| Synopsis | VRRP initialization delay timer |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp number init-delay <i>number</i> |
| Tree | init-delay |
| Range | 1 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|-------------|--|
| Synopsis | Virtual MAC address to use in ARP responses |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp number mac <i>string</i> |
| Tree | mac |
| Description | <p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts</p> |

results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

master-int-inherit *boolean*

| | |
|-------------|---|
| Synopsis | Allow master instance to dictate the master down timer |
| Context | configure <i>service ies string interface string ipv4 vrrp number master-int-inherit boolean</i> |
| Tree | master-int-inherit |
| Description | <p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

message-interval *number*

| | |
|-------------|--|
| Synopsis | Interval for sending VRRP advertisement messages |
| Context | configure <i>service ies string interface string ipv4 vrrp number message-interval number</i> |
| Tree | message-interval |
| Description | <p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none"> • When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as master. • When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming |

advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.

- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

| | |
|------------|-------------|
| Range | 1 to 2559 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | VRRP instance to follow a specified operational group |
| Context | configure service ies string interface string ipv4 vrrp number monitor-oper-group reference |
| Tree | monitor-oper-group |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference | configure service oper-group string |
| Introduced | 22.2.R1 |
| Platforms | All |

ntp-reply *boolean*

| | |
|-------------|--|
| Synopsis | Allow processing of NTP requests |
| Context | configure service ies string interface string ipv4 vrrp number ntp-reply boolean |
| Tree | ntp-reply |
| Description | When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. |

When configured to **false**, the router does not process NTP requests.

| | |
|------------|---------|
| Default | false |
| Introduced | 20.2.R1 |
| Platforms | All |

oper-group *reference*

| | |
|-------------|---|
| Synopsis | Operational group name associated with the VRRP |
| Context | configure service ies string interface string ipv4 vrrp number oper-group reference |
| Tree | oper-group |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference | configure service oper-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Designate the virtual router instance as owner |
| Context | configure service ies string interface string ipv4 vrrp number owner boolean |
| Tree | owner |
| Description | When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to false , this virtual router instance is designated as a non-owner. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

passive *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Suppress the processing of VRRP advertisement messages |
| Context | configure <i>service ies string interface string ipv4 vrrp number</i> passive <i>boolean</i> |
| Tree | passive |
| Description | <p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ping-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to ICMP echo requests |
| Context | configure <i>service ies string interface string ipv4 vrrp number</i> ping-reply <i>boolean</i> |
| Tree | ping-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy *reference*

| | |
|----------|------------------------------|
| Synopsis | VRRP priority control policy |
|----------|------------------------------|

| | |
|-------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> policy <i>reference</i> |
| Tree | policy |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference | configure vrrp policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

preempt *boolean*

| | |
|-------------|--|
| Synopsis | Allow the VRRP to override an existing non-owner master |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> preempt <i>boolean</i> |
| Tree | preempt |
| Description | <p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|-------------|---|
| Synopsis | Base priority for the VRRP |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> priority <i>number</i> |
| Tree | priority |
| Description | This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process. |

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

| | |
|------------|----------|
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

ssh-reply *boolean*

| | |
|-------------|--|
| Synopsis | Allow the non-owner master to reply to SSH requests |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ssh-reply <i>boolean</i> |
| Tree | ssh-reply |
| Description | When configured to true , the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).

When configure to false , SSH requests to non-owner master virtual IP addresses are silently discarded. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

standby-forwarding *boolean*

| | |
|-------------|---|
| Synopsis | Allow standby router to forward traffic |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> standby-forwarding <i>boolean</i> |
| Tree | standby-forwarding |
| Description | When configured to true , the standby router forwards all traffic.

When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to Telnet requests |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> telnet-reply <i>boolean</i> |
| Tree | telnet-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

traceroute-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to traceroute requests |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i> |
| Tree | traceroute-reply |
| Description | <p>When configured to true, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to false, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enable the ipv6 context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

address [ipv6-address] *string*

| | |
|------------|---|
| Synopsis | Enter the address list instance |
| Context | configure <i>service ies string interface string ipv6 address string</i> |
| Tree | <i>address</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-address] *string*

| | |
|------------|---|
| Synopsis | IPv6 address assigned to the interface |
| Context | configure <i>service ies string interface string ipv6 address string</i> |
| Tree | <i>address</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-address-detection *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable Duplicate Address Detection |
| Context | configure <i>service ies string interface string ipv6 address string duplicate-address-detection boolean</i> |
| Tree | <i>duplicate-address-detection</i> |
| Description | When configured to true , the router enables Duplicate Address Detection (DAD).
When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

eui-64 *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Form IPv6 address from prefix and 64-bit interface ID |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 address <i>string</i> eui-64 <i>boolean</i> |
| Tree | eui-64 |
| Description | When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv6 address prefix length |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 address <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 4 to 128 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

primary-preference *number*

| | |
|-------------|---|
| Synopsis | Index assigned to the IPv6 address of the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 address <i>string</i> primary-preference <i>number</i> |
| Tree | primary-preference |
| Description | This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected. |

If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.

| | |
|------------|-----------------|
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

track-srrp *number*

| | |
|------------|--|
| Synopsis | SRRP ID whose state is tracked on this IP address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 address <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd |
| Tree | bfd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

echo-receive *number*

| | |
|------------|--|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

receive *number*

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd receive <i>number</i> |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transmit-interval *number*

| | |
|-------------|---|
| Synopsis | BFD transmit interval over this interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd transmit-interval <i>number</i> |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword*

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 bfd type <i>keyword</i> |
| Tree | type |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dhcp6

| | |
|----------|--------------------------------|
| Synopsis | Enter the dhcp6 context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | All |

relay

| | |
|------------|---|
| Synopsis | Enter the relay context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay |
| Tree | relay |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 Relay |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

lease-populate

| | |
|----------|---|
| Synopsis | Enter the lease-populate context |
|----------|---|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

max-nbr-of-leases *number*

| | |
|------------|--|
| Synopsis | Maximum number of lease states allocated by the DHCPv6 relay function, allowed on interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate max-nbr-of-leases <i>number</i> |
| Tree | max-nbr-of-leases |
| Range | 0 to 32767 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

route-populate

| | |
|------------|---|
| Synopsis | Enter the route-populate context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate |
| Tree | route-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

na *boolean*

| | |
|------------|---|
| Synopsis | Create route based on IA_NA prefix option in relay-reply message |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate na <i>boolean</i> |
| Tree | na |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pd

| | |
|------------|--|
| Synopsis | Enable the pd context |
| Context | configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate pd |
| Tree | pd |
| Introduced | 16.0.R1 |
| Platforms | All |

exclude boolean

| | |
|------------|--|
| Synopsis | Create back hole route based on prefix exclude option in relay-reply message |
| Context | configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate pd exclude boolean |
| Tree | exclude |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ta boolean

| | |
|------------|--|
| Synopsis | Create route based on IA_TA prefix option in relay-reply message |
| Context | configure service ies string interface string ipv6 dhcp6 relay lease-populate route-populate ta boolean |
| Tree | ta |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

link-address string

| | |
|------------|---|
| Synopsis | Link address of the DHCPv6 relay messages |
| Context | configure service ies string interface string ipv6 dhcp6 relay link-address string |
| Tree | link-address |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor-resolution *boolean*

| | |
|------------|--|
| Synopsis | Enable neighbor resolution via DHCPv6 relay |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay neighbor-resolution <i>boolean</i> |
| Tree | neighbor-resolution |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

option

| | |
|------------|--|
| Synopsis | Enter the option context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-id

| | |
|------------|---|
| Synopsis | Enter the interface-id context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id |
| Tree | interface-id |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-tuple

| | |
|------------|---|
| Synopsis | Use ASCII-encoded concatenated tuple |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

if-index

| | |
|------------|--|
| Synopsis | Use interface index in interface ID option in DHCPv6 relay packet |
| Context | configure service ies string interface string ipv6 dhcp6 relay option interface-id if-index |
| Tree | if-index |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id

| | |
|------------|--|
| Synopsis | Use SAP ID in interface ID option in DHCPv6 relay packet |
| Context | configure service ies string interface string ipv6 dhcp6 relay option interface-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

string *string*

| | |
|---------------|---|
| Synopsis | String for interface ID option in DHCPv6 relay packet |
| Context | configure service ies string interface string ipv6 dhcp6 relay option interface-id string string |
| Tree | string |
| String Length | 1 to 80 |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-id *boolean*

| | |
|----------|--|
| Synopsis | Allow remote ID option to be sent in the DHCPv6 relay packet |
| Context | configure service ies string interface string ipv6 dhcp6 relay option remote-id boolean |
| Tree | remote-id |
| Default | false |

Introduced 16.0.R1
 Platforms All

python-policy *reference*

Synopsis Python policy name
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [python-policy](#) [reference](#)
 Tree [python-policy](#)
 Reference **configure** [python](#) [python-policy](#) [string](#)
 Introduced 16.0.R1
 Platforms All

server *string*

Synopsis DHCPv6 server to which the DHCPv6 requests are forwarded
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [server](#) [string](#)
 Tree [server](#)
 Max. Instances 8
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms All

source-address *string*

Synopsis Source IPv6 address of the DHCPv6 relay messages
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [source-address](#) [string](#)
 Tree [source-address](#)
 Introduced 16.0.R1
 Platforms All

user-db *reference*

Synopsis Local user database for authentication
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [dhcp6](#) [relay](#) [user-db](#) [reference](#)

| | |
|------------|--|
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server

| | |
|------------|--|
| Synopsis | Enter the server context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server |
| Tree | server |
| Introduced | 16.0.R1 |
| Platforms | All |

max-nbr-of-leases *number*

| | |
|------------|--|
| Synopsis | DHCPv6 leases allowed |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server max-nbr-of-leases <i>number</i> |
| Tree | max-nbr-of-leases |
| Range | 0 to 8000 |
| Default | 8000 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-delegation

| | |
|-------------|--|
| Synopsis | Enter the prefix-delegation context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation |
| Tree | prefix-delegation |
| Description | Commands in this context configure the options for delegating a long-lived prefix from a delegating router to a requesting router, where the delegating router does not require knowledge about the link topology in the network to which the prefixes are assigned. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the prefix delegation |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix [[ipv6-prefix](#)] *string*

| | |
|-------------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix <i>string</i> |
| Tree | prefix |
| Description | Commands in this context configure the IPv6 prefix that is delegated by the system. |
| Introduced | 16.0.R1 |
| Platforms | All |

[[ipv6-prefix](#)] *string*

| | |
|------------|---|
| Synopsis | IPv6 address and prefix |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix <i>string</i> |
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

client-id

| | |
|----------|--|
| Synopsis | Enter the client-id context |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id |
| Tree | client-id |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

duid string

| | |
|---------------|--|
| Synopsis | Requesting router ID |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id duid string |
| Tree | duid |
| String Length | 1 to 130 |
| Introduced | 16.0.R1 |
| Platforms | All |

iaid number

| | |
|-------------|--|
| Synopsis | IAID from the requesting router to match |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id iaid number |
| Tree | iaid |
| Description | This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed. |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

preferred-lifetime (number | keyword)

| | |
|-------------|--|
| Synopsis | Preferred lifetime of the prefix |
| Context | configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string preferred-lifetime (number keyword) |
| Tree | preferred-lifetime |
| Description | This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value. |
| Range | 1 to 4294967294 |
| Default | 604800 |
| Units | seconds |

| | |
|------------|----------|
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

valid-lifetime (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Valid lifetime of the prefix |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 1 to 4294967294 |
| Default | 2592000 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-address-detection *boolean*

| | |
|------------|--|
| Synopsis | Enable Duplicate Address Detection per interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 duplicate-address-detection <i>boolean</i> |
| Tree | duplicate-address-detection |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

forward-ipv4-packets *boolean*

| | |
|------------|---|
| Synopsis | Forward unencapsulated IPv4 packets |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 forward-ipv4-packets <i>boolean</i> |
| Tree | forward-ipv4-packets |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

icmp6

| | |
|------------|---|
| Synopsis | Enter the icmp6 context |
| Context | configure service ies string interface string ipv6 icmp6 |
| Tree | icmp6 |
| Introduced | 16.0.R1 |
| Platforms | All |

packet-too-big

| | |
|-------------|--|
| Synopsis | Enter the packet-too-big context |
| Context | configure service ies string interface string ipv6 icmp6 packet-too-big |
| Tree | packet-too-big |
| Description | Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Packet Too Big message sends |
| Context | configure service ies string interface string ipv6 icmp6 packet-too-big admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|----------|--|
| Synopsis | Number of Packet Too big Messages issued per time frame |
| Context | configure service ies string interface string ipv6 icmp6 packet-too-big number number |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |

Introduced 16.0.R1
 Platforms All

seconds *number*

Synopsis Time used to limit Packet Too Big messages
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [packet-too-big](#) [seconds](#) *number*
 Tree [seconds](#)
 Range 1 to 60
 Default 10
 Introduced 16.0.R1
 Platforms All

param-problem

Synopsis Enter the **param-problem** context
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [param-problem](#)
 Tree [param-problem](#)
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of Parameter Problem message sends
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [param-problem](#) [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

number *number*

Synopsis Number used to limit ICMPv6 Parameter Problem messages
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [param-problem](#) [number](#) *number*

| | |
|------------|------------------------|
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit ICMPv6 Parameter Problem messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

redirects

| | |
|------------|---|
| Synopsis | Enter the redirects context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 redirects |
| Tree | redirects |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Redirect message sends |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Number to limit ICMPv6 Redirect messages per time frame |
| Context | configure service ies string interface string ipv6 icmp6 redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit ICMPv6 Redirect messages |
| Context | configure service ies string interface string ipv6 icmp6 redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

time-exceeded

| | |
|------------|---|
| Synopsis | Enter the time-exceeded context |
| Context | configure service ies string interface string ipv6 icmp6 time-exceeded |
| Tree | time-exceeded |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of Time Exceeded message sends |
| Context | configure service ies string interface string ipv6 icmp6 time-exceeded admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

Introduced 16.0.R1
 Platforms All

number *number*

Synopsis Number to limit Time Exceeded messages per time frame
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [time-exceeded](#) *number* *number*
 Tree [number](#)
 Range 10 to 2000
 Default 100
 Introduced 16.0.R1
 Platforms All

seconds *number*

Synopsis Time used to limit ICMPv6 Time Exceeded messages
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [time-exceeded](#) *seconds* *number*
 Tree [seconds](#)
 Range 1 to 60
 Default 10
 Introduced 16.0.R1
 Platforms All

unreachables

Synopsis Enter the **unreachables** context
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [unreachables](#)
 Tree [unreachables](#)
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of Unreachable message sends
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [unreachables](#) [admin-state](#) *keyword*

| | |
|------------|-----------------------------|
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Number to limit Unreachable messages per time frame |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 unreachable number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit ICMPv6 Unreachable messages |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 icmp6 unreachable seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

link-local-address

| | |
|------------|--|
| Synopsis | Enter the link-local-address context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 link-local-address |
| Tree | link-local-address |
| Introduced | 16.0.R1 |
| Platforms | All |

address string

| | |
|------------|---|
| Synopsis | IPv6 link-local address |
| Context | configure service ies string interface string ipv6 link-local-address address string |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-address-detection boolean

| | |
|-------------|--|
| Synopsis | Enable Duplicate Address Detection |
| Context | configure service ies string interface string ipv6 link-local-address duplicate-address-detection boolean |
| Tree | duplicate-address-detection |
| Description | When configured to true , the router enables Duplicate Address Detection (DAD) on the interface.

When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

local-dhcp-server reference

| | |
|------------|---|
| Synopsis | DHCP server for the interface |
| Context | configure service ies string interface string ipv6 local-dhcp-server reference |
| Tree | local-dhcp-server |
| Reference | configure router string dhcp-server dhcpv6 string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|--|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service ies string interface string ipv6 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |

Platforms All

host-route

Synopsis Enter the **host-route** context

Context **configure service ies** *string* **interface** *string* **ipv6 neighbor-discovery host-route**

Tree **host-route**

Introduced 20.2.R1

Platforms All

populate [*route-type*] *keyword*

Synopsis Enter the **populate** list instance

Context **configure service ies** *string* **interface** *string* **ipv6 neighbor-discovery host-route populate** *keyword*

Tree **populate**

Introduced 20.2.R1

Platforms All

[*route-type*] *keyword*

Synopsis Type of ARP or ND entries that generate host routes

Context **configure service ies** *string* **interface** *string* **ipv6 neighbor-discovery host-route populate** *keyword*

Tree **populate**

Options static, dynamic, evpn

Notes This element is part of a list key.

Introduced 20.2.R1

Platforms All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry

| | |
|-------------|--|
| Context | configure service ies string interface string ipv6 neighbor-discovery host-route populate keyword route-tag number |
| Tree | route-tag |
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies. |
| Range | 1 to 255 |
| Introduced | 20.2.R1 |
| Platforms | All |

learn-unsolicited keyword

| | |
|-------------|---|
| Synopsis | Type of entries learned from unsolicited NA messages |
| Context | configure service ies string interface string ipv6 neighbor-discovery learn-unsolicited keyword |
| Tree | learn-unsolicited |
| Description | This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.

When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior. |
| Options | global, link-local, both |
| Introduced | 16.0.R1 |
| Platforms | All |

limit

| | |
|------------|--|
| Synopsis | Enter the limit context |
| Context | configure service ies string interface string ipv6 neighbor-discovery limit |
| Tree | limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only boolean

| | |
|----------|---|
| Synopsis | Generate log entries when limit is reached |
| Context | configure service ies string interface string ipv6 neighbor-discovery limit log-only boolean |

| | |
|-------------|--|
| Tree | log-only |
| Description | When configured to true , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.

When configured to false , the router does not send the warning message. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

max-entries *number*

| | |
|-------------|---|
| Synopsis | Maximum number of entries learned on an IP interface |
| Context | configure service ies string interface string ipv6 neighbor-discovery limit max-entries number |
| Tree | max-entries |
| Description | This command configures the maximum number of entries that can be learned on an IP interface.

When unconfigured, no maximum limit is imposed. |
| Range | 0 to 102400 |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|---|
| Synopsis | Threshold percentage that triggers a warning message |
| Context | configure service ies string interface string ipv6 neighbor-discovery limit threshold number |
| Tree | threshold |
| Range | 1 to 100 |
| Default | 90 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

local-proxy-nd *boolean*

| | |
|-------------|--|
| Synopsis | Enable local proxy neighbor discovery on the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery local-proxy-nd <i>boolean</i> |
| Tree | local-proxy-nd |
| Description | When configured to true , the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.

When configured to false , the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proactive-refresh *keyword*

| | |
|-------------|---|
| Synopsis | Proactive refresh of neighbor entries |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i> |
| Tree | proactive-refresh |
| Description | This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed. |
| Options | global, link-local, both |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-nd-policy *reference*

| | |
|----------------|---|
| Synopsis | Proxy Neighbor Discovery policy name for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i> |
| Tree | proxy-nd-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |

| | |
|------------|--------------------------------------|
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

reachable-time *number*

| | |
|------------|--|
| Synopsis | Neighbor reachability detection timer |
| Context | configure service ies string interface string ipv6 neighbor-discovery reachable-time number |
| Tree | reachable-time |
| Range | 30 to 3600 |
| Introduced | 16.0.R1 |
| Platforms | All |

secure-nd

| | |
|------------|--|
| Synopsis | Enter the secure-nd context |
| Context | configure service ies string interface string ipv6 neighbor-discovery secure-nd |
| Tree | secure-nd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Secure Neighbor Discovery |
| Context | configure service ies string interface string ipv6 neighbor-discovery secure-nd admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-unsecured-msgs *boolean*

| | |
|----------|---------------------------|
| Synopsis | Accept unsecured messages |
|----------|---------------------------|

| | |
|-------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd allow-unsecured-msgs <i>boolean</i> |
| Tree | allow-unsecured-msgs |
| Description | When configured to true , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted.
When configured to false , the router disables the acceptance of unsecured messages. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

public-key-min-bits *number*

| | |
|------------|--|
| Synopsis | Minimum acceptable key length for public keys in CGA |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd public-key-min-bits <i>number</i> |
| Tree | public-key-min-bits |
| Range | 512 to 1024 |
| Default | 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

security-parameter *number*

| | |
|------------|---|
| Synopsis | Security parameter used in the generation of a CGA |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd security-parameter <i>number</i> |
| Tree | security-parameter |
| Range | 0 to 1 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

stale-time *number*

| | |
|----------|---|
| Synopsis | Time a Neighbor Discovery cache entry remains stale |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery stale-time <i>number</i> |

| | |
|------------|----------------------------|
| Tree | stale-time |
| Range | 60 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor [[ipv6-address](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the static-neighbor list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-address] *string*

| | |
|------------|---|
| Synopsis | IPv6 address corresponding to the physical address |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|------------|--|
| Synopsis | MAC address for the static neighbor |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

qos-route-lookup *keyword*

| | |
|------------|--|
| Synopsis | QoS Route lookup |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination, source |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tcp-mss *number*

| | |
|------------|--|
| Synopsis | TCP maximum segment size for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 tcp-mss <i>number</i> |
| Tree | tcp-mss |
| Range | 1220 to 9726 |
| Introduced | 16.0.R1 |
| Platforms | All |

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-default *boolean*

| | |
|------------|--|
| Synopsis | Ignore default route when performing a uRPF check |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 urpf-check ignore-default <i>boolean</i> |
| Tree | ignore-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mode *keyword*

| | |
|------------|---|
| Synopsis | Unicast RPF check mode |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 urpf-check <i>mode</i> <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | All |

vrrp [[virtual-router-id](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the vrrp list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> |
| Tree | vrrp |
| Max. Instances | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

[virtual-router-id] *number*

| | |
|------------|--|
| Synopsis | Virtual Router Identifier (VRID) for the IP interface |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> |
| Tree | vrrp |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|---|
| Synopsis | Administrative state of VRRP |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | The command determines the administrative state of non-owner virtual router instances. |

Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.

When **disabled**, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.

Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

| | |
|------------|-----------------|
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

backup string

| | |
|----------------|--|
| Synopsis | Virtual router IP addresses for the interface |
| Context | configure service ies string interface string ipv6 vrrp number backup string |
| Tree | backup |
| Description | <p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p> |
| Max. Instances | 4 |
| Introduced | 16.0.R1 |

Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context

Context **configure service ies string interface string ipv6 vrrp number bfd-liveness**

Tree [bfd-liveness](#)

Introduced 16.0.R1

Platforms All

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Destination address for the BFD session

Context **configure service ies string interface string ipv6 vrrp number bfd-liveness dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**

Tree [dest-ip](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the interface running BFD

Context **configure service ies string interface string ipv6 vrrp number bfd-liveness interface-name string**

Tree [interface-name](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

service-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Administrative service name

Context **configure** *service ies string interface string ipv6 vrrp number bfd-liveness service-name string*

Tree *service-name*

String Length 1 to 64

Introduced 16.0.R1

Platforms All

init-delay *number*

Synopsis VRRP initialization delay timer

Context **configure** *service ies string interface string ipv6 vrrp number init-delay number*

Tree *init-delay*

Range 1 to 65535

Units seconds

Introduced 16.0.R1

Platforms All

mac *string*

Synopsis Virtual MAC address to use in ARP responses

Context **configure** *service ies string interface string ipv6 vrrp number mac string*

Tree *mac*

Description This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.

Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced 16.0.R1

Platforms All

master-int-inherit *boolean*

Synopsis Allow master instance to dictate the master down timer

Context **configure** *service ies string interface string ipv6 vrrp number master-int-inherit boolean*

Tree [master-int-inherit](#)

Description When configured to **true**, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.

When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

message-interval *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** *service ies string interface string ipv6 vrrp number message-interval number*

Tree [message-interval](#)

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar

to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.

- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

| | |
|------------|--------------|
| Range | 10 to 4095 |
| Default | 100 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | VRRP instance to follow a specified operational group |
| Context | configure service ies string interface string ipv6 vrrp number monitor-oper-group reference |
| Tree | monitor-oper-group |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference | configure service oper-group string |
| Introduced | 22.2.R1 |
| Platforms | All |

ntp-reply *boolean*

| | |
|----------|---|
| Synopsis | Allow processing of NTP requests |
| Context | configure service ies string interface string ipv6 vrrp number ntp-reply boolean |

| | |
|-------------|--|
| Tree | ntp-reply |
| Description | When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.
When configured to false , the router does not process NTP requests. |
| Default | false |
| Introduced | 20.2.R1 |
| Platforms | All |

oper-group *reference*

| | |
|-------------|---|
| Synopsis | Operational group name associated with the VRRP |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Designate the virtual router instance as owner |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> owner <i>boolean</i> |
| Tree | owner |
| Description | When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.
When configured to false , this virtual router instance is designated as a non-owner. |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Suppress the processing of VRRP advertisement messages |
| Context | configure <i>service ies string interface string ipv6 vrrp number</i> passive <i>boolean</i> |
| Tree | passive |
| Description | <p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ping-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to ICMP echo requests |
| Context | configure <i>service ies string interface string ipv6 vrrp number</i> ping-reply <i>boolean</i> |
| Tree | ping-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|-------------|--|
| Synopsis | VRRP priority control policy |
| Context | configure service ies string interface string ipv6 vrrp number policy reference |
| Tree | policy |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference | configure vrrp policy number |
| Introduced | 16.0.R1 |
| Platforms | All |

preempt boolean

| | |
|-------------|--|
| Synopsis | Allow the VRRP to override an existing non-owner master |
| Context | configure service ies string interface string ipv6 vrrp number preempt boolean |
| Tree | preempt |
| Description | <p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

priority number

| | |
|----------|---|
| Synopsis | Base priority for the VRRP |
| Context | configure service ies string interface string ipv6 vrrp number priority number |

| | |
|-------------|---|
| Tree | priority |
| Description | <p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p> |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

standby-forwarding *boolean*

| | |
|-------------|--|
| Synopsis | Allow standby router to forward traffic |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp number standby-forwarding <i>boolean</i> |
| Tree | standby-forwarding |
| Description | <p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to Telnet requests |
| Context | configure service ies <i>string</i> interface <i>string</i> ipv6 vrrp number telnet-reply <i>boolean</i> |
| Tree | telnet-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to false, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p> |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

traceroute-reply *boolean*

Synopsis Allow non-owner master to reply to traceroute requests

Context **configure service ies** *string* **interface** *string* **ipv6 vrrp number** **traceroute-reply** *boolean*

Tree [traceroute-reply](#)

Description When configured to **true**, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to **false**, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).

Default false

Introduced 16.0.R1

Platforms All

load-balancing

Synopsis Enter the **load-balancing** context

Context **configure service ies** *string* **interface** *string* **load-balancing**

Tree [load-balancing](#)

Introduced 16.0.R1

Platforms All

flow-label-load-balancing *boolean*

Synopsis Enable flow label load balancing

Context **configure service ies** *string* **interface** *string* **load-balancing flow-label-load-balancing** *boolean*

Tree [flow-label-load-balancing](#)

Description When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.

When configured to **false**, the router disables load balancing in ECMP and LAG.

Default false

Introduced 21.5.R1

Platforms All

ip-load-balancing *keyword*

Synopsis IP load-balancing algorithm

Context **configure** [service ies](#) *string* [interface](#) *string* [load-balancing](#) [ip-load-balancing](#) *keyword*

Tree [ip-load-balancing](#)

Description This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **I4-load-balancing** command is enabled, this command also includes the source or destination port in the hash inputs.

Default both

Options both, destination, source, inner-ip

Introduced 16.0.R3

Platforms All

spi-load-balancing *boolean*

Synopsis Enable SPI use in hashing

Context **configure** [service ies](#) *string* [interface](#) *string* [load-balancing](#) [spi-load-balancing](#) *boolean*

Tree [spi-load-balancing](#)

Description When configured to **true**, the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.

Default false

Introduced 16.0.R1

Platforms All

teid-load-balancing *boolean*

Synopsis Enable use of TEID in hashing

Context **configure** [service ies](#) *string* [interface](#) *string* [load-balancing](#) [teid-load-balancing](#) *boolean*

Tree [teid-load-balancing](#)

Default false

Introduced 16.0.R1

Platforms All

loopback *boolean*

| | |
|------------|---|
| Synopsis | Use interface as a loopback interface |
| Context | configure service ies string interface string loopback boolean |
| Tree | loopback |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|------------|---|
| Synopsis | MAC address for the interface |
| Context | configure service ies string interface string mac string |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable MAC accounting functionality |
| Context | configure service ies string interface string mac-accounting boolean |
| Tree | mac-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group to monitor |
| Context | configure service ies string interface string monitor-oper-group reference |
| Tree | monitor-oper-group |
| Reference | configure service oper-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

multi-chassis-shunting-profile *reference*

| | |
|-------------|--|
| Synopsis | Multi-chassis shunting profile name |
| Context | configure service ies <i>string</i> interface <i>string</i> multi-chassis-shunting-profile <i>reference</i> |
| Tree | multi-chassis-shunting-profile |
| Description | This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces. |
| Reference | configure router <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> |
| Notes | The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop). |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multicast-network-domain *reference*

| | |
|------------|--|
| Synopsis | Network domain name |
| Context | configure service ies <i>string</i> interface <i>string</i> multicast-network-domain <i>reference</i> |
| Tree | multicast-network-domain |
| Reference | configure router <i>string</i> network-domains network-domain <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ping-template

| | |
|------------|--|
| Synopsis | Enable the ping-template context |
| Context | configure service ies <i>string</i> interface <i>string</i> ping-template |
| Tree | ping-template |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the ping template |
| Context | configure service ies <i>string</i> interface <i>string</i> ping-template admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|--|
| Default | disable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

destination-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Ping template destination address |
| Context | configure service ies <i>string</i> interface <i>string</i> ping-template <i>destination-address</i> <i>string</i> |
| Tree | destination-address |
| Description | <p>This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. A configuration warning message displays if the primary IPv4 address and the destination are not on the same subnet, INFO: PIP #2092 Ping template misconfiguration - destination-address and primary IP address should fall in the same subnet.</p> <p>Unnumbered interfaces and loopback addresses are not supported.</p> <p>The config service ies vprn interface ping-template must be administratively disabled to remove or change the destination-address ip-address.</p> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Ping template name |
| Context | configure service ies <i>string</i> interface <i>string</i> ping-template <i>name</i> <i>reference</i> |
| Tree | name |
| Description | This command configures the name of the ping template to be assigned to the IP interface. |
| Reference | configure test-oam icmp ping-template <i>string</i> |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ptp-hw-assist

| | |
|------------|---|
| Synopsis | Enter the ptp-hw-assist context |
| Context | configure service ies <i>string</i> interface <i>string</i> ptp-hw-assist |
| Tree | ptp-hw-assist |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|-------------|---|
| Synopsis | Administrative state of the PTP time stamping assist |
| Context | configure service ies <i>string</i> interface <i>string</i> ptp-hw-assist admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | <p>This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.</p> <p>Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.</p> |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

radius-auth-policy *reference*

| | |
|------------|--|
| Synopsis | Authentication policy |
| Context | configure service ies <i>string</i> interface <i>string</i> radius-auth-policy <i>reference</i> |
| Tree | radius-auth-policy |
| Reference | configure subscriber-mgmt radius-authentication-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap [[sap-id](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the sap list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> |
| Tree | sap |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[sap-id] *string*

| | |
|---------------|--|
| Synopsis | SAP ID |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aarp

| | |
|------------|---|
| Synopsis | Enable the aarp context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference

| | |
|------------|---|
| Synopsis | AARP instance ID |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> aarp <i>id reference</i> |
| Tree | id |
| Reference | configure application-assurance aarp <i>number</i> |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Role referenced by the AARP
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [aarp](#) [type](#) *keyword*
 Tree [type](#)
 Options dual-homed, dual-homed-secondary
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [accounting-policy](#) *reference*
 Tree [accounting-policy](#)
 Reference **configure** [log](#) [accounting-policy](#) *number*
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the SAP
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

anti-spoof *keyword*

Synopsis Anti-spoof filtering
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [anti-spoof](#) *keyword*
 Tree [anti-spoof](#)

| | |
|------------|---|
| Options | source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bandwidth *number*

| | |
|------------|--|
| Synopsis | SAP bandwidth |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> bandwidth <i>number</i> |
| Tree | bandwidth |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

calling-station-id *string*

| | |
|---------------|---|
| Synopsis | Calling station ID |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> calling-station-id <i>string</i> |
| Tree | calling-station-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

collect-stats *boolean*

| | |
|----------|-------------------------------|
| Synopsis | Collect accounting statistics |
|----------|-------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

cpu-protection

| | |
|------------|--|
| Synopsis | Enter the cpu-protection context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm-monitoring

| | |
|------------|---|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

aggregate

| | |
|------------|---|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

car

| | |
|----------|---|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
|----------|---|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ip-src-monitoring

| | |
|------------|--|
| Synopsis | Enable IP source monitoring for CPU protection |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection ip-src-monitoring |
| Tree | ip-src-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy-id *reference*

| | |
|------------|---|
| Synopsis | CPM protection policy |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i> |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies string interface string sap string description string |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 16.0.R1 |
| Platforms | All |

dist-cpu-protection *reference*

| | |
|------------|---|
| Synopsis | Distributed CPU protection policy for SAP |
| Context | configure service ies string interface string sap string dist-cpu-protection reference |
| Tree | dist-cpu-protection |
| Reference | configure system security dist-cpu-protection policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service ies string interface string sap string egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

agg-rate

| | |
|------------|---|
| Synopsis | Enter the agg-rate context |
| Context | configure service ies string interface string sap string egress agg-rate |
| Tree | agg-rate |
| Notes | The following elements are part of a choice: agg-rate or percent-agg-rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule *keyword*

| | |
|------------|---|
| Synopsis | Adaptation rule to compute the operational PIR value when an aggregate shaper is used |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i> |
| Tree | adaptation-rule |
| Default | closest |
| Options | max, min, closest |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|--|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-frame-based-accounting *boolean*

| | |
|----------|--|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
|----------|--|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rate number

| | |
|------------|--|
| Synopsis | Enforced aggregate rate for all queues |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|--|
| Synopsis | Enter the root context |
| Context | configure service ies string interface string sap string egress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service ies string interface string sap string egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|--|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service ies string interface string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service ies string interface string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |

| | |
|------------|--|
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[priority-level] *number*

| | |
|------------|--|
| Synopsis | Priority level |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policer control policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

qinq-mark-top-only *boolean*

| | |
|------------|---|
| Synopsis | Mark top Q-tags |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i> |
| Tree | qinq-mark-top-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-egress

| | |
|------------|--|
| Synopsis | Enter the sap-egress context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

hs-secondary-shaper *string*

| | |
|---------------|--|
| Synopsis | HS Secondary Shaper |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides hs-secondary-shaper string |
| Tree | hs-secondary-shaper |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-group [[group-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the hs-wrr-group list instance |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference |
| Tree | hs-wrr-group |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

[group-id] *reference*

| | |
|------------|--|
| Synopsis | HS WRR group identifier |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference |
| Tree | hs-wrr-group |
| Reference | configure qos sap-egress string hs-wrr-group number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-class-weight *number*

| | |
|----------|---|
| Synopsis | Class weight override of the WRR group |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference hs-class-weight number |
| Tree | hs-class-weight |

| | |
|------------|------------------|
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

percent-rate *decimal-number*

| | |
|------------|---|
| Synopsis | Percent rate override applied to the HS WRR group |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group reference percent-rate <i>decimal-number</i> |
| Tree | percent-rate |
| Range | 0.01 to 100.00 |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

rate (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Scheduling rate override applied to the HS WRR group |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group reference rate (<i>number</i> <i>keyword</i>) |
| Tree | rate |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policer [[policer-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] reference

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference |
| Tree | policer |
| Reference | configure qos sap-egress string policer number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cbs (number | keyword)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference cbs (number keyword) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (number | keyword)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference mbs (number keyword) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet size modification for policing information |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -64 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir *decimal-number*

| | |
|----------|---|
| Synopsis | PIR percent rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides policer reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the queue list instance |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-egress string queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|----------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule |

| | |
|------------|---------------------------------|
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

pir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule pir keyword |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

avg-frame-overhead decimal-number

| | |
|------------|---|
| Synopsis | Average packet-to-frame encapsulation overhead |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number |
| Tree | avg-frame-overhead |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

burst-limit (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Explicit shaping burst size for the queue |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-tail

| | |
|------------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference drop-tail |
| Tree | drop-tail |
| Introduced | 16.0.R1 |
| Platforms | All |

low

| | |
|----------|------------------------------|
| Synopsis | Enter the low context |
|----------|------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

hs-class-weight *number*

| | |
|------------|--|
| Synopsis | Class weight override for the queue |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wred-queue

| | |
|------------|--|
| Synopsis | Enter the hs-wred-queue context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue |
| Tree | hs-wred-queue |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policy reference

| | |
|------------|--|
| Synopsis | Slope policy applied to the HSQ queue group queue |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference |
| Tree | policy |
| Reference | configure qos slope-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-weight number

| | |
|------------|--|
| Synopsis | Weighted Round Robin (WRR) weight to parent with this queue into the scheduler |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number |
| Tree | hs-wrr-weight |
| Range | 1 to 127 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

mbs (number | keyword)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference mbs (number keyword) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|----------|---|
| Synopsis | Enable the monitor-queue-depth context |
|----------|---|

| | |
|------------|---|
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 20.10.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|-------------|---|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Description | When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to false , fast queue polling is not enabled. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

violation-threshold *decimal-number*

| | |
|-------------|---|
| Synopsis | Threshold for queue depth before violation is raised |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i> |
| Tree | violation-threshold |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered. |
| Range | 0.01 to 99.99 |
| Introduced | 20.10.R1 |
| Platforms | All |

parent

| | |
|----------|--|
| Synopsis | Enter the parent context |
| Context | configure service ies string interface string sap string egress qos sap-egress overrides queue reference parent |
| Tree | parent |

Introduced 16.0.R1
 Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [parent](#) **cir-weight** *number*
 Tree [cir-weight](#)
 Range 0 to 100
 Introduced 16.0.R1
 Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [parent](#) **weight** *number*
 Tree [weight](#)
 Range 0 to 100
 Introduced 16.0.R1
 Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **percent-rate**
 Tree [percent-rate](#)
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 16.0.R1
 Platforms All

cir *decimal-number*

Synopsis CIR percent rate

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides
queue <i>reference</i> percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

pir *decimal-number*

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides
queue <i>reference</i> percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides
queue <i>reference</i> rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | CIR rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides
queue <i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |

Introduced 16.0.R1
 Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos sap-egress overrides](#) [queue reference rate](#) **pir** (*number* | *keyword*)
 Tree [pir](#)
 Range 1 to 6400000000
 Units kilobps
 Options max
 Introduced 16.0.R1
 Platforms All

policy-name *reference*

Synopsis Policy ID to associate with SAP for mirrored service
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos sap-egress](#) [policy-name reference](#)
 Tree [policy-name](#)
 Reference **configure** [qos sap-egress string](#)
 Introduced 16.0.R1
 Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos sap-egress](#) [port-redirect-group](#)
 Tree [port-redirect-group](#)
 Introduced 16.0.R1
 Platforms All

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the queue group redirect list policy |
| Context | configure service ies string interface string sap string egress qos sap-egress port-redirect-group group-name reference |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Instance of port queue group |
| Context | configure service ies string interface string sap string egress qos sap-egress port-redirect-group instance number |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler-policy

| | |
|------------|---|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service ies string interface string sap string egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service ies string interface string sap string egress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [*scheduler-name*] *string*

| | |
|------------|---|
| Synopsis | Enter the scheduler list instance |
| Context | configure <i>service ies string interface string sap string egress qos scheduler-policy overrides scheduler string</i> |
| Tree | <i>scheduler</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure <i>service ies string interface string sap string egress qos scheduler-policy overrides scheduler string</i> |
| Tree | <i>scheduler</i> |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|----------|--|
| Synopsis | Enter the parent context |
| Context | configure <i>service ies string interface string sap string egress qos scheduler-policy overrides scheduler string parent</i> |
| Tree | <i>parent</i> |

Introduced 16.0.R1
 Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) [parent](#) **cir-weight** *number*
 Tree [cir-weight](#)
 Range 0 to 100
 Introduced 16.0.R1
 Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) [parent](#) **weight** *number*
 Tree [weight](#)
 Range 0 to 100
 Introduced 16.0.R1
 Platforms All

rate

Synopsis Enter the **rate** context
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **rate**
 Tree [rate](#)
 Introduced 16.0.R1
 Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) [string](#) **rate** **cir** (*number* | *keyword*)

| | |
|------------|---------------------|
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-group-redirect-list *reference*

| | |
|-----------|--|
| Synopsis | Assign queue-group redirect list |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> egress queue-group-redirect-list <i>reference</i> |
| Tree | queue-group-redirect-list |
| Reference | configure qos queue-group-redirect-list <i>string</i> |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure service ies string interface string sap string eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service ies string interface string sap string eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|-------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service ies string interface string sap string eth-cfm collect-lmm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> |

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

| | |
|----------------|--|
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile *keyword*

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |

| | |
|------------|--|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep *md-admin-name reference ma-admin-name reference mep-id number*

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Reference | configure <i>eth-cfm domain string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Reference | configure <i>eth-cfm domain string association string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id number

| | |
|------------|---|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais boolean

| | |
|------------|---|
| Synopsis | Enable the generation and the reception of AIS messages |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais boolean |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|----------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification |

| | |
|-------------|--|
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|------------|--|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|------------|--|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm *boolean*

| | |
|----------|---|
| Synopsis | Generate CCM messages |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i> |

| | |
|------------|--|
| Tree | ccm |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority *number*

| | |
|------------|---|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|----------|--|
| Synopsis | Enable the csf context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf |

| | |
|------------|--|
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *decimal-number*

| | |
|------------|--|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|---|
| Synopsis | Enable the eth-test context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|--|
| Synopsis | Enter the test-pattern context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|----------|---------------------------------------|
| Synopsis | Test pattern for Ethernet Test frames |
|----------|---------------------------------------|

| | |
|-------------|---|
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|------------|---|
| Synopsis | Fault propagation for the MEP |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|---|
| Synopsis | Enter the grace context |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|----------|--|
| Synopsis | Enter the eth-ed context |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed |

| | |
|-------------|--|
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|------------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed *boolean*

| | |
|------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|-------------|---|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | <p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|----------|---|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |

| | |
|------------|--|
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|-------------|--|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i> |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. | 8 |
| Instances | |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fwd-wholesale

| | |
|------------|---|
| Synopsis | Enter the fwd-wholesale context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale |
| Tree | fwd-wholesale |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-service *reference*

| | |
|----------|--------------------|
| Synopsis | PPPoE service name |
|----------|--------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i> |
| Tree | pppoe-service |
| Reference | configure service epipe <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of host creation on the SAP |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i> |
| Tree | host-admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-lockout-policy *reference*

| | |
|------------|--|
| Synopsis | Host lockout policy |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i> |
| Tree | host-lockout-policy |
| Reference | configure subscriber-mgmt host-lockout-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

match-qinq-dot1p *keyword*

| | |
|------------|---|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service ies string interface string sap string ingress qos match-qinq-dot1p <i>keyword</i> |
| Tree | match-qinq-dot1p |
| Options | top, bottom |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service ies string interface string sap string ingress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service ies string interface string sap string ingress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|---|
| Synopsis | Enter the root context |
| Context | configure service ies string interface string sap string ingress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|----------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |

| | |
|------------|--|
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[priority-level] *number*

| | |
|------------|---|
| Synopsis | Priority level |
| Context | configure service ies string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number | keyword*)

| | |
|------------|---|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service ies string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority number mbs-contribution (number keyword) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service ies string interface string sap string ingress qos policer-control-policy policy-name reference |
| Tree | policy-name |
| Reference | configure qos policer-control-policy string |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 16.0.R1

Platforms All

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

instance *number*

Synopsis Queue group instance

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1
 Platforms All

overrides

Synopsis Enter the **overrides** context
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#)
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms All

ip-criteria

Synopsis Enter the **ip-criteria** context
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ip-criteria](#)
 Tree [ip-criteria](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv4 criteria
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ip-criteria](#) [activate-entry-tag](#) *number*
 Tree [activate-entry-tag](#)
 Range 1 to 255
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis Enter the **ipv6-criteria** context
 Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ipv6-criteria](#)
 Tree [ipv6-criteria](#)

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv6 criteria
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag](#) *number*
 Tree [activate-entry-tag](#)
 Range 1 to 255
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#) *reference*
 Tree [policer](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] *reference*

Synopsis Policer unique ID
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#) *reference*
 Tree [policer](#)
 Reference **configure** [qos sap-ingress](#) *string* [policer](#) *number*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
policer reference cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
policer reference mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|--|
| Synopsis | Packet size modification for policing information |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
policer reference packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -32 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|----------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
policer reference percent-rate |

| | |
|------------|---|
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service ies string interface string sap string ingress qos sap-ingress overrides policer reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir *decimal-number*

| | |
|------------|---|
| Synopsis | PIR percent rate |
| Context | configure service ies string interface string sap string ingress qos sap-ingress overrides policer reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service ies string interface string sap string ingress qos sap-ingress overrides policer reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|---|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir *keyword*

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i> |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |

Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) **pir** *keyword*

Tree [pir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **cbs** (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

drop-tail

Synopsis Enter the **drop-tail** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **drop-tail**

Tree [drop-tail](#)

Introduced 16.0.R1

Platforms All

low

Synopsis Enter the **low** context

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
queue <i>reference</i> drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|---|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides
queue <i>reference</i> monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 21.7.R1 |

Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#) [fast-polling](#) *boolean*

Tree [fast-polling](#)

Default false

Introduced 21.7.R1

Platforms All

parent

Synopsis Enter the **parent** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#)

Tree [parent](#)

Introduced 16.0.R1

Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [weight](#) *number*

Tree [weight](#)

| | |
|------------|----------|
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service ies string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service ies string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

pir *decimal-number*

| | |
|------------|---|
| Synopsis | PIR percent rate |
| Context | configure service ies string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|----------|-----------|
| Synopsis | Policy ID |
|----------|-----------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

queuing-type *keyword*

| | |
|------------|--|
| Synopsis | Queuing type |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [*scheduler-name*] *string*

| | |
|------------|--|
| Synopsis | Enter the scheduler list instance |
| Context | configure <i>service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string</i> |
| Tree | <i>scheduler</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure <i>service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string</i> |
| Tree | <i>scheduler</i> |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure <i>service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string parent</i> |
| Tree | <i>parent</i> |
| Introduced | 16.0.R1 |

Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) [cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [parent](#) [weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) [cir](#) (*number* | *keyword*)

Tree [cir](#)

| | |
|------------|-----------------|
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-group-redirect-list *reference*

| | |
|------------|---|
| Synopsis | Queue group redirect list |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ingress queue-group-redirect-list <i>reference</i> |
| Tree | queue-group-redirect-list |
| Reference | configure qos queue-group-redirect-list <i>string</i> |
| Introduced | 16.0.R1 |

Platforms All

ip-tunnel [tunnel-name] *string*

Synopsis Enter the **ip-tunnel** list instance

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string*

Tree **ip-tunnel**

Description Commands in this context configure an IP-GRE or IP-IP tunnel and associate it with a private tunnel SAP within an IES service.

Max. Instances 1

Introduced 16.0.R1

Platforms All

[tunnel-name] *string*

Synopsis IP tunnel name

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string*

Tree **ip-tunnel**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the IP tunnel

Context **configure service ies** *string* **interface** *string* **sap** *string* **ip-tunnel** *string* **admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

backup-remote-ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Backup remote IP address that is applied to this tunnel |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> backup-remote-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | backup-remote-ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Clear the Do-not-Fragment bit |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> clear-df-bit <i>boolean</i> |
| Tree | clear-df-bit |
| Description | When configured to true , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.
When configured to false , clearing of the DF bit is disabled. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

delivery-service *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Service to originate and terminate GRE packets |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> delivery-service <i>string</i> |

| | |
|---------------|---|
| Tree | delivery-service |
| Description | This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.
The GRE tunnel does not come up until a valid delivery service is configured. |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

dest-ip [[dest-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Add a list entry for dest-ip |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | dest-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[dest-ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------|--|
| Synopsis | IP address of the remote IP tunnel endpoint |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | dest-ip |

| | |
|-------------|---|
| Description | This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dscp *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Differentiated Services Code Point (DSCP) name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dscp <i>keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum size of the encapsulated tunnel packet |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i> |
| Tree | encapsulated-ip-mtu |
| Description | This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre-header



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **gre-header** context

Context **configure service ies string interface string sap string ip-tunnel string gre-header**

Tree [gre-header](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of the GRE header in the tunnel

Context **configure service ies string interface string sap string ip-tunnel string gre-header admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms All

key



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **key** context

Context **configure service ies string interface string sap string ip-tunnel string gre-header key**

Tree [key](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Administrative state of the keys in the GRE header |
| Context | configure service ies string interface string sap string ip-tunnel string gre-header key admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

receive number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Receive key of the GRE header |
| Context | configure service ies string interface string sap string ip-tunnel string gre-header key receive <i>number</i> |
| Tree | receive |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

send number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Send key of the GRE header |
| Context | configure service ies string interface string sap string ip-tunnel string gre-header key send number |
| Tree | send |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the icmp-generation context |
| Context | configure service ies string interface string sap string ip-tunnel string icmp-generation |
| Tree | icmp-generation |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the frag-required context |
| Context | configure service ies string interface string sap string ip-tunnel string icmp-generation frag-required |
| Tree | frag-required |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Send fragmentation required messages |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Maximum interval that the ICMP messages can be sent |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i> |
| Tree | interval |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

message-count *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Maximum number of ICMP messages sent |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i> |

| | |
|-------------|--|
| Tree | message-count |
| Description | This command configures the maximum number of ICMP messages that can be sent during the period specified by the interval command. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the icmp6-generation context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation |
| Tree | icmp6-generation |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the packet-too-big context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big |
| Tree | packet-too-big |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of sending Packet Too Big messages |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

number *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum number of PTB ICMPv6 messages that can be sent |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big number <i>number</i> |
| Tree | number |
| Description | This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

seconds *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Maximum interval when PTB messages can be sent |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | IP MTU for the interface |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Description | This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.

When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipsec-transport-mode-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | IPsec transport mode profile name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ipsec-transport-mode-profile <i>reference</i> |
| Tree | ipsec-transport-mode-profile |

| | |
|------------|---|
| Reference | configure ipsec ipsec-transport-mode-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Local IP address of this tunnel |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> local-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-ip-address |
| Description | This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).

When this command specifies an IPv6 address, it must be a global unicast address. |
| Introduced | 16.0.R1 |
| Platforms | All |

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Time to age out the learned path MTU |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> pmtu-discovery-aging <i>number</i> |
| Tree | pmtu-discovery-aging |
| Description | This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation. |
| Range | 900 to 3600 |
| Default | 900 |
| Units | seconds |

| | |
|------------|--|
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | TCP Maximum Segment Size (MSS) on the private side |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i> |
| Tree | private-tcp-mss-adjust |
| Description | This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable propagation of the path MTU to IPv4 hosts |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i> |
| Tree | propagate-pmtu-v4 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

propagate-pmtu-v6 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable propagation of path MTU to IPv6 hosts |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> propagate-pmtu-v6 <i>boolean</i> |
| Tree | propagate-pmtu-v6 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

public-tcp-mss-adjust (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | TCP Maximum Segment Size (MSS) on the public side |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | public-tcp-mss-adjust |
| Description | This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reassemble (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|------------------------------|
| Synopsis | Maximum reassembly wait time |
|----------|------------------------------|

| | |
|-------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> reassemble (<i>number</i> <i>keyword</i>) |
| Tree | reassemble |
| Description | This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly. |
| Range | 1 to 5000 |
| Units | milliseconds |
| Options | use-tunnel-group-setting, none |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Remote IP address of the tunnel |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | remote-ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

ipsec-gateway [**name**] *string*

| | |
|----------------|---|
| Synopsis | Enter the ipsec-gateway list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> |
| Tree | ipsec-gateway |
| Max. Instances | 1 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|----------|--------------------|
| Synopsis | IPsec gateway name |
|----------|--------------------|

| | |
|---------------|--|
| Context | configure service ies string interface string sap string ipsec-gateway string |
| Tree | ipsec-gateway |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the IPsec gateway |
| Context | configure service ies string interface string sap string ipsec-gateway string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cert

| | |
|------------|---|
| Synopsis | Enter the cert context |
| Context | configure service ies string interface string sap string ipsec-gateway string cert |
| Tree | cert |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cert-profile *reference*

| | |
|------------|--|
| Synopsis | Certificate profile name |
| Context | configure service ies string interface string sap string ipsec-gateway string cert cert-profile reference |
| Tree | cert-profile |
| Reference | configure ipsec cert-profile string |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

status-verify

| | |
|-------------|---|
| Synopsis | Enter the status-verify context |
| Context | configure service ies string interface string sap string ipsec-gateway string cert status-verify |
| Tree | status-verify |
| Description | Commands in this context configure certificate revocation status verification. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-result *keyword*

| | |
|-------------|--|
| Synopsis | Default result of Certificate Status Verification (CSV) |
| Context | configure service ies string interface string sap string ipsec-gateway string cert status-verify default-result keyword |
| Tree | default-result |
| Description | This command specifies the default result when both the primary and secondary methods fail to provide an answer. |
| Default | revoked |
| Options | revoked, good |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

primary *keyword*

| | |
|------------|---|
| Synopsis | Primary method of CSV to verify the revocation status |
| Context | configure service ies string interface string sap string ipsec-gateway string cert status-verify primary keyword |
| Tree | primary |
| Default | crI |
| Options | crI, ocsp |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

secondary *keyword*

| | |
|------------|--|
| Synopsis | Secondary method of CSV to verify the revocation status |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify secondary <i>keyword</i> |
| Tree | secondary |
| Default | none |
| Options | none, <i>crl</i> , <i>ocsp</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

trust-anchor-profile *reference*

| | |
|------------|--|
| Synopsis | Trust anchor profile name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert trust-anchor-profile <i>reference</i> |
| Tree | trust-anchor-profile |
| Reference | configure ipsec trust-anchor-profile <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

client-db

| | |
|-------------|--|
| Synopsis | Enable the client-db context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db |
| Tree | client-db |
| Description | Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fallback *boolean*

| | |
|----------|---|
| Synopsis | Fall back to the default authentication policy |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db fallback <i>boolean</i> |
| Tree | fallback |

| | |
|-------------|--|
| Description | When configured to true , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.

When configured to false and the client database lookup fails to return a matched result, the system fails the tunnel setup. |
| Default | true |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name reference

| | |
|------------|--|
| Synopsis | Client database name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db <i>name reference</i> |
| Tree | name |
| Reference | configure ipsec client-db <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-secure-service

| | |
|------------|---|
| Synopsis | Enable the default-secure-service context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service |
| Tree | default-secure-service |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interface string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Private IPsec tunnel interface name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service interface <i>string</i> |

| | |
|---------------|--|
| Tree | interface |
| String Length | 1 to 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Default security service name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service service-name <i>string</i> |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-tunnel-template *reference*

| | |
|------------|---|
| Synopsis | Default tunnel policy template for the gateway |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-tunnel-template <i>reference</i> |
| Tree | default-tunnel-template |
| Reference | configure ipsec tunnel-template <i>number</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-address-assignment

| | |
|------------|--|
| Synopsis | Enter the dhcp-address-assignment context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment |
| Tree | dhcp-address-assignment |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcpv4

| | |
|------------|---|
| Synopsis | Enable the dhcpv4 context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 |
| Tree | dhcpv4 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the IPsec DHCPv4 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gi-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Gateway IP address of DHCPv4 packets sent by the system |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 gi-address <i>string</i> |
| Tree | gi-address |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

send-release *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Send DHCPv4 release message when IPsec tunnel removed |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 send-release <i>boolean</i> |
| Tree | send-release |
| Default | true |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

server

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the server context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server |
| Tree | server |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | DHCPv4 server addresses |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server address <i>string</i> |
| Tree | address |
| Description | This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen. |

| | |
|----------------|--|
| Max. Instances | 8 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Router instance used to reach the DHCPv4 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcpv6

| | |
|------------|---|
| Synopsis | Enable the dhcpv6 context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 |
| Tree | dhcpv6 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the DHCPv6 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Link address of the relayed DHCPv6 packets

Context **configure** *service ies string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 link-address string*

Tree [link-address](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send DHCPv6 release message when IPsec tunnel removed

Context **configure** *service ies string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 send-release boolean*

Tree [send-release](#)

Default true

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **server** context

Context **configure** *service ies string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 server*

Tree [server](#)

| | |
|------------|--|
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|--|
| Synopsis | DHCPv6 server addresses |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server address <i>string</i> |
| Tree | address |
| Description | This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen. |
| Max. Instances | 8 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Router instance to reach the DHCPv6 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ike-policy *reference*

| | |
|----------|---------------|
| Synopsis | IKE policy ID |
|----------|---------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ike-policy <i>reference</i> |
| Tree | ike-policy |
| Reference | configure ipsec ike-policy <i>number</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local

| | |
|------------|--|
| Synopsis | Enter the local context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local |
| Tree | local |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address-assignment

| | |
|------------|--|
| Synopsis | Enable the address-assignment context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment |
| Tree | address-assignment |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of local address assignments |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the ipv4 context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 |
| Tree | ipv4 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Local DHCPv4 server name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 dhcp-server <i>string</i> |
| Tree | dhcp-server |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Name of the pool defined in the specified DHCPv4 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 pool <i>string</i> |
| Tree | pool |
| String Length | 1 to 32 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Router instance ID for the local DHCPv4 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

secondary-pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Name of the secondary pool defined in the DHCPv4 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 secondary-pool <i>string</i> |
| Tree | secondary-pool |
| String Length | 1 to 32 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the ipv6 context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 |
| Tree | ipv6 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Local DHCPv6 server name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 dhcp-server <i>string</i> |
| Tree | dhcp-server |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Secondary pool name defined in the DHCPv6 server |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 pool <i>string</i> |
| Tree | pool |
| String Length | 1 to 32 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Router instance ID hosting the DHCPv6 connection |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Local gateway address of the IPsec gateway |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | gateway-address |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id

| | |
|----------|---|
| Synopsis | Enter the id context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id |
| Tree | id |

| | |
|-------------|--|
| Description | Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

auto



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Select ID based on authentication method in IKE policy |
| Context | configure service ies string interface string sap string ipsec-gateway string local id auto |
| Tree | auto |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | FQDN as the local ID type |
| Context | configure service ies string interface string sap string ipsec-gateway string local id fqdn string |
| Tree | fqdn |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4 string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IPv4 address as the local ID type |
| Context | configure service ies string interface string sap string ipsec-gateway string local id ipv4 string |
| Tree | ipv4 |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv6 address as the local ID type |
| Context | configure service ies string interface string sap string ipsec-gateway string local id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ipv6 |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-history-key-records

| | |
|------------|--|
| Synopsis | Enter the max-history-key-records context |
| Context | configure service ies string interface string sap string ipsec-gateway string max-history-key-records |
| Tree | max-history-key-records |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

esp number

| | |
|------------|---|
| Synopsis | Maximum number of recent records |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> max-history-key-records esp <i>number</i> |
| Tree | esp |
| Range | 1 to 48 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ike number

| | |
|------------|---|
| Synopsis | Maximum number of historical IKE keys recorded |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> max-history-key-records ike <i>number</i> |
| Tree | ike |
| Range | 1 to 3 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pre-shared-key string

| | |
|---------------|---|
| Synopsis | Pre-shared key for the IPsec gateway |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> pre-shared-key <i>string</i> |
| Tree | pre-shared-key |
| String Length | 1 to 115 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

radius

| | |
|------------|---|
| Synopsis | Enter the radius context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius |
| Tree | radius |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|--|
| Synopsis | RADIUS accounting policy |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure ipsec radius accounting-policy <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication-policy *reference*

| | |
|------------|--|
| Synopsis | RADIUS authentication policy |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius authentication-policy <i>reference</i> |
| Tree | authentication-policy |
| Reference | configure ipsec radius authentication-policy <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ts-list *reference*

| | |
|------------|---|
| Synopsis | TS list used for IKEv2 TS negotiation |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ts-list <i>reference</i> |
| Tree | ts-list |
| Reference | configure ipsec ts-list <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lag

| | |
|------------|--|
| Synopsis | Enter the lag context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 16.0.R1 |

Platforms All

link-map-profile *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure** *service ies string interface string sap string lag link-map-profile number*

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

per-link-hash

Synopsis Enter the **per-link-hash** context

Context **configure** *service ies string interface string sap string lag per-link-hash*

Tree [per-link-hash](#)

Introduced 16.0.R1

Platforms All

class *number*

Synopsis Class used on LAG egress using weighted per-link-hash

Context **configure** *service ies string interface string sap string lag per-link-hash class number*

Tree [class](#)

Range 1 to 3

Default 1

Introduced 16.0.R1

Platforms All

weight number

| | |
|------------|---|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service ies string interface string sap string lag per-link-hash weight number |
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

multi-service-site reference

| | |
|------------|--|
| Synopsis | Multi service site name |
| Context | configure service ies string interface string sap string multi-service-site reference |
| Tree | multi-service-site |
| Reference | configure service customer string multi-service-site string |
| Introduced | 16.0.R1 |
| Platforms | All |

static-host

| | |
|------------|---|
| Synopsis | Enter the static-host context |
| Context | configure service ies string interface string sap string static-host |
| Tree | static-host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4 [ip] string mac string

| | |
|------------|--|
| Synopsis | Enter the ipv4 list instance |
| Context | configure service ies string interface string sap string static-host ipv4 string mac string |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ip] string

| | |
|------------|---|
| Synopsis | IP address |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac string

| | |
|------------|---|
| Synopsis | MAC address |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of the static host |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-string string

| | |
|---------------|---|
| Synopsis | ANCP string |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> ancp-string <i>string</i> |
| Tree | ancp-string |
| String Length | 1 to 63 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis Enter the **app-profile** context
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* [app-profile](#)
 Tree [app-profile](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis Application profile used by the static host
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* [app-profile](#) [profile](#) *reference*
 Tree [profile](#)
 Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis Intermediate destination ID
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* [int-dest-id](#) *string*
 Tree [int-dest-id](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis SLA profile name

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Sub-profile name |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | Subscriber identification |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id <i>string</i> <i>string</i> |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-sap-id

| | |
|------------|--|
| Synopsis | Use the SAP id as subscriber ID |
| Context | configure <i>service ies string interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i> |
| Tree | <i>use-sap-id</i> |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure <i>service ies string interface string sap string transit-policy</i> |
| Tree | <i>transit-policy</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP transit policy ID |
| Context | configure <i>service ies string interface string sap string transit-policy ip reference</i> |
| Tree | <i>ip</i> |
| Reference | configure <i>application-assurance group number partition number transit-ip-policy number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP prefix policy ID |
| Context | configure service ies <i>string</i> interface <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy-ipv4 reference

| | |
|------------|--|
| Synopsis | Host connectivity IPv4 policy |
| Context | configure service ies <i>string</i> interface <i>string</i> shcv-policy-ipv4 <i>reference</i> |
| Tree | shcv-policy-ipv4 |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

spoke-sdp [[sdp-bind-id](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[[sdp-bind-id](#)] *string*

| | |
|----------|----------------|
| Synopsis | SDP binding ID |
|----------|----------------|

| | |
|---------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aarp

| | |
|------------|--|
| Synopsis | Enable the aarp context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference

| | |
|------------|---|
| Synopsis | AARP instance ID |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> aarp id reference |
| Tree | id |
| Reference | configure application-assurance aarp <i>number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|---|
| Synopsis | Role referenced by the AARP |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> aarp type keyword |
| Tree | type |
| Options | dual-homed, dual-homed-secondary |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Policy to collect accounting statistics |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SDP binding to the service |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Application profile name for this SDP |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service ies string interface string spoke-sdp string bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | All |

encap keyword

| | |
|------------|--|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service ies string interface string spoke-sdp string bfd bfd-liveness encap keyword |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-template reference

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service ies string interface string spoke-sdp string bfd bfd-template reference |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template string |
| Introduced | 21.2.R1 |
| Platforms | All |

failure-action keyword

| | |
|----------|--|
| Synopsis | VCCV BFD action taken on the SDP binding |
| Context | configure service ies string interface string spoke-sdp string bfd failure-action keyword |

| | |
|-------------|---|
| Tree | failure-action |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Default | none |
| Options | none, down |
| Introduced | 21.2.R1 |
| Platforms | All |

wait-for-up-timer *number*

| | |
|-------------|--|
| Synopsis | Time waited for BFD up status |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i> |
| Tree | wait-for-up-timer |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.

This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range | 1 to 60 |
| Units | seconds |
| Introduced | 21.2.R1 |
| Platforms | All |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Allow agent to collect accounting statistics |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Use the control word as preferred |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cpu-protection

| | |
|------------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm-monitoring

| | |
|------------|--|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

aggregate

| | |
|------------|--|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

car

| | |
|------------|---|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
| Context | configure service ies string interface string spoke-sdp string cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ip-src-monitoring

| | |
|------------|--|
| Synopsis | Enable IP source monitoring for CPU protection |
| Context | configure service ies string interface string spoke-sdp string cpu-protection ip-src-monitoring |
| Tree | ip-src-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service ies string interface string spoke-sdp string cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy-id *reference*

| | |
|----------|--|
| Synopsis | CPM protection policy |
| Context | configure service ies string interface string spoke-sdp string cpu-protection policy-id reference |
| Tree | policy-id |

| | |
|------------|---|
| Reference | configure system security cpu-protection policy number |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies string interface string spoke-sdp string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service ies string interface string spoke-sdp string egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies string interface string spoke-sdp string egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|-----------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies string interface string spoke-sdp string egress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter string |

Introduced 16.0.R1
 Platforms All

ipv6 *reference*

Synopsis IPv6 filter policy name
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress filter ipv6](#) *reference*
 Tree [ipv6](#)
 Reference **configure** [filter ipv6-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

qos

Synopsis Enter the **qos** context
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos](#)
 Tree [qos](#)
 Introduced 16.0.R1
 Platforms All

network

Synopsis Enter the **network** context
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#)
 Tree [network](#)
 Introduced 16.0.R1
 Platforms All

policy-name *reference*

Synopsis Network policy ID
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos network](#) *string*

Introduced 16.0.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#)
Tree [port-redirect-group](#)
Introduced 16.0.R1
Platforms All

group-name *reference*

Synopsis Name of the egress port queue group
Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#) [group-name](#) *reference*
Tree [group-name](#)
Reference **configure** [qos queue-group-templates](#) [egress queue-group](#) *string*
Introduced 16.0.R1
Platforms All

instance *number*

Synopsis Queue-group instance ID
Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network](#) [port-redirect-group](#) [instance](#) *number*
Tree [instance](#)
Range 1 to 65535
Introduced 16.0.R1
Platforms All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label

| | |
|------------|--|
| Synopsis | Enable the use of entropy labels for spoke SDPs |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> entropy-label |
| Tree | entropy-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-imm-fc-stats

| | |
|----------|---|
| Synopsis | Enter the collect-imm-fc-stats context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-imm-fc-stats |
| Tree | collect-imm-fc-stats |

| | |
|-------------|--|
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile keyword

| | |
|-------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> |

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

| | |
|----------------|--|
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> association <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|---|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---------------------------------|
| Synopsis | Administrative state of the MEP |
|----------|---------------------------------|

| | |
|------------|---|
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais *boolean*

| | |
|------------|---|
| Synopsis | Enable the generation and the reception of AIS messages |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais boolean |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|----------|--|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number |

| | |
|------------|--|
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm *boolean*

| | |
|------------|--|
| Synopsis | Generate CCM messages |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i> |
| Tree | ccm |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority *number*

| | |
|----------|--|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|------------|--|
| Synopsis | Enable the csf context |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf |
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *decimal-number*

| | |
|----------|---|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|--|
| Synopsis | Enable the eth-test context |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|---|
| Synopsis | Enter the test-pattern context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|--|
| Synopsis | Generate a CRC checksum |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|-------------|--|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|------------|---|
| Synopsis | Fault propagation for the MEP |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|--|
| Synopsis | Enter the grace context |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|----------|--|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |

| | |
|------------|--|
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|------------|--|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed boolean

| | |
|-------------|--|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed boolean

| | |
|------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#)

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#) [rx-eth-vsm-grace](#) *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [spoke-sdp](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [grace](#) [eth-vsm-grace](#) [tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

| | |
|------------|--|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|------------|--|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|----------|---|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
|----------|---|

| | |
|----------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm squelch-ingress-levels <i>number</i> |
| Tree | squelch-ingress-levels |
| Description | This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped. |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

hash-label

| | |
|------------|--|
| Synopsis | Enable the hash-label context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label |
| Tree | hash-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

signal-capability

| | |
|------------|--|
| Synopsis | Enable the signaling of the hash label between PE nodes |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability |
| Tree | signal-capability |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|----------|----------------------------------|
| Synopsis | Enter the ingress context |
|----------|----------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|----------|---|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos |

| | |
|------------|---------------------|
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|----------|---|
| Synopsis | Instance of the forwarding-plane ingress Queue Group for this SDP binding |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i> |

| | |
|------------|--------------------------|
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Network policy ID |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Ingress MPLS VC label to send packets to the far end |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 1 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP transit policy ID |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy ip reference |
| Tree | ip |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP prefix policy ID |
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy prefix reference |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-type keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Type of virtual circuit (VC) associated with the SDP binding |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i> |
| Tree | vc-type |
| Default | ether |
| Options | ether, ipipe |
| Introduced | 16.0.R1 |
| Platforms | All |

static-tunnel-redundant-nextthop *string*

| | |
|-------------|---|
| Synopsis | Address for the static ISA tunnel redundant next-hop |
| Context | configure service ies <i>string</i> interface <i>string</i> static-tunnel-redundant-nextthop <i>string</i> |
| Tree | static-tunnel-redundant-nextthop |
| Description | This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel.
The next-hop address is resolved in the routing table of the corresponding service. |
| Notes | The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nextthop and static-tunnel-redundant-nextthop) . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tos-marking-state *keyword*

| | |
|------------|---|
| Synopsis | TOS marking state |
| Context | configure service ies <i>string</i> interface <i>string</i> tos-marking-state <i>keyword</i> |
| Tree | tos-marking-state |
| Default | untrusted |
| Options | trusted, untrusted |
| Introduced | 16.0.R1 |
| Platforms | All |

tunnel *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable/disable tunnel interface |
| Context | configure service ies <i>string</i> interface <i>string</i> tunnel <i>boolean</i> |
| Tree | tunnel |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vas-if-type *keyword*

| | |
|------------|---|
| Synopsis | VAS interface type |
| Context | configure service ies <i>string</i> interface <i>string</i> vas-if-type <i>keyword</i> |
| Tree | vas-if-type |
| Options | to-from-access, to-from-network, to-from-both |
| Introduced | 16.0.R1 |
| Platforms | All |

vpls [[vpls-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the vpls list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> |
| Tree | vpls |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[[vpls-name](#)] *string*

| | |
|---------------|---|
| Synopsis | VPLS service |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> |
| Tree | vpls |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service ies string interface string vpls string egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

reclassify-using-qos *reference*

| | |
|------------|--|
| Synopsis | Egress QoS policy |
| Context | configure service ies string interface string vpls string egress reclassify-using-qos reference |
| Tree | reclassify-using-qos |
| Reference | configure qos sap-egress string |
| Introduced | 16.0.R1 |
| Platforms | All |

routed-override-filter

| | |
|------------|--|
| Synopsis | Enter the routed-override-filter context |
| Context | configure service ies string interface string vpls string egress routed-override-filter |
| Tree | routed-override-filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip *reference*

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies string interface string vpls string egress routed-override-filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter string |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> egress routed-override-filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn

| | |
|------------|--|
| Synopsis | Enter the evpn context |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn |
| Tree | evpn |
| Introduced | 19.10.R1 |
| Platforms | All |

arp

| | |
|------------|--|
| Synopsis | Enter the arp context |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp |
| Tree | arp |
| Introduced | 19.10.R1 |
| Platforms | All |

advertise [[route-type](#)] *keyword*

| | |
|-------------|--|
| Synopsis | Enter the advertise list instance |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp advertise <i>keyword</i> |
| Tree | advertise |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.

The learn-dynamic command must be set to false when using this functionality. |
| Introduced | 19.10.R1 |

Platforms All

[route-type] *keyword*

Synopsis Type of ARP or ND entries that generate host routes

Context **configure** **service** **ies** *string* **interface** *string* **vpls** *string* **evpn** **arp** **advertise** *keyword*

Tree **advertise**

Description This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.

Options static, dynamic

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry

Context **configure** **service** **ies** *string* **interface** *string* **vpls** *string* **evpn** **arp** **advertise** *keyword* **route-tag** *number*

Tree **route-tag**

Description This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.

Range 0 to 255

Introduced 19.10.R1

Platforms All

flood-garp-and-unknown-req *boolean*

Synopsis Allow CPM originated ARP frames to flood R-VPLS service

Context **configure** **service** **ies** *string* **interface** *string* **vpls** *string* **evpn** **arp** **flood-garp-and-unknown-req** *boolean*

Tree **flood-garp-and-unknown-req**

| | |
|-------------|---|
| Description | When configured to true , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command.
When configured to false , CPM-originated ARP flooding is suppressed. |
| Default | true |
| Introduced | 19.10.R1 |
| Platforms | All |

learn-dynamic *boolean*

| | |
|-------------|---|
| Synopsis | Process ARP or ND messages on EVPN tunnels |
| Context | configure <i>service ies string interface string vpls string evpn arp learn-dynamic boolean</i> |
| Tree | <i>learn-dynamic</i> |
| Description | When configured to true , the system processes ARP or ND messages that arrive on EVPN tunnels.
When configured to false , learning is disabled and table entries are not created for these messages. |
| Default | true |
| Introduced | 19.10.R1 |
| Platforms | All |

nd

| | |
|------------|---|
| Synopsis | Enter the nd context |
| Context | configure <i>service ies string interface string vpls string evpn nd</i> |
| Tree | <i>nd</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

advertise [*route-type*] *keyword*

| | |
|-------------|---|
| Synopsis | Enter the advertise list instance |
| Context | configure <i>service ies string interface string vpls string evpn nd advertise keyword</i> |
| Tree | <i>advertise</i> |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. |

The **learn-dynamic** command must be set to **false** when using this functionality.

Introduced 20.5.R1
 Platforms All

[route-type] keyword

Synopsis Type of ARP or ND entries that generate host routes
 Context **configure service ies string interface string vpls string evpn nd advertise keyword**
 Tree **advertise**
 Description This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
 Options static, dynamic
 Notes This element is part of a list key.
 Introduced 20.5.R1
 Platforms All

route-tag number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry
 Context **configure service ies string interface string vpls string evpn nd advertise keyword route-tag number**
 Tree **route-tag**
 Description This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
 Range 0 to 255
 Introduced 20.5.R1
 Platforms All

learn-dynamic boolean

Synopsis Process ARP or ND messages on EVPN tunnels
 Context **configure service ies string interface string vpls string evpn nd learn-dynamic boolean**

| | |
|-------------|---|
| Tree | learn-dynamic |
| Description | When configured to true , the system processes ARP or ND messages that arrive on EVPN tunnels.
When configured to false , learning is disabled and table entries are not created for these messages. |
| Default | true |
| Introduced | 20.5.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

routed-override-filter

| | |
|------------|--|
| Synopsis | Enter the routed-override-filter context |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter |
| Tree | routed-override-filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service ies <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

redundant-interface [[interface-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the redundant-interface list instance |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> |
| Tree | redundant-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[interface-name] *string*

| | |
|---------------|--|
| Synopsis | Interface name |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> |
| Tree | redundant-interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time

Synopsis Enter the **hold-time** context
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [hold-time](#)
Tree [hold-time](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [hold-time](#) [ipv4](#)
Tree [ipv4](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis Enter the **down** context
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [hold-time](#) [ipv4](#) [down](#)
Tree [down](#)
Description Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

init-only *boolean*

| | |
|-------------|--|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 down init-only boolean |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Down hold time for the IP interface |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 down seconds number |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|--|
| Synopsis | Up hold time for the IP interface |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> hold-time ipv4 up seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-mtu *number*

| | |
|------------|---|
| Synopsis | IP MTU applied to outgoing packets |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

primary

| | |
|------------|---|
| Synopsis | Enable the primary context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> ipv4 primary |
| Tree | primary |
| Introduced | 16.0.R4 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis IPv4 address to be assigned to the interface
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [ipv4](#) [primary](#) [address](#) *string*
Tree [address](#)
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis IPv4 address prefix length
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [ipv4](#) [primary](#) [prefix-length](#) *number*
Tree [prefix-length](#)
Range 0 to 32
Notes This element is mandatory.
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-ip *string*

Synopsis Remote IP address for the interface
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [ipv4](#) [primary](#) [remote-ip](#) *string*
Tree [remote-ip](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance
Context **configure** [service](#) [ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*
Tree [spoke-sdp](#)

| | |
|----------------|---|
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[sdp-bind-id] *string*

| | |
|---------------|---|
| Synopsis | SDP binding ID |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SDP binding to the service |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Use the control word as preferred |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|----------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |

| | |
|------------|---|
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Ingress MPLS VC label to send packets to the far end |
| Context | configure service ies <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 1 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Service ID |
| Context | configure service ies <i>string</i> service-id <i>number</i> |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

subscriber-interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the subscriber-interface list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> |
| Tree | subscriber-interface |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[interface-name] string

Synopsis Subscriber interface name

Context **configure service ies string subscriber-interface string**

Tree [subscriber-interface](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of the subscriber interface

Context **configure service ies string subscriber-interface string admin-state keyword**

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description

Context **configure service ies string subscriber-interface string description string**

Tree [description](#)

String Length 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Forwarding service name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> fwd-service <i>reference</i> |
| Tree | fwd-service |
| Reference | configure service vprn <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

fwd-subscriber-interface *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Forwarding subscriber interface name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> fwd-subscriber-interface <i>reference</i> |
| Tree | fwd-subscriber-interface |
| Reference | configure service vprn <i>string</i> subscriber-interface <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-interface [\[group-interface-name\]](#) *string*

| | |
|------------|---|
| Synopsis | Enter the group-interface list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> |
| Tree | group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[group-interface-name] *string*

| | |
|----------|----------------------|
| Synopsis | Group interface name |
|----------|----------------------|

| | |
|---------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> |
| Tree | group-interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bonding-parameters

| | |
|------------|---|
| Synopsis | Enter the bonding-parameters context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters |
| Tree | bonding-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of ESM connection bonding |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection [[connection-index](#)] *number*

Synopsis Enter the **connection** list instance

Context **configure service ies** *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) [connection](#) *number*

Tree [connection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[connection-index] *number*

Synopsis Bonding connection index

Context **configure service ies** *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) [connection](#) *number*

Tree [connection](#)

Range 1 to 2

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *string*

Synopsis Connection service

Context **configure service ies** *string* [subscriber-interface](#) *string* [group-interface](#) *string* [bonding-parameters](#) [connection](#) *number* [service](#) *string*

Tree [service](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | FPE that provisions bonding functionality |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters fpe <i>reference</i> |
| Tree | fpe |
| Reference | configure fwd-path-ext fpe <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multicast

| | |
|------------|--|
| Synopsis | Enter the multicast context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters multicast |
| Tree | multicast |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

connection (*number* | *keyword*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Multicast connection |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters multicast connection (<i>number</i> <i>keyword</i>) |
| Tree | connection |
| Range | 1 to 2 |
| Default | use-incoming |
| Options | use-incoming |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

brg

| | |
|------------|---|
| Synopsis | Enter the brg context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg |
| Tree | brg |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BRG |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authenticated-brg-only *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Allow BRGs that have been pre-authenticated |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg authenticated-brg-only <i>boolean</i> |
| Tree | authenticated-brg-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-brg-profile *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Default BRG profile that can be overridden during authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg default-brg-profile <i>reference</i> |
| Tree | default-brg-profile |
| Reference | configure subscriber-mgmt vrgw brg-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cflowd-parameters

| | |
|------------|---|
| Synopsis | Enter the cflowd-parameters context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters |
| Tree | cflowd-parameters |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sampling [[sampling-type](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the sampling list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[sampling-type] *keyword*

| | |
|----------|---|
| Synopsis | Traffic sampling type |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |

| | |
|-------------|---|
| Description | This command configures the type of traffic to be sampled on the associated IP interface. |
| Options | unicast, multicast, both |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

direction *keyword*

| | |
|-------------|---|
| Synopsis | Direction of traffic for cflowd sampling |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i> |
| Tree | direction |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces. |
| Default | ingress-only |
| Options | ingress-only, egress-only, both |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sample-profile (*keyword* | *number*)

| | |
|-------------|--|
| Synopsis | Sample profile ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>) |
| Tree | sample-profile |
| Description | This command defines the sampling rate profile associated with this interface. |
| Max. Range | 0 to 4294967295 |
| Options | 1 |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|----------|-------------------------|
| Synopsis | Type of cflowd analysis |
|----------|-------------------------|

| | |
|-------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> type <i>keyword</i> |
| Tree | type |
| Description | This command configures the cflowd sampling type on the associated IP interface. |
| Options | acl, interface |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

data-trigger

| | |
|------------|---|
| Synopsis | Enter the data-trigger context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger |
| Tree | data-trigger |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of data-triggered host creation |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 255 |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dynamic-routes-track-srrp

Synopsis Enable the **dynamic-routes-track-srrp** context
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [dynamic-routes-track-srrp](#)
Tree [dynamic-routes-track-srrp](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis Delay before updating the route state after the last SRRP transition
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [dynamic-routes-track-srrp](#) [hold-time](#) *number*
Tree [hold-time](#)
Range 1 to 50
Units deciseconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-parameters

Synopsis Enter the **gtp-parameters** context
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [gtp-parameters](#)
Tree [gtp-parameters](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of GTP access
Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [gtp-parameters](#) [admin-state](#) *keyword*

| | |
|------------|------------------------------------|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fpe reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | PE that provisions the GTP user interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gtp-parameters fpe <i>reference</i> |
| Tree | fpe |
| Reference | configure fwd-path-ext fpe <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gx-policy reference

| | |
|------------|--|
| Synopsis | Diameter application policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gx-policy <i>reference</i> |
| Tree | gx-policy |
| Reference | configure subscriber-mgmt diameter-gx-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress |
| Tree | ingress |
| Introduced | 19.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-accounting *reference*

Synopsis Ingress policy accounting template name

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ingress-policy-accounting](#) *reference*

Tree [policy-accounting](#)

Reference **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string*

Introduced 19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s

ingress-stats *boolean*

Synopsis Collect ingress interface statistics

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ingress-stats](#) *boolean*

Tree [ingress-stats](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis Interface IP MTU

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ip-mtu](#) *number*

Tree [ip-mtu](#)

Range 512 to 9786

Units bytes

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis Enter the **ipoe-linking** context

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking |
| Tree | ipoe-linking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of IPoE host linking |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gratuitous-router-advertisement *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Send unsolicited router advertisement after DHCP setup |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking
gratuitous-router-advertisement <i>boolean</i> |
| Tree | gratuitous-router-advertisement |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shared-circuit-id *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Enable circuit ID in DHCPv4 Option82 to validate DHCPv6 |
|----------|---|

| | |
|------------|---|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipoe-linking shared-circuit-id boolean</i> |
| Tree | shared-circuit-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session

| | |
|------------|---|
| Synopsis | Enter the ipoe-session context |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipoe-session</i> |
| Tree | ipoe-session |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IPoE session management |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipoe-session admin-state keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipoe-session description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-auth

| | |
|------------|--|
| Synopsis | Enter the force-auth context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth |
| Tree | force-auth |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cid-change *boolean*

| | |
|------------|--|
| Synopsis | Ignore min-auth-interval when circuit ID changed |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth cid-change <i>boolean</i> |
| Tree | cid-change |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rid-change *boolean*

| | |
|------------|--|
| Synopsis | Ignore min-auth-interval when remote ID changed |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth rid-change <i>boolean</i> |
| Tree | rid-change |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session-policy *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-----------|--|
| Synopsis | IPoE Session policy to be used for new sessions |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session ipoe-session-policy <i>reference</i> |
| Tree | ipoe-session-policy |
| Reference | configure subscriber-mgmt ipoe-session-policy <i>string</i> |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Minimum time between two authentication attempts |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session min-auth-interval (<i>keyword</i> <i>number</i>) |
| Tree | min-auth-interval |
| Range | 1 to 32000000 |
| Default | infinite |
| Units | seconds |
| Options | infinite, always-reauthenticate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-session-timeout *keyword*

| | |
|------------|--|
| Synopsis | Session timeout attribute to be interpreted |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session radius-session-timeout <i>keyword</i> |
| Tree | radius-session-timeout |
| Options | absolute, ignore, backwards-compatible |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-session-limit *number*

| | |
|------------|--|
| Synopsis | Maximum number of sessions per SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session sap-session-limit <i>number</i> |
| Tree | sap-session-limit |
| Range | 1 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limit *number*

| | |
|------------|--|
| Synopsis | Maximum number of sessions on this group interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session session-limit <i>number</i> |
| Tree | session-limit |
| Range | 1 to 500000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stateless-redundancy *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session stateless-redundancy <i>boolean</i> |
| Tree | stateless-redundancy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Local user database that is used to (pre-)authenticate new sessions |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp-host

| | |
|------------|--|
| Synopsis | Enter the arp-host context |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 arp-host |
| Tree | arp-host |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of ARP hosts |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 arp-host admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-limit *number*

| | |
|------------|--|
| Synopsis | Maximum number of ARP hosts |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 arp-host host-limit number |
| Tree | host-limit |
| Range | 1 to 524287 |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval *number*

| | |
|------------|---|
| Synopsis | Minimum authentication interval |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host min-auth-interval <i>number</i> |
| Tree | min-auth-interval |
| Range | 1 to 6000 |
| Default | 15 |
| Units | minutes |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-host-limit *number*

| | |
|------------|--|
| Synopsis | Maximum number of ARP hosts per SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host sap-host-limit <i>number</i> |
| Tree | sap-host-limit |
| Range | 1 to 131071 |
| Default | 1 |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp

| | |
|------------|---|
| Synopsis | Enter the dhcp context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of DHCP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i> |

| | |
|------------|---|
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|---|
| Synopsis | Enter the client-applications context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|------------|---|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications dhcp <i>boolean</i> |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|------------|--|
| Synopsis | Enable PPPoE clients to use DHCP relay or proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter *reference*

| | |
|------------|---|
| Synopsis | DHCP filter ID for the group interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp filter <i>reference</i> |
| Tree | filter |
| Reference | configure filter dhcp-filter <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address *string*

| | |
|-------------|---|
| Synopsis | GI address for the DHCP relay |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp gi-address <i>string</i> |
| Tree | gi-address |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-populate

| | |
|------------|---|
| Synopsis | Enter the lease-populate context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

I2-header

| | |
|------------|---|
| Synopsis | Enable the I2-header context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate I2-header |
| Tree | I2-header |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac *string*

| | |
|------------|---|
| Synopsis | IEEE address used in anti-spoofing entries for the SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate I2-header mac <i>string</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-leases *number*

| | |
|------------|--|
| Synopsis | Maximum number of DHCPv4 leases |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i> |
| Tree | max-leases |
| Range | 1 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-circuit-id *boolean*

| | |
|------------|---|
| Synopsis | Enable Option 82 circuit ID on relayed DHCP packets |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp match-circuit-id <i>boolean</i> |
| Tree | match-circuit-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

offer-selection

| | |
|------------|---|
| Synopsis | Enter the offer-selection context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection |
| Tree | offer-selection |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac

| | |
|------------|--|
| Synopsis | Enter the client-mac context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac |
| Tree | client-mac |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses. |

| | |
|------------|---|
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-address *keyword*

| | |
|-------------|--|
| Synopsis | Designated client MAC addresses for Offer selection |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac mac-address <i>keyword</i> |
| Tree | mac-address |
| Description | This command specifies the client MAC addresses for which the Discover delay applies. |
| Options | odd, even |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|--|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server [**ipv4-address**] *string*

| | |
|----------|--|
| Synopsis | Enter the server list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> |
| Tree | server |

| | |
|----------------|---|
| Max. Instances | 8 |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv4-address] *string*

| | |
|------------|--|
| Synopsis | IP address of the DHCP server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> |
| Tree | server |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|--|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay DHCP Discover messages sent to the server. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-82

| | |
|----------|--|
| Synopsis | Enter the option-82 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 |
| Tree | option-82 |

| | |
|-------------|---|
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action *keyword*

| | |
|------------|---|
| Synopsis | Action to take with received DHCP Option 82 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 action <i>keyword</i> |
| Tree | action |
| Default | keep |
| Options | replace, drop, keep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id

| | |
|------------|--|
| Synopsis | Enter the circuit-id context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-tuple

| | |
|------------|---|
| Synopsis | Use the ASCII-encoded tuple for the circuit ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ifindex

| | |
|------------|--|
| Synopsis | Use the interface index for the circuit ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id ifindex |
| Tree | ifindex |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

none

| | |
|------------|---|
| Synopsis | Do not include the circuit ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id

| | |
|------------|---|
| Synopsis | Use the SAP ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vlan-ascii-tuple

| | |
|----------|---|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple |

| | |
|-------------|---|
| Tree | vlan-ascii-tuple |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id

| | |
|-------------|--|
| Synopsis | Enter the remote-id context |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 remote-id |
| Tree | remote-id |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|--|
| Synopsis | User-defined ASCII string for the remote ID |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 remote-id ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac

| | |
|----------|---------------------------------------|
| Synopsis | Use the MAC address for the remote ID |
|----------|---------------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 remote-id mac</i> |
| Tree | mac |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

none

| | |
|------------|---|
| Synopsis | Do not include the remote ID |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 remote-id none</i> |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor-specific-option

| | |
|-------------|---|
| Synopsis | Enter the vendor-specific-option context |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 vendor-specific-option</i> |
| Tree | vendor-specific-option |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac-address *boolean*

| | |
|------------|--|
| Synopsis | Send the MAC address in the VSO |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 vendor-specific-option client-mac-address boolean</i> |
| Tree | client-mac-address |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool-name *boolean*

Synopsis Send the pool name in the VSO

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4** **dhcp** **option-82** **vendor-specific-option** **pool-name** *boolean*

Tree [pool-name](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis Send SAP ID in the sub-option of the DHCP relay packet

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4** **dhcp** **option-82** **vendor-specific-option** **sap-id** *boolean*

Tree [sap-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis Send the service ID in the Vendor Specific Option

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4** **dhcp** **option-82** **vendor-specific-option** **service-id** *boolean*

Tree [service-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis User-defined ASCII string for the VSO

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4** **dhcp** **option-82** **vendor-specific-option** **string** *string*

Tree [string](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-id *boolean*

Synopsis Send the system ID in the VSO
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [ipv4](#) [dhcp](#) [option-82](#) [vendor-specific-option](#) [system-id](#) *boolean*
 Tree [system-id](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis Enter the **proxy-server** context
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [ipv4](#) [dhcp](#) [proxy-server](#)
 Tree [proxy-server](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCP proxy server
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [ipv4](#) [dhcp](#) [proxy-server](#) [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

| | |
|------------|--|
| Synopsis | IP address used as DHCP server address in SAP context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server emulated-server <i>string</i> |
| Tree | emulated-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-time

| | |
|------------|---|
| Synopsis | Enter the lease-time context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server lease-time |
| Tree | lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-override *boolean*

| | |
|------------|---|
| Synopsis | Use lease time information provided by RADIUS server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i> |
| Tree | radius-override |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|--|
| Synopsis | DHCP lease time |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server lease-time value <i>number</i> |
| Tree | value |
| Range | 300 to 315446399 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy name

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4](#) [dhcp](#) [python-policy](#) *reference*

Tree [python-policy](#)

Description This command associates a Python policy name with the interface.

Reference **configure** [python](#) [python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis Enable the **relay-proxy** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4](#) [dhcp](#) [relay-proxy](#)

Tree [relay-proxy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4](#) [dhcp](#) [relay-proxy](#) [release-update-src-ip](#) *boolean*

Tree [release-update-src-ip](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

siaddr-override *string*

Synopsis DHCP server IP address for address hiding function

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i> |
| Tree | siaddr-override |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

release-include-gi-address *boolean*

| | |
|------------|--|
| Synopsis | Include gateway IP address in DHCP Release messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i> |
| Tree | release-include-gi-address |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|--|
| Synopsis | IP addresses for DHCP server requests |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp server <i>string</i> |
| Tree | server |
| Description | This command configures a list of servers that this interface forwards requests to.
The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-ip-addr *keyword*

| | |
|----------|---|
| Synopsis | Type of source address to use for DHCP relay |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i> |

| | |
|------------|---|
| Tree | src-ip-addr |
| Default | auto |
| Options | auto, gi-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

trusted *boolean*

| | |
|-------------|---|
| Synopsis | Relay untrusted packets |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp trusted <i>boolean</i> |
| Tree | trusted |
| Description | <p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Local user database for authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

icmp

| | |
|------------|--|
| Synopsis | Enter the icmp context |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mask-reply *boolean*

| | |
|------------|---|
| Synopsis | Allow responses to ICMP mask requests on the interface |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 icmp mask-reply boolean |
| Tree | mask-reply |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

param-problem

| | |
|-------------|--|
| Synopsis | Enter the param-problem context |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 icmp param-problem |
| Tree | param-problem |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of sent Parameter Problem messages |
| Context | configure service ies string subscriber-interface string group-interface string ipv4 icmp param-problem admin-state keyword |
| Tree | admin-state |
| Default | enable |

| | |
|------------|---|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of Parameter Problem messages to send |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit number of Parameter Problem messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redirects

| | |
|-------------|---|
| Synopsis | Enter the redirects context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects |
| Tree | redirects |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of sending ICMP redirect messages
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4](#) [icmp](#) [redirects](#) **admin-state** *keyword*
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis Maximum number of ICMP redirect messages to send
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4](#) [icmp](#) [redirects](#) **number** *number*
 Tree [number](#)
 Range 10 to 1000
 Default 100
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis Time used to limit the number of ICMP redirect messages
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4](#) [icmp](#) [redirects](#) **seconds** *number*
 Tree [seconds](#)
 Range 1 to 60
 Default 10
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-expired

| | |
|-------------|---|
| Synopsis | Enter the ttl-expired context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp ttl-expired |
| Tree | ttl-expired |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending TTL expired messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp ttl-expired admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of TTL expired messages to send |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp ttl-expired number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|----------|---|
| Synopsis | Time used to limit the number of TTL expired messages |
|----------|---|

| | |
|------------|---|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 icmp ttl-expired seconds number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-matching-address *boolean*

| | |
|-------------|--|
| Synopsis | Use the subscriber interface address as source address |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 icmp ttl-expired use-matching-address boolean</i> |
| Tree | use-matching-address |
| Description | <p>When configured to true, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.</p> <p>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.</p> <p>When configured to false, the system uses the first configured address.</p> |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unreachables

| | |
|-------------|---|
| Synopsis | Enter the unreachables context |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 icmp unreachables</i> |
| Tree | unreachables |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of sending unreachable messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|---|
| Synopsis | Maximum number of unreachable messages to send |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|--|
| Synopsis | Time to limit the number of ICMP unreachable messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-df-bit *boolean*

| | |
|----------|---|
| Synopsis | Ignore DF bit in the IPv4 header when fragmenting |
|----------|---|

| | |
|-------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 ignore-df-bit <i>boolean</i> |
| Tree | ignore-df-bit |
| Description | When configured to true , fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.

When configured to false , the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1. |
| Default | false |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|--|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-proxy-arp *boolean*

| | |
|-------------|--|
| Synopsis | Enable local proxy ARP on interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i> |
| Tree | local-proxy-arp |
| Description | When configured to true , the router enables local proxy ARP on the interface.

When configured to false , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

populate *boolean*

| | |
|----------|--|
| Synopsis | Allow static and dynamic hosts to be populated in system ARP cache |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i> |
| Tree | populate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-arp-policy *reference*

| | |
|----------------|--|
| Synopsis | Proxy ARP policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i> |
| Tree | proxy-arp-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-proxy-arp *boolean*

| | |
|------------|--|
| Synopsis | Enable remote proxy ARP on the interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i> |
| Tree | remote-proxy-arp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|----------|--|
| Synopsis | Timeout for an ARP entry learned on the interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i> |
| Tree | timeout |
| Range | 0 to 65535 |

| | |
|------------|---|
| Default | 14400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos-route-lookup *keyword*

| | |
|------------|--|
| Synopsis | QoS route lookup |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mode *keyword*

| | |
|------------|--|
| Synopsis | Unicast RPF check mode |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 urpf-check mode <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|---|
| Synopsis | Enable the ipv6 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-multiple-wan-addresses *boolean*

| | |
|------------|--|
| Synopsis | Allow multiple WAN addresses |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i> |
| Tree | allow-multiple-wan-addresses |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-reply

| | |
|------------|---|
| Synopsis | Enter the auto-reply context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply |
| Tree | auto-reply |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-solicitation *boolean*

| | |
|------------|---|
| Synopsis | Enable auto-reply for NS |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply neighbor-solicitation <i>boolean</i> |
| Tree | neighbor-solicitation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicitation *boolean*

| | |
|------------|--|
| Synopsis | Enable auto-reply for RS |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply router-solicitation <i>boolean</i> |
| Tree | router-solicitation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp6

| | |
|------------|--|
| Synopsis | Enter the dhcp6 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter *reference*

| | |
|------------|--|
| Synopsis | DHCPv6 filter |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 filter <i>reference</i> |
| Tree | filter |
| Reference | configure filter dhcp6-filter <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option

| | |
|------------|---|
| Synopsis | Enter the option context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-id

| | |
|------------|---|
| Synopsis | Enter the interface-id context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id |
| Tree | interface-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-tuple

| | |
|------------|--|
| Synopsis | Use ASCII-encoded concatenated tuple |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

if-index

| | |
|------------|---|
| Synopsis | Use interface index in interface ID option in DHCPv6 relay packet |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id if-index |
| Tree | if-index |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id

| | |
|----------|---|
| Synopsis | Use SAP ID in interface ID option in DHCPv6 relay packet |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis String for interface ID option in DHCPv6 relay packet
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6** **option** **interface-id** *string* *string*
Tree [string](#)
String Length 1 to 80
Notes The following elements are part of a choice: **ascii-tuple**, **if-index**, **sap-id**, or **string**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis Allow remote ID option to be sent in the DHCPv6 relay packet
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6** **option** **remote-id** *boolean*
Tree [remote-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

override-slaac *boolean*

Synopsis Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6** **override-slaac** *boolean*
Tree [override-slaac](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pd-managed-route

| | |
|------------|--|
| Synopsis | Enable the pd-managed-route context |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6</i>
<i>pd-managed-route</i> |
| Tree | <i>pd-managed-route</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-hop *keyword*

| | |
|------------|--|
| Synopsis | Next hop type |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6</i>
<i>pd-managed-route next-hop</i> <i>keyword</i> |
| Tree | <i>next-hop</i> |
| Default | ipv6 |
| Options | ipv4, ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|--|
| Synopsis | Enter the proxy-server context |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6</i>
<i>proxy-server</i> |
| Tree | <i>proxy-server</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the DHCPv6 proxy server |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6</i>
<i>proxy-server admin-state</i> <i>keyword</i> |
| Tree | <i>admin-state</i> |
| Default | disable |
| Options | enable, disable |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6**
proxy-server **client-applications**
Tree **client-applications**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis Enable IPoE clients to use DHCP relay or proxy server
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6**
proxy-server **client-applications** **dhcp** *boolean*
Tree **dhcp**
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Allow the PPP application to use DHCP relay functionality
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6**
proxy-server **client-applications** **ppp** *boolean*
Tree **ppp**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis Time for prefix to remain preferred on this interface
Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **dhcp6**
proxy-server **preferred-lifetime** (*number* | *keyword*)

| | |
|------------|---|
| Tree | preferred-lifetime |
| Range | 300 to 4294967294 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rebind-timer *number*

| | |
|------------|---|
| Synopsis | Rebind timer (T2) for this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server rebind-timer <i>number</i> |
| Tree | rebind-timer |
| Range | 0 to 1209600 |
| Default | 2880 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew-timer *number*

| | |
|------------|--|
| Synopsis | Renew timer (T1) |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server renew-timer <i>number</i> |
| Tree | renew-timer |
| Range | 0 to 604800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server-id

| | |
|----------|------------------------------------|
| Synopsis | Enter the server-id context |
|----------|------------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 proxy-server server-id</i> |
| Tree | server-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-ascii *string*

| | |
|---------------|---|
| Synopsis | Vendor-assigned ID based on Enterprise Number (DUID-EN) |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 proxy-server server-id</i> duid-en-ascii <i>string</i> |
| Tree | duid-en-ascii |
| String Length | 1 to 58 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-hex *string*

| | |
|---------------|---|
| Synopsis | DUID system ID in hexadecimal format |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 proxy-server server-id</i> duid-en-hex <i>string</i> |
| Tree | duid-en-hex |
| String Length | 1 to 118 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-ll

| | |
|------------|---|
| Synopsis | Use link-layer address (DUID-LL) as DUID |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv6 dhcp6 proxy-server server-id</i> duid-ll |
| Tree | duid-ll |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime (*number* | *keyword*)

Synopsis Time for prefix to remain valid on this interface

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 proxy-server valid-lifetime** (*number* | *keyword*)

Tree [valid-lifetime](#)

Range 300 to 4294967294

Default 86400

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 python-policy** *reference*

Tree [python-policy](#)

Reference **configure python python-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay

Synopsis Enter the **relay** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay**

Tree [relay](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 Relay |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

advertise-selection

| | |
|------------|---|
| Synopsis | Enter the advertise-selection context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection |
| Tree | advertise-selection |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac

| | |
|------------|--|
| Synopsis | Enter the client-mac context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac |
| Tree | client-mac |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-address *keyword*

| | |
|----------|---|
| Synopsis | Designated client MAC addresses for Advertise selection |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac mac-address <i>keyword</i> |
| Tree | mac-address |
| Options | odd, even |

| | |
|------------|---|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|-------------|--|
| Synopsis | Enter the preference-option context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value number

| | |
|------------|---|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option value <i>number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay number

| | |
|-------------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|-------------|---|
| Synopsis | Enter the preference-option context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|---|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option value <i>number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server [*ipv6-address*] *string*

| | |
|----------------|--|
| Synopsis | Enter the server list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> |
| Tree | server |
| Max. Instances | 8 |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv6-address] *string*

| | |
|----------|---------------------------------|
| Synopsis | IP address of the DHCPv6 server |
|----------|---------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> |
| Tree | server |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|-------------|---|
| Synopsis | Enter the preference-option context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|---|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option value <i>number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent to the server. |
| Range | 1 to 100 |

| | |
|------------|---|
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay *number*

| | |
|-------------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the server instance or the client-mac context. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|---|
| Synopsis | Enter the client-applications context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|------------|---|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications dhcp <i>boolean</i> |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp boolean

| | |
|------------|---|
| Synopsis | Allow the PPP application to use DHCP relay functionality |
| Context | configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay client-applications ppp boolean |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-split

| | |
|-------------|---|
| Synopsis | Enter the lease-split context |
| Context | configure service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay lease-split |
| Tree | lease-split |
| Description | <p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> the renew time T1 committed by the server (long renew time) half of the preferred lifetime committed by the server when T1 committed by the server equals zero |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 lease split |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime *number*

| | |
|------------|--|
| Synopsis | DHCPv6 lease split valid lifetime (short lease time) |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split valid-lifetime <i>number</i> |
| Tree | valid-lifetime |
| Range | 300 to 315446399 |
| Default | 3600 |
| Units | seconds |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|--|
| Synopsis | Link address for the DHCPv6 relay messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay link-address <i>string</i> |
| Tree | link-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------|--|
| Synopsis | DHCP6 server(s) to which the DHCP6 requests are forwarded |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay server <i>string</i> |

| | |
|----------------|---|
| Tree | server |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-address *string*

| | |
|------------|---|
| Synopsis | Source IPv6 address for the DHCPv6 relay messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i> |
| Tree | source-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

snooping

| | |
|------------|---|
| Synopsis | Enter the snooping context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping |
| Tree | snooping |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 snooping |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

user-db *reference*

| | |
|------------|---|
| Synopsis | Local user database for authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-ident *keyword*

| | |
|------------|--|
| Synopsis | DHCP6 user identification for this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 user-ident <i>keyword</i> |
| Tree | user-ident |
| Default | mac |
| Options | mac, mac-interface-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-bridged-mode *boolean*

| | |
|------------|---|
| Synopsis | Enable IPv6 IPoE bridged mode |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 ipoe-bridged-mode <i>boolean</i> |
| Tree | ipoe-bridged-mode |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|----------|---|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 neighbor-discovery |
| Tree | neighbor-discovery |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dad-snooping *boolean*

Synopsis Populate table via duplicate address detection packets
 Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6**
neighbor-discovery **dad-snooping** *boolean*
 Tree **dad-snooping**
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-limit *number*

Synopsis Maximum number of neighbor entries learned per SLAAC host
 Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6**
neighbor-discovery **neighbor-limit** *number*
 Tree **neighbor-limit**
 Range 1 to 8
 Default 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos-route-lookup *keyword*

Synopsis QoS route lookup
 Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6** **qos-**
route-lookup *keyword*
 Tree **qos-route-lookup**
 Options destination
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

router-advertisements

| | |
|------------|---|
| Synopsis | Enter the router-advertisements context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements |
| Tree | router-advertisements |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of router advertisements |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-mcast *keyword*

| | |
|------------|--|
| Synopsis | Protocol with forced multicast |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements force-mcast <i>keyword</i> |
| Tree | force-mcast |
| Options | ip, ip-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-advertisement-interval *number*

| | |
|----------|--|
| Synopsis | Maximum advertisement interval |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i> |
| Tree | max-advertisement-interval |
| Range | 900 to 1800 |

| | |
|------------|---|
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-advertisement-interval *number*

| | |
|------------|--|
| Synopsis | Minimum advertisement interval |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i> |
| Tree | min-advertisement-interval |
| Range | 900 to 1350 |
| Default | 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|---|
| Synopsis | Enter the options context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

current-hop-limit *number*

| | |
|------------|--|
| Synopsis | Hop limit to be advertised |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i> |
| Tree | current-hop-limit |
| Range | 0 to 255 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dns

| | |
|------------|---|
| Synopsis | Enter the dns context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns |
| Tree | dns |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-rdnss *boolean*

| | |
|------------|--|
| Synopsis | Include the RDNSS server option 25 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns include-rdnss <i>boolean</i> |
| Tree | include-rdnss |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rdnss-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum time for the RDNSS address to remain valid |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns rdnss-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | rdnss-lifetime |
| Range | 900 to 3600 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-configuration *boolean*

| | |
|----------|------------------------------------|
| Synopsis | Managed address configuration flag |
|----------|------------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options managed-configuration <i>boolean</i> |
| Tree | managed-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mtu (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Advertised MTU value |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options mtu (<i>number</i> <i>keyword</i>) |
| Tree | mtu |
| Range | 1280 to 9212 |
| Default | not-included |
| Units | bytes |
| Options | not-included |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

other-stateful-configuration *boolean*

| | |
|------------|---|
| Synopsis | Other stateful configuration flag |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options other-stateful-configuration <i>boolean</i> |
| Tree | other-stateful-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reachable-time *number*

| | |
|----------|--|
| Synopsis | Neighbor discovery reachable time that is advertised for this group interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i> |
| Tree | reachable-time |

| | |
|------------|---|
| Range | 0 to 3600000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retransmit-timer *number*

| | |
|------------|---|
| Synopsis | Neighbor discovery retransmit timer that is advertised for this group interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i> |
| Tree | retransmit-timer |
| Range | 0 to 1800000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Router lifetime |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | router-lifetime |
| Range | 2700 to 9000 |
| Default | 4500 |
| Units | seconds |
| Options | no-default-router |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-options

| | |
|----------|--|
| Synopsis | Enter the prefix-options context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options |

| | |
|------------|---|
| Tree | prefix-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

autonomous *boolean*

| | |
|------------|---|
| Synopsis | Value of the autonomous flag |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options autonomous <i>boolean</i> |
| Tree | autonomous |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-link *boolean*

| | |
|------------|--|
| Synopsis | Assign the prefix to an interface on the specified link |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options on-link <i>boolean</i> |
| Tree | on-link |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain preferred |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain valid |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6</i> <i>router-advertisements</i> <i>prefix-options</i> <i>valid-lifetime</i> (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 0 to 4294967294 |
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicit

| | |
|------------|---|
| Synopsis | Enter the router-solicit context |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6</i> <i>router-solicit</i> |
| Tree | router-solicit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of router-solicit based authentication |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6</i> <i>router-solicit</i> <i>admin-state</i> <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inactivity-timer (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time before an inactive host is removed |
|----------|---|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>) |
| Tree | inactivity-timer |
| Range | 1 to 31536000 |
| Default | 300 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval *number*

| | |
|------------|--|
| Synopsis | Minimum interval between two consecutive authentication attempts for the same host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit min-auth-interval <i>number</i> |
| Tree | min-auth-interval |
| Range | 1 to 360000 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|---|
| Synopsis | Local user-database that is used for router solicit based authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

urpf-check

| | |
|----------|--------------------------------------|
| Synopsis | Enable the urpf-check context |
|----------|--------------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mode *keyword*

| | |
|------------|--|
| Synopsis | Unicast RPF check mode |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check mode <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-address-assignment

| | |
|------------|---|
| Synopsis | Enter the local-address-assignment context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment |
| Tree | local-address-assignment |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Local Address Assignment |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>local-address-assignment</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>local-address-assignment</i> ipv4 client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe *boolean*

| | |
|------------|---|
| Synopsis | Request local addresses for non-DHCP/managed IPoE hosts |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>local-address-assignment</i> ipv4 client-applications ipoe <i>boolean</i> |
| Tree | ipoe |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for PPP IPCP hosts |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>local-address-assignment</i> ipv4 client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis Default pools

Context **configure** *service ies string subscriber-interface string group-interface string local-address-assignment ipv4 default-pool string*

Tree [default-pool](#)

String Length 1 to 32

Max. Instances 2

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *reference*

Synopsis Local DHCP server that contains pools for local address assignment

Context **configure** *service ies string subscriber-interface string group-interface string local-address-assignment ipv4 server reference*

Tree [server](#)

Reference **configure** *router string dhcp-server dhcpv4 string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context

Context **configure** *service ies string subscriber-interface string group-interface string local-address-assignment ipv6*

Tree [ipv6](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service ies string subscriber-interface string group-interface string local-address-assignment ipv6 client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-slaac *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE SLAAC hosts |
| Context | configure service ies string subscriber-interface string group-interface string local-address-assignment ipv6 client-applications ipoe-slaac <i>boolean</i> |
| Tree | ipoe-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-wan *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE IA NA hosts |
| Context | configure service ies string subscriber-interface string group-interface string local-address-assignment ipv6 client-applications ipoe-wan <i>boolean</i> |
| Tree | ipoe-wan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-slaac *boolean*

| | |
|------------|---|
| Synopsis | Request local addresses for PPP SLAAC hosts |
| Context | configure service ies string subscriber-interface string group-interface string local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i> |
| Tree | ppp-slaac |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server reference

Synopsis Local DHCPv6 server that contains pools for local address assignment

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv6 server](#) *reference*

Tree [server](#)

Reference **configure** [router](#) *string* [dhcp-server dhcpv6](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis MAC address for the interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [mac](#) *string*

Tree [mac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq-auth-policy reference

Synopsis Diameter NASREQ application policy to use for authentication

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [nasreq-auth-policy](#) *reference*

Tree [nasreq-auth-policy](#)

Reference **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-up-while-empty boolean

Synopsis Enable this group interface without any active SAPs

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [oper-up-while-empty](#) *boolean*

Tree [oper-up-while-empty](#)

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe

| | |
|------------|--|
| Synopsis | Enter the pppoe context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe |
| Tree | pppoe |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of PPPoE |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anti-spoof *keyword*

| | |
|------------|--|
| Synopsis | PPPoE anti-spoof filtering |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Default | mac-sid |
| Options | mac-sid, mac-sid-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp-client

| | |
|------------|---|
| Synopsis | Enter the dhcp-client context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client |
| Tree | dhcp-client |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-id *keyword*

| | |
|------------|--|
| Synopsis | Type of information that DHCP option 61 contains |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client client-id <i>keyword</i> |
| Tree | client-id |
| Options | mac-pppoe-session-id |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|------------|---|
| Synopsis | PPPoE policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe policy <i>reference</i> |
| Tree | policy |
| Reference | configure subscriber-mgmt ppp-policy <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy used to modify PPPoE packets

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [python-policy](#) *reference*

Tree [python-policy](#)

Reference **configure** [python](#) [python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis Maximum PPPoE sessions per SAP

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [sap-session-limit](#) *number*

Tree [sap-session-limit](#)

Range 1 to 131071

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [session-limit](#) *number*

Tree [session-limit](#)

Range 1 to 333823

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Local user database for authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-auth-policy *reference*

| | |
|------------|---|
| Synopsis | RADIUS authentication policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> radius-auth-policy <i>reference</i> |
| Tree | radius-auth-policy |
| Reference | configure subscriber-mgmt radius-authentication-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redundant-interface *reference*

| | |
|------------|--|
| Synopsis | Redundant interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> redundant-interface <i>reference</i> |
| Tree | redundant-interface |
| Reference | configure service ies <i>string</i> redundant-interface <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap [[sap-id](#)] *string*

| | |
|----------|------------------------------------|
| Synopsis | Enter the sap list instance |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> |
| Tree | sap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[sap-id] *string*

| | |
|---------------|---|
| Synopsis | SAP ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|--|
| Synopsis | Accounting policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anti-spoof *keyword*

| | |
|------------|--|
| Synopsis | Type of anti-spoof filtering |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Options | source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

calling-station-id *string*

| | |
|---------------|---|
| Synopsis | Calling station ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> calling-station-id <i>string</i> |
| Tree | calling-station-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

collect-stats *boolean*

| | |
|----------|---|
| Synopsis | Collect accounting statistics |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpu-protection

| | |
|------------|--|
| Synopsis | Enter the cpu-protection context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

eth-cfm-monitoring

| | |
|------------|---|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

aggregate

| | |
|------------|---|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

car

| | |
|----------|---|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
|----------|---|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

ip-src-monitoring

| | |
|------------|--|
| Synopsis | Enable IP source monitoring for CPU protection |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection ip-src-monitoring |
| Tree | ip-src-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

policy-id *reference*

| | |
|------------|---|
| Synopsis | CPM protection policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i> |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy <i>number</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

default-host

Synopsis Enter the **default-host** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **default-host**

Tree [default-host](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

ipv4 [[address](#)] *reference* [prefix-length](#) *number*

Synopsis Enter the **ipv4** list instance

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **default-host** **ipv4** *reference* [prefix-length](#) *number*

Tree [ipv4](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

[address](#) *reference*

Synopsis IPv4 default host address

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **default-host** **ipv4** *reference* [prefix-length](#) *number*

Tree [ipv4](#)

Reference **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* **ipv4** [address](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **default-host** **ipv4** *reference* [prefix-length](#) *number*

| | |
|------------|--|
| Tree | ipv4 |
| Range | 0 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

next-hop *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Next hop IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv4 <i>reference</i> prefix-length <i>number</i> next-hop <i>string</i> |
| Tree | next-hop |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ipv6 [[address](#)] *string* [prefix-length](#) *number*

| | |
|------------|---|
| Synopsis | Enter the ipv6 list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

[address] *string*

| | |
|----------|---|
| Synopsis | IPv6 default host address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> |
| Tree | ipv6 |
| Notes | This element is part of a list key. |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv6 address prefix length |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> |
| Tree | ipv6 |
| Range | 0 to 128 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

next-hop *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Next hop IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> next-hop <i>string</i> |
| Tree | next-hop |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system security](#) [dist-cpu-protection](#) *policy* *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#)

Tree [egress](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis Enter the **agg-rate** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [agg-rate](#)

Tree [agg-rate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

adaptation-rule *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [agg-rate](#) [adaptation-rule](#) *keyword*

Tree [adaptation-rule](#)

| | |
|------------|----------------------|
| Default | closest |
| Options | max, min, closest |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Shaping burst size when an aggregate shaper is used |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|---|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queue-frame-based-accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate number

Synopsis Enforced aggregate rate for all queues

Context **configure** *service ies string subscriber-interface string group-interface string sap string egress agg-rate rate number*

Tree *rate*

Range 1 to 6400000000

Units kilobps

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context

Context **configure** *service ies string subscriber-interface string group-interface string sap string egress filter*

Tree *filter*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name

Context **configure** *service ies string subscriber-interface string group-interface string sap string egress filter ip reference*

Tree *ip*

Reference **configure** *filter ip-filter string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policer-control-policy

| | |
|------------|---|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qinq-mark-top-only *boolean*

| | |
|------------|---|
| Synopsis | Mark top Q-tags |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i> |
| Tree | qinq-mark-top-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-egress

| | |
|------------|--|
| Synopsis | Enter the sap-egress context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eth-cfm

| | |
|------------|---|
| Synopsis | Enter the eth-cfm context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fc *keyword*

| | |
|----------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
|----------|---|

| | |
|----------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fc-in-profile *keyword*

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>eth-cfm</i> collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

mep *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>eth-cfm</i> mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

md-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>eth-cfm</i> mep <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> |
| Tree | mep |
| Reference | configure <i>eth-cfm</i> <i>domain</i> <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ma-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> association <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

mep-id *number*

| | |
|------------|--|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ais *boolean*

| | |
|----------|---|
| Synopsis | Enable the generation and the reception of AIS messages |
|----------|---|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i> |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fng-alarm-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fng-reset-time *number*

| | |
|----------|--|
| Synopsis | Time that must expire before an FNG alarm is reset |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>eth-cfm mep md-admin-name reference</i> <i>ma-admin-name reference</i> <i>mep-id number</i> <i>alarm-notification fng-reset-time number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ccm boolean

| | |
|------------|---|
| Synopsis | Generate CCM messages |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>eth-cfm mep md-admin-name reference</i> <i>ma-admin-name reference</i> <i>mep-id number</i> ccm boolean |
| Tree | ccm |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ccm-ltm-priority number

| | |
|------------|---|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>eth-cfm mep md-admin-name reference</i> <i>ma-admin-name reference</i> <i>mep-id number</i> ccm-ltm-priority number |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ccm-padding-size number

| | |
|----------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>eth-cfm mep md-admin-name reference</i> <i>ma-admin-name reference</i> <i>mep-id number</i> ccm-padding-size number |

| | |
|-------------|---|
| Tree | ccm-padding-size |
| Description | <p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second.</p> |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

csf

| | |
|------------|---|
| Synopsis | Enable the csf context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf |
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

multiplier *decimal-number*

| | |
|------------|--|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

eth-test

| | |
|-------------|--|
| Synopsis | Enable the eth-test context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

bit-error-threshold *number*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

test-pattern

| | |
|----------|---------------------------------------|
| Synopsis | Enter the test-pattern context |
|----------|---------------------------------------|

| | |
|-------------|--|
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>eth-test</i> <i>test-pattern</i> |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

crc-tlv *boolean*

| | |
|------------|--|
| Synopsis | Generate a CRC checksum |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>eth-test</i> <i>test-pattern</i> crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

pattern *keyword*

| | |
|-------------|--|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>eth-cfm</i> <i>mep</i> <i>md-admin-name</i> <i>reference</i> <i>ma-admin-name</i> <i>reference</i> <i>mep-id</i> <i>number</i> <i>eth-test</i> <i>test-pattern</i> pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fault-propagation *keyword*

| | |
|----------|-------------------------------|
| Synopsis | Fault propagation for the MEP |
|----------|-------------------------------|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

grace

| | |
|-------------|---|
| Synopsis | Enter the grace context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

eth-ed

| | |
|-------------|--|
| Synopsis | Enter the eth-ed context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

max-rx-defect-window *number*

| | |
|----------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |

| | |
|------------|--|
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

priority *number*

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

rx-eth-ed *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

tx-eth-ed *boolean*

| | |
|----------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

eth-vsm-grace

| | |
|-------------|--|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

rx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

tx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. |

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

| | |
|------------|--|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

one-way-delay-threshold *number*

| | |
|------------|---|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

squelch-ingress-levels *number*

| | |
|----------------|---|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i> |
| Tree | squelch-ingress-levels |
| Description | This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped. |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fwd-wholesale

| | |
|------------|--|
| Synopsis | Enter the fwd-wholesale context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale |
| Tree | fwd-wholesale |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-service *reference*

| | |
|------------|--|
| Synopsis | PPPoE service name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i> |
| Tree | pppoe-service |
| Reference | configure service epipe <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the hosts |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i> |
| Tree | host-admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-lockout-policy *reference*

| | |
|------------|--|
| Synopsis | Host lockout policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i> |
| Tree | host-lockout-policy |
| Reference | configure subscriber-mgmt host-lockout-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

igmp-host-tracking

| | |
|------------|--|
| Synopsis | Enter the igmp-host-tracking context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking |
| Tree | igmp-host-tracking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

expiry-time *number*

| | |
|----------|--|
| Synopsis | Time that the system continues to track inactive hosts |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking expiry-time <i>number</i> |
| Tree | expiry-time |

| | |
|------------|---|
| Range | 1 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|---|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|------------|---|
| Synopsis | Maximum number of multicast groups to be tracked per group |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|--|
| Synopsis | Maximum number of multicast groups to be tracked |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|---|
| Synopsis | Maximum number of multicast sources to be tracked |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable IGMP router alert check option |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
ingress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-qinq-dot1p keyword

| | |
|----------|---|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
ingress qos match-qinq-dot1p keyword |
| Tree | match-qinq-dot1p |
| Options | top, bottom |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis Enter the **policer-control-policy** context
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#)
 Tree [policer-control-policy](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policer control policy name
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [policy-name](#) [reference](#)
 Tree [policy-name](#)
 Reference **configure** [qos](#) [policer-control-policy](#) [string](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#)
 Tree [sap-ingress](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policy ID
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [policy-name](#) [reference](#)

| | |
|------------|---|
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queuing-type *keyword*

| | |
|------------|---|
| Synopsis | Queuing type |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lag

| | |
|------------|---|
| Synopsis | Enter the lag context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-map-profile *number*

| | |
|-------------|---|
| Synopsis | LAG link map profile for a SAP or network interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i> |
| Tree | link-map-profile |
| Description | <p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p> |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

per-link-hash

| | |
|------------|--|
| Synopsis | Enter the per-link-hash context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash |
| Tree | per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

class *number*

| | |
|----------|---|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
|----------|---|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i> |
| Tree | class |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

weight *number*

| | |
|------------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i> |
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

monitor-oper-group *reference*

| | |
|------------|---|
| Synopsis | Monitor operational group |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multi-service-site *reference*

| | |
|----------|---|
| Synopsis | Multi service site name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> multi-service-site <i>reference</i> |
| Tree | multi-service-site |

| | |
|------------|---|
| Reference | configure service customer <i>string</i> multi-service-site <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

static-host

| | |
|------------|---|
| Synopsis | Enter the static-host context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host |
| Tree | static-host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4 [**ip**] *string* **mac** *string*

| | |
|------------|---|
| Synopsis | Enter the ipv4 list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ip] *string*

| | |
|----------|--------------------------------------|
| Synopsis | IPv4 address used by the static host |
|----------|--------------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac *string*

| | |
|------------|---|
| Synopsis | MAC address used by the static host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the static host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-string *string*

| | |
|---------------|--|
| Synopsis | ANCP string |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> ancp-string <i>string</i> |
| Tree | ancp-string |
| String Length | 1 to 63 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis Enter the **app-profile** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **app-profile**

Tree [app-profile](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis Application profile used by the static host

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **app-profile** [profile](#) *reference*

Tree [profile](#)

Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scope *keyword*

Synopsis Scope of the static host application profile

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **app-profile** [scope](#) *keyword*

Tree [scope](#)

Default subscriber

Options subscriber, mac

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis Intermediate destination ID

| | |
|---------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> int-dest-id <i>string</i> |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-route [**prefix**] *string*

| | |
|-------------|--|
| Synopsis | Enter the managed-route list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> |
| Tree | managed-route |
| Description | Commands in this context configure managed route parameters. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[prefix] *string*

| | |
|------------|--|
| Synopsis | Managed route prefix associated with IPv4 static host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> |
| Tree | managed-route |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpe-check

| | |
|------------|---|
| Synopsis | Enable the cpe-check context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check |
| Tree | cpe-check |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP address of the target CPE device |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check destination-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | destination-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop-count *number*

| | |
|------------|--|
| Synopsis | Consecutive ping replies missed before CPE deemed down |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check drop-count <i>number</i> |
| Tree | drop-count |
| Range | 1 to 255 |
| Default | 3 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failed-action

| | |
|------------|---|
| Synopsis | Enter the failed-action context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action |
| Tree | failed-action |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric *number*

| | |
|----------|--|
| Synopsis | Metric associated with the provisioned managed route |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action metric <i>number</i> |
| Tree | metric |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|------------|--|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action preference <i>number</i> |
| Tree | preference |
| Range | 0 to 255 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag *number*

| | |
|------------|---|
| Synopsis | Route tag used if CPE check fails |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

withdraw *boolean*

| | |
|------------|--|
| Synopsis | Withdraw the route when the CPE check fails |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw <i>boolean</i> |
| Tree | withdraw |
| Default | false |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | Interval between ICMP pings to the target CPE IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check interval <i>number</i> |
| Tree | interval |
| Range | 1 to 255 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

log *boolean*

| | |
|------------|---|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check log <i>boolean</i> |
| Tree | log |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

padding-size *number*

| | |
|----------|--|
| Synopsis | Padding size for CPE connectivity checks |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Source IP address used in the ICMP messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | source-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|---|
| Synopsis | Time interval determining that a ping is missed |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 10 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric *number*

| | |
|----------|--|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i> |
| Tree | metric |

| | |
|-------------|---|
| Description | This command configures a metric to associate with the provisioned managed route. |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|-------------|---|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i> |
| Tree | preference |
| Description | This command configures the preference associated with the provisioned managed route. |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag *number*

| | |
|------------|--|
| Synopsis | Route tag used if CPE check fails |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rip-policy *reference*

| | |
|----------|--|
| Synopsis | RIP policy name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> rip-policy <i>reference</i> |
| Tree | rip-policy |

| | |
|------------|---|
| Reference | configure subscriber-mgmt rip-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv

| | |
|------------|--|
| Synopsis | Enter the shcv context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> shcv |
| Tree | shcv |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | SLA profile name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Sub-profile name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|----------|--|
| Synopsis | Enter the subscriber-id context |
|----------|--|

| | |
|------------|---|
| Context | configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string subscriber-id</i> |
| Tree | <i>subscriber-id</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Subscriber identification |
| Context | configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string subscriber-id string string</i> |
| Tree | <i>string</i> |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-sap-id

| | |
|------------|--|
| Synopsis | Use the SAP id as subscriber ID |
| Context | configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i> |
| Tree | <i>use-sap-id</i> |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6 [*prefix*] *string mac string*

| | |
|------------|---|
| Synopsis | Enter the ipv6 list instance |
| Context | configure service ies <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string</i> |
| Tree | <i>ipv6</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[prefix] string

| | |
|------------|--|
| Synopsis | IPv6 prefix |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> |
| Tree | ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac string

| | |
|------------|--|
| Synopsis | MAC address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> |
| Tree | ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of the static host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anccp-string string

| | |
|----------|--|
| Synopsis | ANCP string |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> anccp-string <i>string</i> |

| | |
|---------------|---|
| Tree | ancp-string |
| String Length | 1 to 63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile

| | |
|------------|--|
| Synopsis | Enter the app-profile context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile |
| Tree | app-profile |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

profile *reference*

| | |
|------------|---|
| Synopsis | Application profile used by the static host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile profile <i>reference</i> |
| Tree | profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scope *keyword*

| | |
|------------|---|
| Synopsis | Scope of the static host application profile |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> app-profile scope <i>keyword</i> |
| Tree | scope |
| Default | subscriber |
| Options | subscriber, mac |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id *string*

| | |
|---------------|--|
| Synopsis | Intermediate destination ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> int-dest-id <i>string</i> |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-linking *string*

| | |
|------------|--|
| Synopsis | IPv6 host associated with the IPv4 host through the learned MAC address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> mac-linking <i>string</i> |
| Tree | mac-linking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-route [[ipv6-prefix](#)] *string*

| | |
|-------------|--|
| Synopsis | Enter the managed-route list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> |
| Tree | managed-route |
| Description | Commands in this context configure managed route parameters. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[ipv6-prefix](#)] *string*

| | |
|------------|--|
| Synopsis | Managed route prefix associated with IPv6 static host |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> |
| Tree | managed-route |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cpe-check

Synopsis Enable the **cpe-check** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check**

Tree **cpe-check**

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP address of the target CPE device

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **destination-ip-address**

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

drop-count *number*

Synopsis Consecutive ping replies missed before CPE deemed down

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv6** *string* **mac** *string* **managed-route** *string* **cpe-check** **drop-count** *number*

Tree **drop-count**

Range 1 to 255

Default 3

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failed-action

| | |
|------------|---|
| Synopsis | Enter the failed-action context |
| Context | configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action |
| Tree | failed-action |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric number

| | |
|------------|---|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action metric number |
| Tree | metric |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference number

| | |
|------------|---|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action preference number |
| Tree | preference |
| Range | 0 to 255 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag number

| | |
|----------|-----------------------------------|
| Synopsis | Route tag used if CPE check fails |
|----------|-----------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

withdraw *boolean*

| | |
|------------|---|
| Synopsis | Withdraw the route when the CPE check fails |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw <i>boolean</i> |
| Tree | withdraw |
| Default | false |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|--|
| Synopsis | Interval between ICMP pings to the target CPE IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check interval <i>number</i> |
| Tree | interval |
| Range | 1 to 255 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

log *boolean*

| | |
|------------|---|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check log <i>boolean</i> |
| Tree | log |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

padding-size *number*

| | |
|------------|---|
| Synopsis | Padding size for CPE connectivity checks |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Source IP address used in the ICMP messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | source-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|----------|--|
| Synopsis | Time interval determining that a ping is missed |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i> |

| | |
|------------|---|
| Tree | timeout |
| Range | 1 to 10 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric number

| | |
|-------------|---|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string metric number |
| Tree | metric |
| Description | This command configures a metric to associate with the provisioned managed route. |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference number

| | |
|-------------|---|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string preference number |
| Tree | preference |
| Description | This command configures the preference associated with the provisioned managed route. |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag number

| | |
|----------|-----------------------------------|
| Synopsis | Route tag used if CPE check fails |
|----------|-----------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retail-svc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Retail service ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> retail-svc-id <i>number</i> |
| Tree | retail-svc-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv

| | |
|------------|---|
| Synopsis | Enter the shcv context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> shcv |
| Tree | shcv |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|----------|---|
| Synopsis | SLA profile name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |

| | |
|------------|--|
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Sub-profile name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | Subscriber identification |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id <i>string</i> string |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-sap-id

| | |
|------------|---|
| Synopsis | Use the SAP id as subscriber ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id use-sap-id |
| Tree | use-sap-id |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-learning

| | |
|------------|--|
| Synopsis | Enter the mac-learning context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning |
| Tree | mac-learning |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

data-triggered *boolean*

| | |
|------------|--|
| Synopsis | Enable learning of MAC addresses from data packets |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning data-triggered <i>boolean</i> |
| Tree | data-triggered |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

single-mac *boolean*

| | |
|------------|--|
| Synopsis | Enforce single MAC address and subscriber for the SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning single-mac <i>boolean</i> |
| Tree | single-mac |
| Default | false |
| Introduced | 16.0.R4 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-sla-mgmt

Synopsis Enter the **sub-sla-mgmt** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt**

Tree **sub-sla-mgmt**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of SAP subscriber management

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis Enter the **defaults** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt defaults**

Tree **defaults**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis Default application profile name for this SAP

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt defaults app-profile** *reference*

Tree **app-profile**

| | |
|------------|--|
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id

| | |
|------------|--|
| Synopsis | Enter the int-dest-id context |
| Context | configure service ies string subscriber-interface string group-interface string sap string
sub-sla-mgmt defaults int-dest-id |
| Tree | int-dest-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | Use the configured string |
| Context | configure service ies string subscriber-interface string group-interface string sap string
sub-sla-mgmt defaults int-dest-id string string |
| Tree | string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

top-q-tag

| | |
|------------|--|
| Synopsis | Use the top Q-tag of this SAP |
| Context | configure service ies string subscriber-interface string group-interface string sap string
sub-sla-mgmt defaults int-dest-id top-q-tag |
| Tree | top-q-tag |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | Default SLA profile for hosts on this SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
sub-sla-mgmt defaults sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Default subscriber profile used for subscribers on this SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
sub-sla-mgmt defaults sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
sub-sla-mgmt defaults subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-id

| | |
|------------|--|
| Synopsis | Use auto-generated subscriber identification string |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i>
sub-sla-mgmt defaults subscriber-id auto-id |
| Tree | auto-id |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis Use SAP ID as default subscriber identification string

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) [sap-id](#)

Tree [sap-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Default subscriber identification string for the SAP

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) *string* *string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis Enter the **single-sub-parameters** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#)

Tree [single-sub-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic

Synopsis Enable the **non-sub-traffic** context

| | |
|------------|---|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt</i> <i>single-sub-parameters</i> <i>non-sub-traffic</i> |
| Tree | non-sub-traffic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Application profile name for all non-subscriber traffic |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt</i> <i>single-sub-parameters</i> <i>non-sub-traffic</i> <i>app-profile reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance <i>group number</i> <i>partition number</i> <i>policy app-profile string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|--|
| Synopsis | SLA profile applicable for all non-subscriber traffic |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt</i> <i>single-sub-parameters</i> <i>non-sub-traffic</i> <i>sla-profile reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt <i>sla-profile string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|--|
| Synopsis | Subscriber ID profile applied for all non-subscriber traffic |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt</i> <i>single-sub-parameters</i> <i>non-sub-traffic</i> <i>sub-profile reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt <i>sub-profile string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Subscriber ID applied for all non-subscriber traffic

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [sub-sla-mgmt](#) [single-sub-parameters](#) [non-sub-traffic](#) [subscriber-id](#) [string](#)

Tree [subscriber-id](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

profiled-traffic-only *boolean*

Synopsis Include all traffic in subscriber profile

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [sub-sla-mgmt](#) [single-sub-parameters](#) [profiled-traffic-only](#) [boolean](#)

Tree [profiled-traffic-only](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [sap](#) [string](#) [sub-sla-mgmt](#) [sub-ident-policy](#) [reference](#)

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) [string](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Maximum number of subscribers on this SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt subscriber-limit (<i>keyword</i> <i>number</i>) |
| Tree | subscriber-limit |
| Range | 1 to 131071 |
| Default | 1 |
| Options | no-limit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-parameters

| | |
|------------|---|
| Synopsis | Enter the sap-parameters context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters |
| Tree | sap-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anti-spoof *keyword*

| | |
|------------|--|
| Synopsis | Anti-spoof type of the SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Default | ip-mac |
| Options | ip-mac, nh-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters description <i>string</i> |

| | |
|---------------|---|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-sla-mgmt

| | |
|------------|---|
| Synopsis | Enter the sub-sla-mgmt context |
| Context | configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt |
| Tree | sub-sla-mgmt |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|---|
| Synopsis | Enter the defaults context |
| Context | configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults |
| Tree | defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Default application profile name |
| Context | configure service ies string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|----------|---------------------|
| Synopsis | Default SLA profile |
|----------|---------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt defaults sla-profile reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Default subscriber profile |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt defaults sub-profile reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|---|
| Synopsis | Enter the subscriber-id context |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt defaults subscriber-id</i> |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-id

| | |
|------------|---|
| Synopsis | Subscriber ID that is autogenerated |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap-parameters sub-sla-mgmt defaults subscriber-id auto-id</i> |
| Tree | auto-id |
| Notes | The following elements are part of a choice: auto-id or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | String to be used as default subscriber ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults subscriber-id <i>string</i> <i>string</i> |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: auto-id or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-ident-policy *reference*

| | |
|------------|---|
| Synopsis | Subscriber identification policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt sub-ident-policy <i>reference</i> |
| Tree | sub-ident-policy |
| Reference | configure subscriber-mgmt sub-ident-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy *reference*

| | |
|------------|--|
| Synopsis | Subscriber host connectivity verification policy for IPv4 and IPv6 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy <i>reference</i> |
| Tree | shcv-policy |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy-ipv4 *reference*

| | |
|----------|---|
| Synopsis | Subscriber host connectivity verification policy for IPv4 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy-ipv4 <i>reference</i> |

| | |
|------------|--|
| Tree | shcv-policy-ipv4 |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy-ipv6 *reference*

| | |
|------------|---|
| Synopsis | Subscriber host connectivity verification policy for IPv6 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy-ipv6 <i>reference</i> |
| Tree | shcv-policy-ipv6 |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

srrp [[srrp-id](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the srrp list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> |
| Tree | srrp |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[srrp-id] *number*

| | |
|------------|--|
| Synopsis | SRRP instance ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> |
| Tree | srrp |
| Range | 1 to 4294967295 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of SRRP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bfd-liveness

| | |
|------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dest-ip *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Destination IPv4 prefix |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness dest-ip <i>string</i> |
| Tree | dest-ip |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Name of the interface running BFD |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness interface-name <i>string</i> |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness service-name <i>string</i> |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gw-mac *string*

| | |
|------------|---|
| Synopsis | Gateway MAC address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> gw-mac <i>string</i> |
| Tree | gw-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

keep-alive-interval *number*

| | |
|------------|--|
| Synopsis | Interval between SRRP advertisements |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> keep-alive-interval <i>number</i> |
| Tree | keep-alive-interval |
| Range | 1 to 100 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

message-path *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | SAP to use as the SRRP message path |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> message-path <i>reference</i> |
| Tree | message-path |
| Reference | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

monitor-oper-group

| | |
|------------|---|
| Synopsis | Enter the monitor-oper-group context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group |
| Tree | monitor-oper-group |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-name *reference*

| | |
|------------|--|
| Synopsis | Operational group name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

priority-step *number*

| | |
|------------|--|
| Synopsis | Step value to change priority of SRRP instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group priority-step <i>number</i> |
| Tree | priority-step |
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

one-garp-per-sap *boolean*

| | |
|------------|--|
| Synopsis | Send one gratuitous ARP to each SAP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> one-garp-per-sap <i>boolean</i> |
| Tree | one-garp-per-sap |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy reference

Synopsis VRRP priority control policy associated with the SRRP

Context **configure service ies string subscriber-interface string group-interface string srrp number policy reference**

Tree [policy](#)

Reference **configure vrrp policy number**

Max. Instances 2

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preempt boolean

Synopsis Allow the SRRP instance to override an existing master

Context **configure service ies string subscriber-interface string group-interface string srrp number preempt boolean**

Tree [preempt](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority number

Synopsis Priority for this interface at this level

Context **configure service ies string subscriber-interface string group-interface string srrp number priority number**

Tree [priority](#)

Range 1 to 254

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-fib-population-packets *keyword*

| | |
|------------|--|
| Synopsis | Mode used to send FIB population packets (such as ARP) on switchover |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> send-fib-population-packets <i>keyword</i> |
| Tree | send-fib-population-packets |
| Default | all |
| Options | all, outer-tag-only |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suppress-aa-sub *boolean*

| | |
|------------|---|
| Synopsis | Enable application assurance suppression for ESM subscribers |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> suppress-aa-sub <i>boolean</i> |
| Tree | suppress-aa-sub |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tos-marking-state *keyword*

| | |
|------------|---|
| Synopsis | TOS marking state |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> tos-marking-state <i>keyword</i> |
| Tree | tos-marking-state |
| Default | untrusted |
| Options | trusted, untrusted |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Group interface type |
| Context | configure service ies string subscriber-interface string group-interface string type keyword |
| Tree | type |
| Default | plain |
| Options | plain, lns, wlan-gw, gtp, bonding |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw

| | |
|------------|--|
| Synopsis | Enter the wlan-gw context |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw |
| Tree | wlan-gw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of WLAN Gateway |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gateway-address [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------|--|
| Synopsis | Enter the gateway-address list instance |
|----------|--|

| | |
|----------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | gateway-address |
| Max. Instances | 10 |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Gateway endpoint address of the WLAN Gateway tunnel |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | gateway-address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

purpose

| | |
|------------|---|
| Synopsis | Enter the purpose context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) purpose |
| Tree | purpose |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

xconnect *boolean*

| | |
|------------|---|
| Synopsis | Use tunnel IP address for crosse-connect traffic |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) purpose xconnect <i>boolean</i> |
| Tree | xconnect |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gateway-router *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Routing instance the WLAN-GW endpoint resides in |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw gateway-router <i>string</i> |
| Tree | gateway-router |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

group-encryption

| | |
|------------|--|
| Synopsis | Enter the group-encryption context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption |
| Tree | group-encryption |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encryption-keygroup-inbound *reference*

| | |
|------------|---|
| Synopsis | Encryption keygroup for inbound traffic |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-inbound <i>reference</i> |
| Tree | encryption-keygroup-inbound |
| Reference | configure group-encryption encryption-keygroup <i>number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encryption-keygroup-outbound *reference*

| | |
|----------|--|
| Synopsis | Encryption keygroup for inbound traffic |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-outbound <i>reference</i> |

| | |
|------------|---|
| Tree | encryption-keygroup-outbound |
| Reference | configure group-encryption encryption-keygroup <i>number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-ap

| | |
|------------|---|
| Synopsis | Enter the I2-ap context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap |
| Tree | I2-ap |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

access-point [[sap-id](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the access-point list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap access-point <i>string</i> |
| Tree | access-point |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[[sap-id](#)] *string*

| | |
|---------------|--|
| Synopsis | SAP ID for the Layer 2 access point |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap access-point <i>string</i> |
| Tree | access-point |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the L2 access points |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encap-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service encapsulation type of this access point |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> encap-type <i>keyword</i> |
| Tree | encap-type |
| Options | null, dot1q, qinq |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

epipe-sap-template *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Parameters template for the internal connections with the ISA cards |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> epipe-sap-template <i>reference</i> |
| Tree | epipe-sap-template |
| Reference | configure service template epipe-sap-template <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

auto-sub-id-fmt *keyword*

| | |
|------------|--|
| Synopsis | Format of the auto-generated subscriber ID |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap auto-sub-id-fmt <i>keyword</i> |
| Tree | auto-sub-id-fmt |
| Default | include-ap-tags |
| Options | include-ap-tags, sap-only |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-encap-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Default encapsulation type for Layer 2 access points |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap default-encap-type <i>keyword</i> |
| Tree | default-encap-type |
| Default | null |
| Options | null, dot1q, qinq |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lanext**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the lanext context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw lanext |
| Tree | lanext |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-bd *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of bridge domains

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [lanext](#) **max-bd** *number*

Tree [max-bd](#)

Range 1 to 131071

Default 131071

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis Enable the **learn-ap-mac** context

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [learn-ap-mac](#)

Tree [learn-ap-mac](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delay-auth *boolean*

Synopsis Delay authentication until ARP/ND is answered or timed out, after which AP MAC can be included

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [learn-ap-mac](#) **delay-auth** *boolean*

Tree [delay-auth](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility

| | |
|------------|---|
| Synopsis | Enter the mobility context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
mobility |
| Tree | mobility |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|------------|--|
| Synopsis | Minimum time between two mobility events for a single UE |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
mobility hold-time <i>number</i> |
| Tree | hold-time |
| Range | 0 to 255 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inter-tunnel-type *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable mobility between terminating tunnel types |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
mobility inter-tunnel-type <i>boolean</i> |
| Tree | inter-tunnel-type |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inter-vlan *boolean*

| | |
|----------|---|
| Synopsis | Enable mobility within different VLANs within the same range of VLAN Q-tags |
|----------|---|

| | |
|------------|--|
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw mobility inter-vlan boolean</i> |
| Tree | inter-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

trigger

| | |
|------------|---|
| Synopsis | Enter the trigger context |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw mobility trigger</i> |
| Tree | trigger |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

control *boolean*

| | |
|------------|---|
| Synopsis | Use control traffic (DHCP, DHCPv6, and ICMPv6-RS messages) as mobility trigger |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw mobility trigger control boolean</i> |
| Tree | control |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

data *boolean*

| | |
|------------|--|
| Synopsis | Use data traffic as mobility trigger |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw mobility trigger data boolean</i> |
| Tree | data |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

iapp *boolean*

| | |
|------------|--|
| Synopsis | Use Inter Access Point Protocol (IAPP) messages as mobility trigger |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
mobility trigger iapp <i>boolean</i> |
| Tree | iapp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

oper-down-on-group-degrade *boolean*

| | |
|------------|--|
| Synopsis | Bring interface operationally down when its ISA WLAN Gateway becomes degraded |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
oper-down-on-group-degrade <i>boolean</i> |
| Tree | oper-down-on-group-degrade |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp-mss-adjust *number*

| | |
|------------|---|
| Synopsis | Value for the TCP Maximum Segment Size (MSS) option if not present, or if value is higher |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
tcp-mss-adjust <i>number</i> |
| Tree | tcp-mss-adjust |
| Range | 160 to 10240 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel-egress-qos

| | |
|----------|--|
| Synopsis | Enter the tunnel-egress-qos context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
tunnel-egress-qos |

| | |
|------------|------------------------------------|
| Tree | tunnel-egress-qos |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Administrative state of egress QoS for WLAN-GW tunnels |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

agg-rate-limit (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Aggregate rate limit of each shaper associated with this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos agg-rate-limit (<i>number</i> <i>keyword</i>) |
| Tree | agg-rate-limit |
| Range | 1 to 100000000 |
| Default | max |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

granularity *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Granularity of the egress shaping for WLAN Gateway |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos granularity <i>keyword</i> |
| Tree | granularity |
| Default | per-tunnel |
| Options | per-tunnel, per-retailer |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Minimum time that the egress QoS resources associated with a tunnel (such as a shaper) are held |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos hold-time (<i>number</i> <i>keyword</i>) |
| Tree | hold-time |
| Range | 1 to 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multi-client-only *boolean*

| | |
|------------|---|
| Synopsis | Tunnel traffic to shape when multiple UEs use this tunnel |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos multi-client-only <i>boolean</i> |
| Tree | multi-client-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Identifier of the egress QoS policy associated with each tunnel of this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos qos <i>reference</i> |
| Tree | qos |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler-policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Identifier of the egress scheduler policy associated with each tunnel of this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos scheduler-policy <i>reference</i> |
| Tree | scheduler-policy |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel-encaps

| | |
|------------|---|
| Synopsis | Enter the tunnel-encaps context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-encaps |
| Tree | tunnel-encaps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

learn-l2tp-cookie (*keyword* | *hex-string*)

| | |
|---------------|--|
| Synopsis | System that learns the cookie from L2TP tunnels terminating on this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-encaps learn-l2tp-cookie (<i>keyword</i> <i>hex-string</i>) |
| Tree | learn-l2tp-cookie |
| String Length | 6 |
| Default | never |
| Options | never, always |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vlan-range [[range](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the vlan-range list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> |
| Tree | vlan-range |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[range] *string*

| | |
|------------|--|
| Synopsis | IEEE 802.1q VLAN tag range |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> |
| Tree | vlan-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication

| | |
|----------|---|
| Synopsis | Enter the authentication context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication |
| Tree | authentication |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-time *number*

Synopsis Minimum time to hold a UE down after an authentication failure
Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *wlan-gw* *vlan-range* *string* *authentication* *hold-time* *number*
Tree [hold-time](#)
Range 0 to 3600
Default 5
Units seconds
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local

Synopsis Enable the **local** context
Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *wlan-gw* *vlan-range* *string* *authentication* *local*
Tree [local](#)
Introduced 22.2.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

coa-policy *reference*

Synopsis RADIUS ISA policy applied to CoA or disconnect messages
Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *wlan-gw* *vlan-range* *string* *authentication* *local* *coa-policy* *reference*
Tree [coa-policy](#)
Reference **configure** *aaa* *radius* *isa-policy* *string*
Introduced 22.2.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-ue-state *keyword*

| | |
|------------|---|
| Synopsis | UE state accepted for immediate authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local default-ue-state <i>keyword</i> |
| Tree | default-ue-state |
| Options | portal, dsm |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

on-control-plane *boolean*

| | |
|------------|---|
| Synopsis | Trigger authentication on first control plane packet instead of first data packet |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication on-control-plane <i>boolean</i> |
| Tree | on-control-plane |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|------------|---|
| Synopsis | RADIUS policy for authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication policy <i>reference</i> |
| Tree | policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vlan-mismatch-timeout *number*

| | |
|----------|---|
| Synopsis | Timeout value for the RADIUS proxy cache if a packet is received with a non-matching VLAN |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication vlan-mismatch-timeout <i>number</i> |

| | |
|------------|---------------------------------------|
| Tree | vlan-mismatch-timeout |
| Range | 5 to 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

data-triggered-ue-creation

| | |
|------------|--|
| Synopsis | Enter the data-triggered-ue-creation context |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation |
| Tree | data-triggered-ue-creation |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of data-triggered UE creation |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arp *boolean*

| | |
|------------|---|
| Synopsis | Authenticate ARP packets received from an unknown UE |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string data-triggered-ue-creation arp <i>boolean</i> |
| Tree | arp |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

create-proxy-cache-entry

| | |
|------------|--|
| Synopsis | Enter the create-proxy-cache-entry context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry |
| Tree | create-proxy-cache-entry |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|---------------|---|
| Synopsis | MAC address format |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry mac-format <i>string</i> |
| Tree | mac-format |
| String Length | 2 to 7 |
| Default | aa: |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|---|
| Synopsis | Enable the proxy-server context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | RADIUS Proxy server name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |

| | |
|------------|------------------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router instance of the RADIUS proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server router-instance <i>string</i> |
| Tree | router-instance |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp4

| | |
|------------|---|
| Synopsis | Enter the dhcp4 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 |
| Tree | dhcp4 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of DHCPv4 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dns string

| | |
|----------------|--|
| Synopsis | DNS servers signaled in DHCP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 dns <i>string</i> |
| Tree | dns |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

l2-aware-ip-address (*ipv4-unicast-address* | *keyword*)

| | |
|------------|---|
| Synopsis | L2-Aware NAT inside IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 l2-aware-ip-address (<i>ipv4-unicast-address</i> <i>keyword</i>) |
| Tree | l2-aware-ip-address |
| Options | from-pool |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lease-time

| | |
|------------|---|
| Synopsis | Enter the lease-time context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time |
| Tree | lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active number

| | |
|----------|---|
| Synopsis | IP address lease time for the UE after successful (portal) authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time active <i>number</i> |
| Tree | active |

| | |
|------------|------------------------------------|
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|---|
| Synopsis | IP address lease time that is provided before and during (portal) authentication to the UE |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time initial <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nbns string

| | |
|----------------|--|
| Synopsis | NetBIOS servers signaled in DHCP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 nbns <i>string</i> |
| Tree | nbns |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp6

| | |
|----------|--|
| Synopsis | Enter the dhcp6 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 |

| | |
|------------|------------------------------------|
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the protocol |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime

| | |
|------------|--|
| Synopsis | Enter the preferred-lifetime context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime |
| Tree | preferred-lifetime |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active *number*

| | |
|------------|--|
| Synopsis | Preferred signaled lifetime after full authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime active <i>number</i> |
| Tree | active |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|--|
| Synopsis | Preferred signaled lifetime when the UE is not fully authenticated |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp6 preferred-lifetime initial number</i> |
| Tree | <i>initial</i> |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime

| | |
|------------|---|
| Synopsis | Enter the valid-lifetime context |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp6 valid-lifetime</i> |
| Tree | <i>valid-lifetime</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active number

| | |
|------------|---|
| Synopsis | Signaled valid lifetime after full authentication |
| Context | configure service ies <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>wlan-gw</i> <i>vlan-range string</i> <i>dhcp6 valid-lifetime active number</i> |
| Tree | <i>active</i> |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|----------|--|
| Synopsis | Valid signaled lifetime when the UE is not fully authenticated |
|----------|--|

| | |
|------------|--|
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>dhcp6</i> <i>valid-lifetime</i> <i>initial</i> <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dsm

| | |
|------------|---|
| Synopsis | Enter the dsm context |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> dsm |
| Tree | dsm |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | ISA Radius Policy for accounting |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> dsm accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-update

| | |
|----------|--|
| Synopsis | Enable the accounting-update context |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> dsm accounting-update |

| | |
|------------|------------------------------------|
| Tree | accounting-update |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | Time interval between consecutive Interim accounting update messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-update interval <i>number</i> |
| Tree | interval |
| Range | 5 to 259200 |
| Units | minutes |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of DSM |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

application-assurance

| | |
|------------|--|
| Synopsis | Enter the application-assurance context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm application-assurance |
| Tree | application-assurance |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-statistics *boolean*

| | |
|------------|---|
| Synopsis | Collect AA statistics |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm application-assurance accounting-statistics <i>boolean</i> |
| Tree | accounting-statistics |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

profile *reference*

| | |
|------------|---|
| Synopsis | AA application profile used for portal authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm application-assurance profile <i>reference</i> |
| Tree | profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

url-parameter *string*

| | |
|---------------|--|
| Synopsis | AA URL parameter included for HTTP portal redirect |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm application-assurance url-parameter <i>string</i> |
| Tree | url-parameter |
| String Length | 1 to 247 |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|----------|---|
| Synopsis | Enter the egress context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm egress |
| Tree | egress |

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis Policer for egress traffic
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [egress](#) [policer](#) [reference](#)
 Tree [policer](#)
 Reference **configure** [subscriber-mgmt](#) [isa-policer](#) [string](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [ingress](#)
 Tree [ingress](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-filter *reference*

Synopsis Filter for ingress traffic
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [ingress](#) [ip-filter](#) [reference](#)
 Tree [ip-filter](#)
 Reference **configure** [subscriber-mgmt](#) [isa-filter](#) [string](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*

Synopsis Policer for ingress traffic

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress policer <i>reference</i> |
| Tree | policer |
| Reference | configure subscriber-mgmt isa-policer <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

soft-quota-exhausted-filter *reference*

| | |
|-------------|---|
| Synopsis | Filter applied when soft volume quota is reached |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress soft-quota-exhausted-filter <i>reference</i> |
| Tree | soft-quota-exhausted-filter |
| Description | This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the ip-filter command in the configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs. |
| Reference | configure subscriber-mgmt isa-filter <i>string</i> |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

one-time-redirect

| | |
|------------|---|
| Synopsis | Enter the one-time-redirect context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect |
| Tree | one-time-redirect |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port *number*

| | |
|----------|--|
| Synopsis | Destination port of packets considered for HTTP redirect |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm one-time-redirect port <i>number</i> |

| | |
|------------|------------------------------------|
| Tree | port |
| Range | 1 to 65535 |
| Default | 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

url string

| | |
|---------------|---|
| Synopsis | URL for redirected HTTP protocol packets that can be overridden by AAA |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string dsm one-time-redirect url string |
| Tree | url |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

volume-quota-direction keyword

| | |
|-------------|---|
| Synopsis | Volume quota direction for WLAN GW |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string dsm volume-quota-direction keyword |
| Tree | volume-quota-direction |
| Description | This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs. |
| Default | both |
| Options | both, ingress, egress |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dynamic-service boolean

| | |
|----------|--|
| Synopsis | Dynamically assign WLAN-GW subscriber to a VPLS service |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string dynamic-service boolean |
| Tree | dynamic-service |

| | |
|-------------|---|
| Description | When configured to true , the WLAN-GW subscriber is dynamically assigned to a VPLS service, based on RADIUS authentication reply attributes. This feature is used in conjunction with the configure service vpls wlan-gw wlan-gw-group command.

See "Dynamic VPLS service" in the <i>7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide</i> for more information about the dynamic VPLS service feature. |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

extension [[extension-range](#)] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for extension |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> extension <i>string</i> |
| Tree | extension |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[extension-range] *string*

| | |
|-------------|---|
| Synopsis | VLAN tag range used for matching |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> extension <i>string</i> |
| Tree | extension |
| Description | This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility. |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

http-redirect-policy *reference*

| | |
|----------|---|
| Synopsis | Default HTTP redirect policy for portal authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> http-redirect-policy <i>reference</i> |
| Tree | http-redirect-policy |

| | |
|------------|---|
| Reference | configure subscriber-mgmt http-redirect-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

idle-timeout-action *keyword*

| | |
|------------|--|
| Synopsis | Action to perform when the idle timeout expires |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> idle-timeout-action <i>keyword</i> |
| Tree | idle-timeout-action |
| Default | remove |
| Options | remove, shcv |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-service

| | |
|------------|--|
| Synopsis | Enable the I2-service context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service |
| Tree | I2-service |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of Layer 2 service for VLAN range |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> l2-service description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service *reference*

| | |
|------------|--|
| Synopsis | Layer 2 service associated with the range |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> l2-service service <i>reference</i> |
| Tree | service |
| Reference | configure service vpls <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-policy *reference*

| | |
|------------|--|
| Synopsis | NAT policy for DSM and ISA portal authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> nat-policy <i>reference</i> |
| Tree | nat-policy |
| Reference | configure service nat nat-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

retail-service *string*

| | |
|----------|---|
| Synopsis | Default retail service for new UEs in this range |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> retail-service <i>string</i> |
| Tree | retail-service |

String Length 1 to 64
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac

Synopsis Enter the **slaac** context
 Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **slaac**
 Tree **slaac**
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the protocol
 Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **slaac** **admin-state** *keyword*
 Tree **admin-state**
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis Enter the **preferred-lifetime** context
 Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **slaac** **preferred-lifetime**
 Tree **preferred-lifetime**
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active *number*

Synopsis Preferred signaled lifetime after full authentication

| | |
|------------|--|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime active <i>number</i> |
| Tree | active |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial *number*

| | |
|------------|---|
| Synopsis | Preferred signaled lifetime when the UE is not fully authenticated |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac preferred-lifetime initial <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime

| | |
|------------|--|
| Synopsis | Enter the valid-lifetime context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime |
| Tree | valid-lifetime |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active *number*

| | |
|----------|--|
| Synopsis | Signaled valid lifetime after full authentication |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime active <i>number</i> |
| Tree | active |

| | |
|------------|------------------------------------|
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|--|
| Synopsis | Valid signaled lifetime when the UE is not fully authenticated |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string slaac valid-lifetime initial <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vrgw

| | |
|------------|--|
| Synopsis | Enter the vrgw context |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw |
| Tree | vrgw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of vRGW |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

brg

Synopsis Enter the **brg** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) **brg**

Tree [brg](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

authenticated-brg-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Only allow hosts from BRGs pre-authenticated using the radius-proxy

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) **brg** **authenticated-brg-only** *boolean*

Tree [authenticated-brg-only](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default BRG profile to use if the AAA server does not specify one

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) **brg** **default-brg-profile** *reference*

Tree [default-brg-profile](#)

Reference **configure** [subscriber-mgmt](#) [vrgw](#) [brg-profile](#) *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis Enter the **lanext** context

Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string vrgw lanext*

Tree *lanext*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **access** context

Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string vrgw lanext access*

Tree *access*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of allowed MAC entries on access side

Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw
vlan-range string vrgw lanext access max-mac number*

Tree *max-mac*

Range 1 to 256

Default 20

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-access *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Allow multiple access points |
| Context | configure <i>service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext access multi-access boolean</i> |
| Tree | multi-access |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Policer for ingress home traffic |
| Context | configure <i>service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext access policer reference</i> |
| Tree | policer |
| Reference | configure <i>subscriber-mgmt isa-policer string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of HLE |
| Context | configure <i>service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

assistive-address-resolution *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ISA assists in address resolution

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *wlan-gw* *vlan-range* *string* *vrgw* *lanext* *assistive-address-resolution* *boolean*

Tree *assistive-address-resolution*

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bd-mac-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Prefix from which BD MACs for MAC translation are derived

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *wlan-gw* *vlan-range* *string* *vrgw* *lanext* *bd-mac-prefix* *string*

Tree *bd-mac-prefix*

String Length 8

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-translation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Hide MAC address of home host by translating it to BD MAC

Context **configure** *service* *ies* *string* *subscriber-interface* *string* *group-interface* *string* *wlan-gw* *vlan-range* *string* *vrgw* *lanext* *mac-translation* *boolean*

| | |
|------------|------------------------------------|
| Tree | mac-translation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

network



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of the HLE network |
| Context | configure service ies string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw lanext network admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-mac number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Maximum number of allowed MAC entries on network side |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network max-mac number |
| Tree | max-mac |
| Range | 1 to 64 |
| Default | 20 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Policer for ingress data center traffic |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network policer reference |
| Tree | policer |
| Reference | configure subscriber-mgmt isa-policer <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

xconnect

| | |
|------------|---|
| Synopsis | Enter the xconnect context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect |
| Tree | xconnect |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting

| | |
|------------|--|
| Synopsis | Enter the accounting context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting |
| Tree | accounting |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mobility-updates *boolean*

| | |
|------------|---|
| Synopsis | Accounting updates triggered by mobility |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting mobility-updates <i>boolean</i> |
| Tree | mobility-updates |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | ISA RADIUS accounting policy for cross-connected UEs |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting policy <i>reference</i> |
| Tree | policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

update-interval *number*

| | |
|----------|---|
| Synopsis | Time between consecutive Interim accounting update messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting update-interval <i>number</i> |

| | |
|------------|------------------------------------|
| Tree | update-interval |
| Range | 5 to 259200 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the cross-connect |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Identifier of the WLAN Gateway ISA group to terminate UEs for this group interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw wlan-gw-group <i>reference</i> |
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wpp

| | |
|----------|--|
| Synopsis | Enable the wpp context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp |
| Tree | wpp |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of WPP
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial

Synopsis Enter the **initial** context
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [initial](#)
 Tree [initial](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile *reference*

Synopsis Initial application profile name
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp](#) [initial](#) [app-profile](#) *reference*
 Tree [app-profile](#)
 Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis Initial SLA profile

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Initial subscriber profile |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-time *number*

| | |
|------------|---|
| Synopsis | Lease time |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp lease-time <i>number</i> |
| Tree | lease-time |
| Range | 10 to 315446399 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal

| | |
|------------|---|
| Synopsis | Enter the portal context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal |
| Tree | portal |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|---|
| Synopsis | Web portal server name |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal-group *reference*

| | |
|------------|--|
| Synopsis | WPP portal group for this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal portal-group <i>reference</i> |
| Tree | portal-group |
| Reference | configure aaa wpp portal-group <i>string</i> |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|--|
| Synopsis | The virtual router instance of the WPP portal for this interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal router-instance <i>string</i> |
| Tree | router-instance |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

restore-to-initial-on-disconnect *boolean*

| | |
|------------|--|
| Synopsis | Restore initial profiles after a host has disconnected |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp
restore-to-initial-on-disconnect <i>boolean</i> |
| Tree | restore-to-initial-on-disconnect |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

triggered-hosts *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable triggered hosts |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp
triggered-hosts <i>boolean</i> |
| Tree | triggered-hosts |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|--|
| Synopsis | User database |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time

| | |
|------------|---|
| Synopsis | Enter the hold-time context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service ies string subscriber-interface string hold-time ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure service ies string subscriber-interface string hold-time ipv4 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

init-only *boolean*

| | |
|-------------|---|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service ies string subscriber-interface string hold-time ipv4 down init-only boolean |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|----------|--|
| Synopsis | Down hold time for the IP interface |
| Context | configure service ies string subscriber-interface string hold-time ipv4 down seconds number |

| | |
|------------|---|
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv4 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv4 up seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

down

| | |
|-------------|---|
| Synopsis | Enter the down context |
| Context | configure service ies string subscriber-interface string hold-time ipv6 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

init-only boolean

| | |
|-------------|--|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service ies string subscriber-interface string hold-time ipv6 down init-only boolean |
| Tree | init-only |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds number

| | |
|------------|--|
| Synopsis | Down hold time for the IP interface |
| Context | configure service ies string subscriber-interface string hold-time ipv6 down seconds number |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-linking

| | |
|------------|---|
| Synopsis | Enter the ipoe-linking context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipoe-linking |
| Tree | ipoe-linking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gratuitous-router-advertisement *boolean*

| | |
|----------|--|
| Synopsis | Send unsolicited router advertisement after DHCP setup |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipoe-linking gratuitous-router-advertisement <i>boolean</i> |
| Tree | gratuitous-router-advertisement |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session

Synopsis Enter the **ipoe-session** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipoe-session](#)
Tree [ipoe-session](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum number of sessions on this group interface
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipoe-session](#) **session-limit** *number*
Tree [session-limit](#)
Range 1 to 500000
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv4](#)
Tree [ipv4](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address [[ipv4-address](#)] *string*

Synopsis Enter the **address** list instance
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv4](#) **address** *string*
Tree [address](#)
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv4-address] *string*

Synopsis IP address associated with the subscriber subnet

Context **configure** *service ies string subscriber-interface string ipv4 address string*

Tree *address*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gateway *string*

Synopsis Gateway IP address within the subnet for SRRP routing

Context **configure** *service ies string subscriber-interface string ipv4 address string gateway string*

Tree *gateway*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

holdup-time *number*

Synopsis Wait time before accepting new state attribute

Context **configure** *service ies string subscriber-interface string ipv4 address string holdup-time number*

Tree *holdup-time*

Range 100 to 5000

Units milliseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

populate-host-routes *boolean*

Synopsis Populate subscriber host routes in local FIB

Context **configure** *service ies string subscriber-interface string ipv4 address string populate-host-routes boolean*

| | |
|------------|---|
| Tree | populate-host-routes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv4 address prefix length |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 <i>address</i> <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-srrp *number*

| | |
|------------|--|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 <i>address</i> <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-unmatching-subnets *boolean*

| | |
|------------|--|
| Synopsis | Allow subscriber hosts without a matching subnet |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 allow-unmatching-subnets <i>boolean</i> |
| Tree | allow-unmatching-subnets |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-dns *string*

| | |
|----------------|--|
| Synopsis | Default DNS server addresses |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 default-dns <i>string</i> |
| Tree | default-dns |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp

| | |
|------------|---|
| Synopsis | Enter the dhcp context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCP |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|---|
| Synopsis | Enter the client-applications context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|------------|---|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp client-applications dhcp <i>boolean</i> |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|------------|---|
| Synopsis | Enable PPPoE clients to use DHCP relay or proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp client-applications ppp boolean |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address *string*

| | |
|----------|--|
| Synopsis | GI address for the DHCP relay |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp gi-address <i>string</i> |
| Tree | gi-address |

| | |
|-------------|---|
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-populate

| | |
|------------|--|
| Synopsis | Enter the lease-populate context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-leases *number*

| | |
|------------|---|
| Synopsis | Maximum number of DHCPv4 leases |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i> |
| Tree | max-leases |
| Range | 0 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-82

| | |
|-------------|---|
| Synopsis | Enter the option-82 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 |
| Tree | option-82 |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure service ies string subscriber-interface string ipv4 dhcp option-82 vendor-specific-option**

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context **configure service ies string subscriber-interface string ipv4 dhcp option-82 vendor-specific-option client-mac-address *boolean***

Tree [client-mac-address](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id *boolean*

Synopsis Send SAP ID in the sub-option of the DHCP relay packet

Context **configure service ies string subscriber-interface string ipv4 dhcp option-82 vendor-specific-option sap-id *boolean***

Tree [sap-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *boolean*

Synopsis Send the service ID in the Vendor Specific Option

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | User-defined ASCII string for the VSO |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option string <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

system-id *boolean*

| | |
|------------|--|
| Synopsis | Send the system ID in the VSO |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i> |
| Tree | system-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|--|
| Synopsis | Enter the proxy-server context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the DHCP proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

emulated-server *string*

| | |
|------------|---|
| Synopsis | IP address used as DHCP server address in SAP context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server emulated-server <i>string</i> |
| Tree | emulated-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-time

| | |
|------------|--|
| Synopsis | Enter the lease-time context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server lease-time |
| Tree | lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-override *boolean*

| | |
|------------|--|
| Synopsis | Use lease time information provided by RADIUS server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i> |
| Tree | radius-override |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis DHCP lease time

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp proxy-server lease-time](#) *value number*

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp python-policy](#) *reference*

Tree [python-policy](#)

Reference **configure** [python](#) [python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

relay-proxy

Synopsis Enable the **relay-proxy** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy](#)

Tree [relay-proxy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

release-update-src-ip *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp relay-proxy](#) [release-update-src-ip](#) *boolean*

| | |
|------------|---|
| Tree | release-update-src-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

siaddr-override *string*

| | |
|------------|---|
| Synopsis | DHCP server IP address for address hiding function |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i> |
| Tree | siaddr-override |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

release-include-gi-address *boolean*

| | |
|------------|---|
| Synopsis | Include the GI address in DHCP relay messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i> |
| Tree | release-include-gi-address |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|--|
| Synopsis | DHCP server IP addresses |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp server <i>string</i> |
| Tree | server |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-ip-addr *keyword*

| | |
|------------|--|
| Synopsis | Type of source address to use for DHCP relay |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i> |
| Tree | src-ip-addr |
| Default | auto |
| Options | auto, gi-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

virtual-subnet *boolean*

| | |
|------------|---|
| Synopsis | Enable a virtual subnet for DHCPv4 hosts |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp virtual-subnet <i>boolean</i> |
| Tree | virtual-subnet |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

export-host-routes *boolean*

| | |
|------------|---|
| Synopsis | Allow export of subscriber management host routes |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 export-host-routes <i>boolean</i> |
| Tree | export-host-routes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unnumbered

| | |
|------------|--|
| Synopsis | Enter the unnumbered context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered |
| Tree | unnumbered |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-address *string*

| | |
|------------|--|
| Synopsis | IP address for the subscriber interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered ip-address <i>string</i> |
| Tree | ip-address |
| Notes | The following elements are part of a choice: ip-address or ip-int-name . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-int-name *string*

| | |
|---------------|---|
| Synopsis | Interface name from which an IPv4 address is borrowed |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv4 unnumbered ip-int-name <i>string</i> |
| Tree | ip-int-name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ip-address or ip-int-name . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enable the ipv6 context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address [[ipv6-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the address list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis IPv6 address for the subscriber interface
 Context **configure** *service ies string subscriber-interface string ipv6 address string*
 Tree [address](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Host type for subscriber interface prefixes
 Context **configure** *service ies string subscriber-interface string ipv6 address string host-type keyword*
 Tree [host-type](#)
 Default pd
 Options pd, wan, pd-wan
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis IPv6 address prefix length
 Context **configure** *service ies string subscriber-interface string ipv6 address string prefix-length number*
 Tree [prefix-length](#)
 Range 0 to 128
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-multiple-wan-addresses *boolean*

| | |
|------------|--|
| Synopsis | Allow multiple WAN addresses |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i> |
| Tree | allow-multiple-wan-addresses |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-unmatching-prefixes *boolean*

| | |
|------------|---|
| Synopsis | Allow subscriber hosts without a matching prefix |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 allow-unmatching-prefixes <i>boolean</i> |
| Tree | allow-unmatching-prefixes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-dns *string*

| | |
|----------------|--|
| Synopsis | Default DNS server addresses |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 default-dns <i>string</i> |
| Tree | default-dns |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delegated-prefix-length (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | IPv6 delegated prefix length |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 delegated-prefix-length (<i>number</i> <i>keyword</i>) |

| | |
|------------|---|
| Tree | delegated-prefix-length |
| Range | 48 to 64 |
| Default | 64 |
| Options | variable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp6

| | |
|------------|--|
| Synopsis | Enter the dhcp6 context |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

override-slaac *boolean*

| | |
|------------|--|
| Synopsis | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 override-slaac <i>boolean</i> |
| Tree | override-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-managed-route

| | |
|------------|---|
| Synopsis | Enable the pd-managed-route context |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 pd-managed-route |
| Tree | pd-managed-route |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-hop *keyword*

| | |
|------------|--|
| Synopsis | Next hop type |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 pd-managed-route next-hop <i>keyword</i> |
| Tree | next-hop |
| Default | ipv6 |
| Options | ipv4, ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|---|
| Synopsis | Enter the proxy-server context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCPv6 proxy server |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis Enable IPoE clients to use DHCP relay or proxy server

Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean](#)

Tree [dhcp](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Allow the PPP application to use DHCP relay functionality

Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean](#)

Tree [ppp](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (number | keyword)

Synopsis Time for prefix to remain preferred on this interface

Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server preferred-lifetime \(number | keyword\)](#)

Tree [preferred-lifetime](#)

Range 300 to 4294967294

Default 3600

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

| | |
|------------|---|
| Synopsis | Rebind timer (T2) for this interface |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server rebind-timer <i>number</i> |
| Tree | rebind-timer |
| Range | 0 to 1209600 |
| Default | 2880 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew-timer *number*

| | |
|------------|--|
| Synopsis | Renew timer (T1) |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server renew-timer <i>number</i> |
| Tree | renew-timer |
| Range | 0 to 604800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server-id

| | |
|------------|--|
| Synopsis | Enter the server-id context |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id |
| Tree | server-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-ascii *string*

| | |
|----------|---|
| Synopsis | Vendor-assigned ID based on Enterprise Number (DUID-EN) |
|----------|---|

| | |
|---------------|--|
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-en-ascii string |
| Tree | duid-en-ascii |
| String Length | 1 to 58 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-hex string

| | |
|---------------|--|
| Synopsis | DUID system ID in hexadecimal format |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-en-hex string |
| Tree | duid-en-hex |
| String Length | 1 to 118 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-ll

| | |
|------------|--|
| Synopsis | Use link-layer address (DUID-LL) as DUID |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-ll |
| Tree | duid-ll |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (number | keyword)

| | |
|----------|---|
| Synopsis | Time for prefix to remain valid on this interface |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server valid-lifetime (number keyword) |
| Tree | valid-lifetime |
| Range | 300 to 4294967294 |

| | |
|------------|---|
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 python-policy reference |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

relay

| | |
|------------|--|
| Synopsis | Enter the relay context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay |
| Tree | relay |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 Relay |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp boolean

| | |
|------------|---|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications dhcp boolean |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp boolean

| | |
|------------|--|
| Synopsis | Allow the PPP application to use DHCP relay functionality |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications ppp boolean |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies string subscriber-interface string ipv6 dhcp6 relay description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis Enter the **lease-split** context

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split**

Tree **lease-split**

Description Commands in this context configure DHCPv6 lease split.

DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of DHCPv6 lease split

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split admin-state keyword**

Tree **admin-state**

Default disable

Options enable, disable

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split valid-lifetime number**

Tree **valid-lifetime**

Range 300 to 315446399

Default 3600

Units seconds

Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis Link address for the DHCPv6 relay messages
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [link-address](#) *string*
Tree [link-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis DHCP6 server(s) to which the DHCP6 requests are forwarded
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [server](#) *string*
Tree [server](#)
Max. Instances 8
Notes This element is ordered by the user.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis Source IPv6 address for the DHCPv6 relay messages
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [source-address](#) *string*
Tree [source-address](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis Enable IPv6 IPoE bridged mode
Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [ipoe-bridged-mode](#) *boolean*

| | |
|------------|---|
| Tree | ipoe-bridged-mode |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-local-address

| | |
|------------|---|
| Synopsis | Enter the link-local-address context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address |
| Tree | link-local-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address *string*

| | |
|------------|---|
| Synopsis | IPv6 link local address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix [[ipv6-prefix](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> |
| Tree | prefix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[ipv6-prefix](#)] *string*

| | |
|----------|---|
| Synopsis | IPv6 address for a router interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> |
| Tree | prefix |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

holdup-time *number*

| | |
|------------|---|
| Synopsis | Time to wait before route accepts new state attribute |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> holdup-time <i>number</i> |
| Tree | holdup-time |
| Range | 100 to 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Host type for subscriber interface prefixes |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> host-type <i>keyword</i> |
| Tree | host-type |
| Default | pd |
| Options | pd, wan, pd-wan |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-srrp *number*

| | |
|----------|--|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisements

Synopsis Enter the **router-advertisements** context
Context **configure service ies string subscriber-interface string ipv6 router-advertisements**
Tree [router-advertisements](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of router advertisements
Context **configure service ies string subscriber-interface string ipv6 router-advertisements admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast keyword

Synopsis Protocol with forced multicast
Context **configure service ies string subscriber-interface string ipv6 router-advertisements force-mcast keyword**
Tree [force-mcast](#)
Options ip, ip-mac
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-advertisement-interval number

Synopsis Maximum advertisement interval

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i> |
| Tree | max-advertisement-interval |
| Range | 900 to 1800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-advertisement-interval *number*

| | |
|------------|---|
| Synopsis | Minimum advertisement interval |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i> |
| Tree | min-advertisement-interval |
| Range | 900 to 1350 |
| Default | 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|--|
| Synopsis | Enter the options context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

current-hop-limit *number*

| | |
|----------|--|
| Synopsis | Hop limit to be advertised |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i> |
| Tree | current-hop-limit |

| | |
|------------|---|
| Range | 0 to 255 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dns

| | |
|------------|--|
| Synopsis | Enter the dns context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns |
| Tree | dns |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-rdnss *boolean*

| | |
|------------|---|
| Synopsis | Include the RDNSS server option 25 |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns include-rdnss <i>boolean</i> |
| Tree | include-rdnss |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rdnss-lifetime (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum time for the RDNSS address to remain valid |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns rdnss-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | rdnss-lifetime |
| Range | 900 to 3600 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-configuration *boolean*

| | |
|------------|---|
| Synopsis | Managed address configuration flag |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
options managed-configuration <i>boolean</i> |
| Tree | managed-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mtu (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Advertised MTU value |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
options mtu (<i>number</i> <i>keyword</i>) |
| Tree | mtu |
| Range | 1280 to 9212 |
| Default | not-included |
| Units | bytes |
| Options | not-included |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

other-stateful-configuration *boolean*

| | |
|------------|--|
| Synopsis | Other stateful configuration flag |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
options other-stateful-configuration <i>boolean</i> |
| Tree | other-stateful-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reachable-time *number*

| | |
|----------|---|
| Synopsis | Neighbor discovery reachable time that is advertised for this group interface |
|----------|---|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i> |
| Tree | reachable-time |
| Range | 0 to 3600000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retransmit-timer *number*

| | |
|------------|---|
| Synopsis | Neighbor discovery retransmit timer that is advertised for this group interface |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i> |
| Tree | retransmit-timer |
| Range | 0 to 1800000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Router lifetime |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | router-lifetime |
| Range | 2700 to 9000 |
| Default | 4500 |
| Units | seconds |
| Options | no-default-router |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-options

| | |
|------------|---|
| Synopsis | Enter the prefix-options context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
prefix-options |
| Tree | prefix-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

autonomous *boolean*

| | |
|------------|---|
| Synopsis | Value of the autonomous flag |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
prefix-options autonomous <i>boolean</i> |
| Tree | autonomous |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-link *boolean*

| | |
|------------|--|
| Synopsis | Assign the prefix to an interface on the specified link |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
prefix-options on-link <i>boolean</i> |
| Tree | on-link |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time for a prefix to remain preferred |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
prefix-options preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 3600 |

| | |
|------------|---|
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Time for a prefix to remain valid |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 0 to 4294967294 |
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicit

| | |
|------------|--|
| Synopsis | Enter the router-solicit context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit |
| Tree | router-solicit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inactivity-timer (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Time before an inactive host is removed |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>) |
| Tree | inactivity-timer |
| Range | 1 to 31536000 |
| Default | 300 |
| Units | seconds |
| Options | infinite |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis Enter the **local-address-assignment** context
Context **configure service ies string subscriber-interface string local-address-assignment**
Tree [local-address-assignment](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of Local Address Assignment
Context **configure service ies string subscriber-interface string local-address-assignment admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure service ies string subscriber-interface string local-address-assignment ipv4**
Tree [ipv4](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
Context **configure service ies string subscriber-interface string local-address-assignment ipv4 client-applications**
Tree [client-applications](#)

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|------------|---|
| Synopsis | Request local addresses for PPP IPCP hosts |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv4 client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-pool *string*

| | |
|----------------|--|
| Synopsis | Default pools |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv4 default-pool <i>string</i> |
| Tree | default-pool |
| String Length | 1 to 32 |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *reference*

| | |
|------------|---|
| Synopsis | Local DHCP server that contains pools for local address assignment |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv4 server <i>reference</i> |
| Tree | server |
| Reference | configure router string dhcp-server dhcpv4 string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|---|
| Synopsis | Enter the ipv6 context |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|---|
| Synopsis | Enter the client-applications context |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv6 client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-slaac *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE SLAAC hosts |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv6 client-applications ipoe-slaac boolean |
| Tree | ipoe-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-wan *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE IA NA hosts |
| Context | configure service ies string subscriber-interface string local-address-assignment ipv6 client-applications ipoe-wan boolean |
| Tree | ipoe-wan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-slaac *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for PPP SLAAC hosts |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i> |
| Tree | ppp-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *reference*

| | |
|------------|---|
| Synopsis | Local DHCPv6 server that contains pools for local address assignment |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 server <i>reference</i> |
| Tree | server |
| Reference | configure router <i>string</i> dhcp-server dhcpv6 <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe

| | |
|------------|---|
| Synopsis | Enter the pppoe context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> pppoe |
| Tree | pppoe |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> pppoe description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions
 Context **configure** *service ies string subscriber-interface string pppoe session-limit number*
 Tree [session-limit](#)
 Range 1 to 333823
 Default 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Mode of operation for hosts with /128 WAN IPv6 address
 Context **configure** *service ies string subscriber-interface string wan-mode keyword*
 Tree [wan-mode](#)
 Default mode64
 Options mode64, mode128
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis Enable the **wlan-gw** context
 Context **configure** *service ies string subscriber-interface string wlan-gw*
 Tree [wlan-gw](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-manager

| | |
|------------|--|
| Synopsis | Enter the pool-manager context |
| Context | configure service ies string subscriber-interface string wlan-gw pool-manager |
| Tree | pool-manager |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp6-client

| | |
|------------|---|
| Synopsis | Enter the dhcp6-client context |
| Context | configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client |
| Tree | dhcp6-client |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcpv4-nat

| | |
|------------|--|
| Synopsis | Enter the dhcpv4-nat context |
| Context | configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat |
| Tree | dhcpv4-nat |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCPv6 client entity |
| Context | configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|---|
| Synopsis | IPv6 address in the link address field of relay header |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address <i>string</i> |
| Tree | link-address |
| Default | :: |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool-name *string*

| | |
|---------------|--|
| Synopsis | Pool name to be sent in the DHCPv6 messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name <i>string</i> |
| Tree | pool-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ia-na

| | |
|------------|--|
| Synopsis | Enter the ia-na context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na |
| Tree | ia-na |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the DHCPv6 client entity |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|------------------------------------|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|--|
| Synopsis | IPv6 address in the link address field of relay header |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na link-address <i>string</i> |
| Tree | link-address |
| Default | :: |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool-name *string*

| | |
|---------------|---|
| Synopsis | Pool name to be sent in the DHCPv6 messages |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na pool-name <i>string</i> |
| Tree | pool-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lease-query

| | |
|------------|--|
| Synopsis | Enable the lease-query context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query |
| Tree | lease-query |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-retries *number*

| | |
|----------|--|
| Synopsis | Maximum number of retries before the lease query assumes that no existing subnets were allocated |
|----------|--|

| | |
|------------|---|
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query max-retries <i>number</i> |
| Tree | max-retries |
| Range | 0 to 10 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

servers *string*

| | |
|----------------|---|
| Synopsis | DHCPv6 servers that are used for requesting addresses |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client servers <i>string</i> |
| Tree | servers |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

slaac

| | |
|------------|---|
| Synopsis | Enter the slaac context |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac |
| Tree | slaac |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the DHCPv6 client entity |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis IPv6 address in the link address field of relay header

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **slaac** **link-address** *string*

Tree [link-address](#)

Default ::

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis Pool name to be sent in the DHCPv6 messages

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **slaac** **pool-name** *string*

Tree [pool-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-ip (*keyword* | *ipv6-address*)

Synopsis Source IP address that is used by the DHCPv6 client

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **source-ip** (*keyword* | *ipv6-address*)

Tree [source-ip](#)

Default use-interface-ip

Options use-interface-ip

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enter the **watermarks** context

| | |
|------------|---|
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager watermarks</i> |
| Tree | watermarks |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high *number*

| | |
|------------|---|
| Synopsis | New prefix that is used when the ISA level reaches high watermark |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager watermarks high number</i> |
| Tree | high |
| Range | 51 to 99 |
| Default | 95 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low *number*

| | |
|------------|--|
| Synopsis | Prefix that is released if the usage level without this prefix is below the low watermark |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager watermarks low number</i> |
| Tree | low |
| Range | 50 to 98 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*

| | |
|------------|--|
| Synopsis | Identifier of the WLAN Gateway ISA group on which the prefixes are installed |
| Context | configure service ies <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager wlan-gw-group reference</i> |
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

redundancy

Synopsis Enter the **redundancy** context

Context **configure service ies string subscriber-interface string wlan-gw redundancy**

Tree [redundancy](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state keyword

Synopsis Administrative state of WLAN-GW redundancy

Context **configure service ies string subscriber-interface string wlan-gw redundancy admin-state keyword**

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

export string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route to export to peer

Context **configure service ies string subscriber-interface string wlan-gw redundancy export string**

Tree [export](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Peer route to monitor |
| Context | configure service ies <i>string</i> subscriber-interface <i>string</i> wlan-gw redundancy monitor <i>string</i> |
| Tree | monitor |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber-mgmt

| | |
|------------|--|
| Synopsis | Enter the subscriber-mgmt context |
| Context | configure service ies <i>string</i> subscriber-mgmt |
| Tree | subscriber-mgmt |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multi-chassis-shunt-id *number*

| | |
|-------------|---|
| Synopsis | Shunt ID for a pair of resilient nodes |
| Context | configure service ies <i>string</i> subscriber-mgmt multi-chassis-shunt-id <i>number</i> |
| Tree | multi-chassis-shunt-id |
| Description | <p>This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.</p> <p>This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.</p> |
| Range | 1 to 8191 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up-resiliency

| | |
|------------|---|
| Synopsis | Enter the up-resiliency context |
| Context | configure service ies string subscriber-mgmt up-resiliency |
| Tree | up-resiliency |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

monitor-oper-group [[oper-group](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the monitor-oper-group list instance |
| Context | configure service ies string subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Description | Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).

Note:
The following is only applicable for the configure service vpls capture-sap context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups. |
| Max. Instances | 4 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[oper-group](#)] *reference*

| | |
|------------|---|
| Synopsis | Operational group name |
| Context | configure service ies string subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Reference | configure service oper-group string |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

health-drop *number*

| | |
|-------------|---|
| Synopsis | Number subtracted from the health value per failure |
| Context | configure service ies <i>string</i> subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i> health-drop <i>number</i> |
| Tree | health-drop |
| Description | This command defines how the failure of an operational group member affects the health value. The base health value is 255; the value decreases with the defined number per member failure to a minimum of 0. |
| Range | 1 to 255 |
| Default | 1 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

video-interface [*interface-name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the video-interface list instance |
| Context | configure service ies <i>string</i> video-interface <i>string</i> |
| Tree | video-interface |
| Max. Instances | 9 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

[interface-name] *string*

| | |
|---------------|---|
| Synopsis | Video interface name |
| Context | configure service ies <i>string</i> video-interface <i>string</i> |
| Tree | video-interface |
| String Length | 1 to 29 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Accounting Policy |
| Context | configure service ies <i>string</i> video-interface <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

address [[ip-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for address |
| Context | configure service ies <i>string</i> video-interface <i>string</i> address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

[ip-address] *string*

| | |
|------------|--|
| Synopsis | IPv4 address for the video interface within the service |
| Context | configure service ies <i>string</i> video-interface <i>string</i> address <i>string</i> |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the video interface |
| Context | configure service ies <i>string</i> video-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel [*mcast-address*] *string source string*

Synopsis Enter the **channel** list instance

Context **configure service ies** *string video-interface string channel string source string*

Tree **channel**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[mcast-address] *string*

Synopsis Multicast channel address

Context **configure service ies** *string video-interface string channel string source string*

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

source *string*

Synopsis Unicast source address

Context **configure service ies** *string video-interface string channel string source string*

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel-name *string*

Synopsis Channel name

Context **configure service ies** *string video-interface string channel string source string channel-name string*

| | |
|---------------|--|
| Tree | channel-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

scte35-action *keyword*

| | |
|------------|--|
| Synopsis | Enable downstream forwarding of SCTE 35 cue avails |
| Context | configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> scte35-action <i>keyword</i> |
| Tree | scte35-action |
| Default | forward |
| Options | forward, drop |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

zone-channel [[zone-mcast-address](#)] *string* [zone-source](#) *string*

| | |
|------------|--|
| Synopsis | Enter the zone-channel list instance |
| Context | configure service ies <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> |
| Tree | zone-channel |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

[zone-mcast-address] *string*

Synopsis Multicast zone channel address

Context **configure** *service ies string video-interface string channel string source string zone-channel string zone-source string*

Tree *zone-channel*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-source *string*

Synopsis Unicast source address

Context **configure** *service ies string video-interface string channel string source string zone-channel string zone-source string*

Tree *zone-channel*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

adi-channel-name *string*

Synopsis Zone channel name

Context **configure** *service ies string video-interface string channel string source string zone-channel string zone-source string adi-channel-name string*

Tree *adi-channel-name*

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

cpu-protection *reference*

| | |
|------------|--|
| Synopsis | CPU protection policy |
| Context | configure service ies <i>string</i> video-interface <i>string</i> cpu-protection <i>reference</i> |
| Tree | cpu-protection |
| Reference | configure system security cpu-protection <i>policy</i> <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ies <i>string</i> video-interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

multicast-service *number*

| | |
|------------|--|
| Synopsis | Associated multicast service ID |
| Context | configure service ies <i>string</i> video-interface <i>string</i> multicast-service <i>number</i> |
| Tree | multicast-service |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

output-format *keyword*

| | |
|----------|---|
| Synopsis | Output format |
| Context | configure service ies <i>string</i> video-interface <i>string</i> output-format <i>keyword</i> |
| Tree | output-format |
| Default | rtp-udp |
| Options | udp, rtp-udp |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

video-sap

| | |
|------------|--|
| Synopsis | Enable the video-sap context |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap |
| Tree | video-sap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

ip reference

| | |
|----------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap egress filter ip reference |
| Tree | ip |

| | |
|------------|--|
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

policy-name *reference*

| | |
|------------|--|
| Synopsis | SAP egress QoS policy ID |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap egress qos policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

filter

| | |
|----------|---------------------------------|
| Synopsis | Enter the filter context |
|----------|---------------------------------|

| | |
|------------|---|
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

policy-name reference

| | |
|------------|--|
| Synopsis | SAP ingress QoS policy ID |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap ingress qos policy-name reference |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

video-group-id *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Video group ID |
| Context | configure service ies <i>string</i> video-interface <i>string</i> video-sap video-group-id <i>reference</i> |
| Tree | video-group-id |
| Reference | configure isa video-group <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

vpn-id *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | VPN identifier for the service |
| Context | configure service ies <i>string</i> vpn-id <i>number</i> |
| Tree | vpn-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipfix

| | |
|------------|--|
| Synopsis | Enter the ipfix context |
| Context | configure service ipfix |
| Tree | ipfix |
| Introduced | 16.0.R1 |
| Platforms | All |

export-policy [[name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the export-policy list instance |
| Context | configure service ipfix export-policy <i>string</i> |
| Tree | export-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | IPFIX policy name |
| Context | configure service ipfix export-policy <i>string</i> |
| Tree | export-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

collector [router-instance](#) *string* [ip-address](#) *string*

| | |
|------------|---|
| Synopsis | Enter the collector list instance |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> |
| Tree | collector |
| Introduced | 16.0.R1 |
| Platforms | All |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router where the collector is reached |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> |
| Tree | collector |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

ip-address *string*

| | |
|------------|---|
| Synopsis | IPv4 address of the external collector node |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> |
| Tree | collector |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the collector |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

mtu *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Maximum Transmission Unit |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> mtu <i>number</i> |
| Tree | mtu |
| Range | 512 to 9212 |
| Default | 1500 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | All |

refresh-timeout *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPFIX template refresh time |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> refresh-timeout <i>number</i> |
| Tree | refresh-timeout |
| Range | 240 to 86400 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

source-ip-address *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Source IP address used in communication towards the collector |
| Context | configure service ipfix export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> source-ip-address <i>string</i> |
| Tree | source-ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ipfix export-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

template-format *keyword*

| | |
|------------|---|
| Synopsis | Template format used by this IPFIX export policy |
| Context | configure service ipfix export-policy <i>string</i> template-format <i>keyword</i> |
| Tree | template-format |
| Default | format1 |
| Options | format1, format2 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipipe [**service-name**] *string*

| | |
|------------|---|
| Synopsis | Enter the ipipe list instance |
| Context | configure service ipipe <i>string</i> |
| Tree | ipipe |
| Introduced | 20.10.R1 |
| Platforms | All |

[service-name] *string*

| | |
|---------------|---|
| Synopsis | Administrative service name |
| Context | configure service ipipe <i>string</i> |
| Tree | ipipe |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the service |
| Context | configure service ipipe <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|----------|
| Introduced | 20.10.R1 |
| Platforms | All |

ce-address-discovery

| | |
|------------|---|
| Synopsis | Enable the ce-address-discovery context |
| Context | configure service ipipe <i>string</i> ce-address-discovery |
| Tree | ce-address-discovery |
| Introduced | 20.10.R1 |
| Platforms | All |

customer *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service customer ID |
| Context | configure service ipipe <i>string</i> customer <i>reference</i> |
| Tree | customer |
| Reference | configure service customer <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service ipipe <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | All |

endpoint [*name*] *string*

| | |
|----------------|--|
| Synopsis | Enter the endpoint list instance |
| Context | configure service ipipe <i>string endpoint string</i> |
| Tree | endpoint |
| Max. Instances | 2 |
| Introduced | 20.10.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Service endpoint name |
| Context | configure service ipipe <i>string endpoint string</i> |
| Tree | endpoint |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ipipe <i>string endpoint string description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | All |

hold-time-active *number*

| | |
|----------|---|
| Synopsis | Time to hold the active state before entering standby when a local MC-LAG SAP goes down |
| Context | configure service ipipe <i>string endpoint string hold-time-active number</i> |
| Tree | hold-time-active |
| Range | 1 to 60 |

| | |
|------------|-------------|
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

revert-time (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint |
| Context | configure service ipipe <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>) |
| Tree | revert-time |
| Range | 1 to 600 |
| Default | immediate |
| Units | seconds |
| Options | never, immediate |
| Introduced | 20.10.R1 |
| Platforms | All |

standby-signaling *keyword*

| | |
|------------|---|
| Synopsis | Endpoint behavior for status of sending PW standby bit |
| Context | configure service ipipe <i>string</i> endpoint <i>string</i> standby-signaling <i>keyword</i> |
| Tree | standby-signaling |
| Options | master |
| Introduced | 20.10.R1 |
| Platforms | All |

sap [[sap-id](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the sap list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> |
| Tree | sap |
| Introduced | 20.10.R1 |
| Platforms | All |

[sap-id] string

| | |
|---------------|--|
| Synopsis | SAP ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

accounting-policy reference

| | |
|------------|---|
| Synopsis | Accounting policy |
| Context | configure service ipipe <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the SAP |
| Context | configure service ipipe <i>string</i> sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

app-profile reference

| | |
|-----------|---|
| Synopsis | Application profile name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |

| | |
|------------|--|
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bandwidth *number*

| | |
|------------|--|
| Synopsis | SAP bandwidth |
| Context | configure service ipipe <i>string</i> sap <i>string</i> bandwidth <i>number</i> |
| Tree | bandwidth |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 20.10.R1 |
| Platforms | All |

ce-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | IP address of the CE device |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ce-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ce-address |
| Introduced | 20.10.R1 |
| Platforms | All |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect accounting statistics |
| Context | configure service ipipe <i>string</i> sap <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

cpu-protection

| | |
|----------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> cpu-protection |
| Tree | cpu-protection |

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis Monitor MAC for CPU protection
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [cpu-protection](#) [mac-monitoring](#)
 Tree [mac-monitoring](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [cpu-protection](#) [policy-id](#) *reference*
 Tree [policy-id](#)
 Reference **configure** [system](#) [security](#) [cpu-protection](#) [policy](#) *number*
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 160
 Introduced 20.10.R1
 Platforms All

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*
 Tree [dist-cpu-protection](#)
 Reference **configure** [system](#) [security](#) [dist-cpu-protection](#) [policy](#) *string*

Introduced 20.10.R1
 Platforms All

egress

Synopsis Enter the **egress** context
 Context **configure service ipipe string sap string egress**
 Tree **egress**
 Introduced 20.10.R1
 Platforms All

agg-rate

Synopsis Enter the **agg-rate** context
 Context **configure service ipipe string sap string egress agg-rate**
 Tree **agg-rate**
 Introduced 20.10.R1
 Platforms All

adaptation-rule *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used
 Context **configure service ipipe string sap string egress agg-rate adaptation-rule *keyword***
 Tree **adaptation-rule**
 Default closest
 Options max, min, closest
 Introduced 22.10.R1
 Platforms 7750 SR-1, 7750 SR-s

burst-limit (*number | keyword*)

Synopsis Shaping burst size when an aggregate shaper is used
 Context **configure service ipipe string sap string egress agg-rate burst-limit (*number | keyword*)**
 Tree **burst-limit**
 Range 1 to 14000000

| | |
|------------|----------------------|
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|--|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

rate *number*

| | |
|------------|---|
| Synopsis | Enforced aggregate rate for all queues |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 20.10.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress filter |
| Tree | filter |
| Introduced | 20.10.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | MAC filter ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter identifier |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos |
| Tree | qos |
| Introduced | 20.10.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|---|
| Synopsis | Enter the root context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[priority-level] *number*

| | |
|------------|--|
| Synopsis | Priority level |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |

| | |
|------------|--|
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policer control policy name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

qinq-mark-top-only *boolean*

| | |
|------------|---|
| Synopsis | Mark top Q-tags |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i> |
| Tree | qinq-mark-top-only |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

sap-egress

| | |
|------------|--|
| Synopsis | Enter the sap-egress context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 20.10.R1 |
| Platforms | All |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service ipipe string sap string egress qos sap-egress overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | All |

hs-secondary-shaper *string*

| | |
|---------------|---|
| Synopsis | HS Secondary Shaper |
| Context | configure service ipipe string sap string egress qos sap-egress overrides hs-secondary-shaper string |
| Tree | hs-secondary-shaper |
| String Length | 1 to 32 |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-group [[group-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the hs-wrr-group list instance |
| Context | configure service ipipe string sap string egress qos sap-egress overrides hs-wrr-group reference |
| Tree | hs-wrr-group |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

[[group-id](#)] *reference*

| | |
|------------|---|
| Synopsis | HS WRR group identifier |
| Context | configure service ipipe string sap string egress qos sap-egress overrides hs-wrr-group reference |
| Tree | hs-wrr-group |
| Reference | configure qos sap-egress string hs-wrr-group number |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |

Platforms 7750 SR-7/12/12e

hs-class-weight *number*

Synopsis Class weight override of the WRR group

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#)
reference [hs-class-weight](#) *number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Introduced 20.10.R1

Platforms 7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis Percent rate override applied to the HS WRR group

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#)
reference [percent-rate](#) *decimal-number*

Tree [percent-rate](#)

Range 0.01 to 100.00

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [hs-wrr-group](#)
reference [rate](#) (*number* | *keyword*)

Tree [rate](#)

Range 1 to 2000000000

Units kilobps

Options max

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] *reference*

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Reference | configure qos sap-egress <i>string</i> policer <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (*number* | *keyword*)

| | |
|----------|-----|
| Synopsis | MBS |
|----------|-----|

| | |
|------------|--|
| Context | configure service ipipe string sap string egress qos sap-egress overrides policer reference mbs (<i>number keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|--|
| Synopsis | Packet size modification for policing information |
| Context | configure service ipipe string sap string egress qos sap-egress overrides policer reference packet-byte-offset number |
| Tree | packet-byte-offset |
| Range | -64 to 31 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service ipipe string sap string egress qos sap-egress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir *decimal-number*

| | |
|----------|--|
| Synopsis | CIR percent rate |
| Context | configure service ipipe string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir *decimal-number*

Synopsis PIR percent rate
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#) [reference](#) [percent-rate](#) **pir** *decimal-number*
 Tree [pir](#)
 Range 0.01 to 100.00
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

rate

Synopsis Enter the **rate** context
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#) [reference](#) **rate**
 Tree [rate](#)
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cir (*number* | *keyword*)

Synopsis CIR rate
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [policer](#) [reference](#) [rate](#) **cir** (*number* | *keyword*)
 Tree [cir](#)
 Range 0 to 6400000000
 Units kilobps
 Options max
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the queue list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference |
| Tree | queue |
| Introduced | 20.10.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|----------|--|
| Synopsis | Policer unique ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference |

| | |
|------------|---|
| Tree | queue |
| Reference | configure qos sap-egress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 20.10.R1 |
| Platforms | All |

cir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule cir <i>keyword</i> |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | All |

pir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule pir <i>keyword</i> |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | All |

avg-frame-overhead *decimal-number*

| | |
|------------|---|
| Synopsis | Average packet-to-frame encapsulation overhead |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> avg-frame-overhead <i>decimal-number</i> |
| Tree | avg-frame-overhead |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | All |

burst-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Explicit shaping burst size for the queue |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

cbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CBS |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

drop-tail

| | |
|----------|------------------------------------|
| Synopsis | Enter the drop-tail context |
|----------|------------------------------------|

| | |
|------------|--|
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> drop-tail |
| Tree | drop-tail |
| Introduced | 20.10.R1 |
| Platforms | All |

low

| | |
|------------|--|
| Synopsis | Enter the low context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> drop-tail low |
| Tree | low |
| Introduced | 20.10.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

hs-class-weight *number*

| | |
|------------|--|
| Synopsis | Class weight override for the queue |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wred-queue

| | |
|------------|--|
| Synopsis | Enter the hs-wred-queue context |
| Context | configure service ipipe string sap string egress qos sap-egress overrides queue reference hs-wred-queue |
| Tree | hs-wred-queue |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

policy reference

| | |
|------------|---|
| Synopsis | Slope policy applied to the HSQ queue group queue |
| Context | configure service ipipe string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference |
| Tree | policy |
| Reference | configure qos slope-policy string |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-weight *number*

| | |
|------------|---|
| Synopsis | Weighted Round Robin (WRR) weight to parent with this queue into the scheduler |
| Context | configure service ipipe string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number |
| Tree | hs-wrr-weight |
| Range | 1 to 127 |
| Default | 1 |
| Introduced | 20.10.R1 |
| Platforms | 7750 SR-7/12/12e |

mbs (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | MBS |
| Context | configure service ipipe string sap string egress qos sap-egress overrides queue reference mbs (number keyword) |
| Tree | mbs |
| Range | 0 to 1073741824 |

| | |
|------------|----------|
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|---|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 20.10.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|-------------|---|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Description | When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to false , fast queue polling is not enabled. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

violation-threshold *decimal-number*

| | |
|-------------|---|
| Synopsis | Threshold for queue depth before violation is raised |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold <i>decimal-number</i> |
| Tree | violation-threshold |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered. |
| Range | 0.01 to 99.99 |

Introduced 20.10.R1
 Platforms All

parent

Synopsis Enter the **parent** context
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [parent](#)
 Tree [parent](#)
 Introduced 20.10.R1
 Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [parent](#) [cir-weight](#) *number*
 Tree [cir-weight](#)
 Range 0 to 100
 Introduced 20.10.R1
 Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [parent](#) [weight](#) *number*
 Tree [weight](#)
 Range 0 to 100
 Introduced 20.10.R1
 Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)
reference [percent-rate](#)

| | |
|------------|---|
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | All |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | All |

pir *decimal-number*

| | |
|------------|---|
| Synopsis | PIR percent rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | All |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

port-redirect-group

| | |
|----------|--|
| Synopsis | Enter the port-redirect-group context |
|----------|--|

| | |
|------------|--|
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group |
| Tree | port-redirect-group |
| Introduced | 20.10.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the queue group redirect list policy |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Instance of port queue group |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 20.10.R1 |
| Platforms | All |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 20.10.R1 |
| Platforms | All |

overrides

| | |
|----------|------------------------------------|
| Synopsis | Enter the overrides context |
|----------|------------------------------------|

| | |
|------------|--|
| Context | configure service ipipe string sap string egress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | All |

scheduler [**scheduler-name**] *string*

| | |
|------------|---|
| Synopsis | Enter the scheduler list instance |
| Context | configure service ipipe string sap string egress qos scheduler-policy overrides scheduler string |
| Tree | scheduler |
| Introduced | 20.10.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service ipipe string sap string egress qos scheduler-policy overrides scheduler string |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 20.10.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 20.10.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR at which the queue it to operate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 20.10.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

endpoint *reference*

| | |
|------------|--|
| Synopsis | Endpoint name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> endpoint <i>reference</i> |
| Tree | endpoint |
| Reference | configure service ipipe <i>string</i> endpoint <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 20.10.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 20.10.R1 |
| Platforms | All |

ip *reference*

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 20.10.R1 |
| Platforms | All |

match-qinq-dot1p keyword

| | |
|------------|--|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i> |
| Tree | match-qinq-dot1p |
| Options | top, bottom |
| Introduced | 20.10.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|---|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|---|
| Synopsis | Enable the overrides context |
| Context | configure service ipipe string sap string ingress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|--|
| Synopsis | Enter the root context |
| Context | configure service ipipe string sap string ingress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service ipipe string sap string ingress qos policer-control-policy overrides root
max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service ipipe string sap string ingress qos policer-control-policy overrides root
priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the priority list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[priority-level] *number*

| | |
|------------|---|
| Synopsis | Priority level |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |

| | |
|------------|--|
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

sap-ingress

| | |
|------------|--|
| Synopsis | Enter the sap-ingress context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress |
| Tree | sap-ingress |
| Introduced | 20.10.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 20.10.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Queue group template name created on forwarding plane |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Queue group instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 20.10.R1 |
| Platforms | All |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | All |

policer [[policer-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] reference

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference |
| Tree | policer |
| Reference | configure qos sap-ingress <i>string</i> policer <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cbs (number | keyword)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference cbs (<i>number keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (number | keyword)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference mbs (<i>number keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet size modification for policing information |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -32 to 31 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir *decimal-number*

| | |
|----------|---|
| Synopsis | PIR percent rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |

| | |
|------------|--|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the queue list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference |
| Tree | queue |
| Introduced | 20.10.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

adaptation-rule

| | |
|----------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference adaptation-rule |

| | |
|------------|---------------------------------|
| Tree | adaptation-rule |
| Introduced | 20.10.R1 |
| Platforms | All |

cir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service ipipe string sap string ingress qos sap-ingress overrides queue
<i>reference</i> adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | All |

pir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service ipipe string sap string ingress qos sap-ingress overrides queue
<i>reference</i> adaptation-rule pir keyword |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 20.10.R1 |
| Platforms | All |

cbs (number | keyword)

| | |
|------------|---|
| Synopsis | CBS |
| Context | configure service ipipe string sap string ingress qos sap-ingress overrides queue
<i>reference</i> cbs (number keyword) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

drop-tail

| | |
|------------|--|
| Synopsis | Enter the drop-tail context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> drop-tail |
| Tree | drop-tail |
| Introduced | 20.10.R1 |
| Platforms | All |

low

| | |
|------------|--|
| Synopsis | Enter the low context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> drop-tail low |
| Tree | low |
| Introduced | 20.10.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

mbs (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | MBS |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |

| | |
|------------|----------|
| Units | bytes |
| Options | auto |
| Introduced | 20.10.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|---|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 21.7.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|------------|---|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference parent |
| Tree | parent |
| Introduced | 20.10.R1 |
| Platforms | All |

cir-weight *number*

| | |
|----------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
|----------|---|

| | |
|------------|--|
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress overrides queue reference parent cir-weight number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | All |

weight number

| | |
|------------|--|
| Synopsis | PIR parameter that overrides parent for queue group |
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress overrides queue reference parent weight number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 20.10.R1 |
| Platforms | All |

percent-rate

| | |
|------------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress overrides queue reference percent-rate</i> |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | All |

cir decimal-number

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | All |

pir *decimal-number*

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 20.10.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 20.10.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|----------|----------|
| Synopsis | PIR rate |
|----------|----------|

| | |
|------------|--|
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress overrides queue reference rate pir</i> (<i>number keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID |
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress policy-name reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

queuing-type *keyword*

| | |
|------------|--|
| Synopsis | Queuing type |
| Context | configure service ipipe <i>string sap string ingress qos sap-ingress queuing-type keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service ipipe <i>string sap string ingress qos scheduler-policy</i> |
| Tree | scheduler-policy |
| Introduced | 20.10.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 20.10.R1 |
| Platforms | All |

scheduler [[scheduler-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the scheduler list instance |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Introduced | 20.10.R1 |
| Platforms | All |

[[scheduler-name](#)] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides
scheduler <i>string</i> |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |

Platforms All

parent

Synopsis Enter the **parent** context

Context **configure service ipipe string sap string ingress qos scheduler-policy overrides scheduler string parent**

Tree [parent](#)

Introduced 20.10.R1

Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure service ipipe string sap string ingress qos scheduler-policy overrides scheduler string parent cir-weight number**

Tree [cir-weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure service ipipe string sap string ingress qos scheduler-policy overrides scheduler string parent weight number**

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure service ipipe string sap string ingress qos scheduler-policy overrides scheduler string rate**

Tree [rate](#)

Introduced 20.10.R1
 Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) **cir** (*number* | *keyword*)
 Tree [cir](#)
 Range 0 to 6400000000
 Units kilobps
 Options sum, max
 Introduced 20.10.R1
 Platforms All

pir (*number* | *keyword*)

Synopsis PIR at which the queue is to operate
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) **pir** (*number* | *keyword*)
 Tree [pir](#)
 Range 1 to 6400000000
 Units kilobps
 Options max
 Introduced 20.10.R1
 Platforms All

policy-name *reference*

Synopsis Scheduler policy name
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos](#) [scheduler-policy](#) *string*
 Introduced 20.10.R1
 Platforms All

lag

| | |
|------------|--|
| Synopsis | Enter the lag context |
| Context | configure service ipipe <i>string sap</i> <i>string lag</i> |
| Tree | lag |
| Introduced | 20.10.R1 |
| Platforms | All |

link-map-profile *number*

| | |
|-------------|---|
| Synopsis | LAG link map profile for a SAP or network interface |
| Context | configure service ipipe <i>string sap</i> <i>string lag</i> link-map-profile <i>number</i> |
| Tree | link-map-profile |
| Description | <p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p> |
| Range | 1 to 64 |
| Introduced | 20.10.R1 |
| Platforms | All |

per-link-hash

| | |
|------------|--|
| Synopsis | Enter the per-link-hash context |
| Context | configure service ipipe <i>string sap</i> <i>string lag</i> per-link-hash |
| Tree | per-link-hash |
| Introduced | 20.10.R1 |
| Platforms | All |

class *number*

| | |
|----------|--|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
| Context | configure service ipipe <i>string sap</i> <i>string lag</i> per-link-hash class <i>number</i> |
| Tree | class |

| | |
|------------|----------|
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 20.10.R1 |
| Platforms | All |

weight *number*

| | |
|------------|---|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service ipipe <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i> |
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 20.10.R1 |
| Platforms | All |

mac *string*

| | |
|------------|--|
| Synopsis | MAC address of the Ipipe Ethernet SAP |
| Context | configure service ipipe <i>string</i> sap <i>string</i> mac <i>string</i> |
| Tree | mac |
| Default | 00:00:00:00:00:00 |
| Introduced | 20.10.R1 |
| Platforms | All |

mac-refresh *number*

| | |
|------------|--|
| Synopsis | MAC refresh interval |
| Context | configure service ipipe <i>string</i> sap <i>string</i> mac-refresh <i>number</i> |
| Tree | mac-refresh |
| Range | 0 to 65535 |
| Default | 14400 |
| Introduced | 20.10.R1 |
| Platforms | All |

multi-service-site *reference*

| | |
|------------|--|
| Synopsis | Multi service site name |
| Context | configure service ipipe <i>string</i> sap <i>string</i> multi-service-site <i>reference</i> |
| Tree | multi-service-site |
| Reference | configure service customer <i>string</i> multi-service-site <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure service ipipe <i>string</i> sap <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP prefix policy ID |
| Context | configure service ipipe <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

use-broadcast-mac *boolean*

| | |
|----------|---|
| Synopsis | Allow broadcast MAC on SAP |
| Context | configure service ipipe <i>string</i> sap <i>string</i> use-broadcast-mac <i>boolean</i> |
| Tree | use-broadcast-mac |

| | |
|------------|----------|
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

service-id *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service ID |
| Context | configure service ipipe <i>string service-id number</i> |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Introduced | 20.10.R1 |
| Platforms | All |

service-mtu *number*

| | |
|----------|---|
| Synopsis | MTU size |
| Context | configure service ipipe <i>string service-mtu number</i> |
| Tree | service-mtu |

Description This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipe bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

| | |
|------------|-----------|
| Range | 1 to 9194 |
| Introduced | 20.10.R1 |
| Platforms | All |

spoke-sdp [**sdp-bind-id**] *string*

| | |
|------------|--|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service ipipe string spoke-sdp string |
| Tree | spoke-sdp |
| Introduced | 20.10.R1 |
| Platforms | All |

[sdp-bind-id] *string*

| | |
|---------------|--|
| Synopsis | SDP binding ID |
| Context | configure service ipipe string spoke-sdp string |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

aarp

| | |
|----------|--------------------------------|
| Synopsis | Enable the aarp context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | AARP instance ID |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> aarp <i>id</i> <i>reference</i> |
| Tree | id |
| Reference | configure application-assurance aarp <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Role of the spoke SDP referenced by the AARP |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> aarp <i>type</i> <i>keyword</i> |
| Tree | type |
| Options | subscriber-side-shunt, network-side-shunt |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the SDP binding to the service |
|----------|--|

| | |
|------------|---|
| Context | configure service ipipe <i>string spoke-sdp string admin-state keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name for this SDP |
| Context | configure service ipipe <i>string spoke-sdp string app-profile reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number partition number policy app-profile string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bandwidth (*number | keyword*)

| | |
|------------|--|
| Synopsis | Bandwidth that is reserved for this SDP binding |
| Context | configure service ipipe <i>string spoke-sdp string bandwidth (number keyword)</i> |
| Tree | bandwidth |
| Range | 0 to 100000000 |
| Default | 0 |
| Units | kilobps |
| Options | max |
| Introduced | 20.10.R1 |
| Platforms | All |

bfd

| | |
|------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service ipipe <i>string spoke-sdp string bfd</i> |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | All |

encap *keyword*

| | |
|------------|--|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i> |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-template *reference*

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> bfd bfd-template <i>reference</i> |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template <i>string</i> |
| Introduced | 21.2.R1 |
| Platforms | All |

ce-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------|---|
| Synopsis | IP address of the CE device |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> ce-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |

| | |
|------------|----------------------------|
| Tree | ce-address |
| Introduced | 20.10.R1 |
| Platforms | All |

control-word *boolean*

| | |
|------------|---|
| Synopsis | Use control word as part of packet encapsulation |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | All |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 20.10.R1 |
| Platforms | All |

filter

| | |
|----------|---|
| Synopsis | Enter the filter context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |

Introduced 20.10.R1
 Platforms All

ip reference

Synopsis IPv4 filter policy name
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress filter ip](#) *reference*
 Tree [ip](#)
 Reference **configure** [filter ip-filter](#) *string*
 Introduced 20.10.R1
 Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress filter ipv6](#) *reference*
 Tree [ipv6](#)
 Reference **configure** [filter ipv6-filter](#) *string*
 Introduced 20.10.R1
 Platforms All

qos

Synopsis Enter the **qos** context
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos](#)
 Tree [qos](#)
 Introduced 20.10.R1
 Platforms All

network

Synopsis Enter the **network** context
 Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#)
 Tree [network](#)
 Introduced 20.10.R1

Platforms All

policy-name *reference*

Synopsis Network policy ID

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [network](#) *string*

Introduced 20.10.R1

Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms All

group-name *reference*

Synopsis Name of the egress port queue group

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*

Introduced 20.10.R1

Platforms All

instance *number*

Synopsis Queue-group instance ID

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

| | |
|------------|------------|
| Range | 1 to 65535 |
| Introduced | 20.10.R1 |
| Platforms | All |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure <i>service ipipe string spoke-sdp string egress vc-label number</i> |
| Tree | <i>vc-label</i> |
| Range | 16 to 1048575 |
| Introduced | 20.10.R1 |
| Platforms | All |

endpoint

| | |
|------------|--|
| Synopsis | Enter the endpoint context |
| Context | configure <i>service ipipe string spoke-sdp string endpoint</i> |
| Tree | <i>endpoint</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

name *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Endpoint name to which SDP bind is attached |
| Context | configure <i>service ipipe string spoke-sdp string endpoint name reference</i> |
| Tree | <i>name</i> |
| Reference | configure <i>service ipipe string endpoint string</i> |
| Introduced | 20.10.R1 |

Platforms All

precedence (*number* | *keyword*)

Synopsis Precedence when multiple SDP binds are on one endpoint

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [endpoint](#) [precedence](#) (*number* | *keyword*)

Tree [precedence](#)

Range 1 to 4

Default 4

Options primary

Introduced 20.10.R1

Platforms All

entropy-label

Synopsis Enable the use of entropy labels for spoke SDPs

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [entropy-label](#)

Tree [entropy-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 20.10.R1

Platforms All

hash-label

Synopsis Enable the **hash-label** context

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [hash-label](#)

Tree [hash-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 20.10.R1

Platforms All

signal-capability

Synopsis Enable the signaling of the hash label between PE nodes

| | |
|------------|--|
| Context | configure service ipipe <i>string spoke-sdp string hash-label signal-capability</i> |
| Tree | signal-capability |
| Introduced | 20.10.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service ipipe <i>string spoke-sdp string ingress</i> |
| Tree | ingress |
| Introduced | 20.10.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service ipipe <i>string spoke-sdp string ingress filter</i> |
| Tree | filter |
| Introduced | 20.10.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service ipipe <i>string spoke-sdp string ingress filter ip reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

ipv6 reference

| | |
|----------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service ipipe <i>string spoke-sdp string ingress filter ipv6 reference</i> |
| Tree | ipv6 |

| | |
|------------|---|
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 20.10.R1 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> ingress qos network |
| Tree | network |
| Introduced | 20.10.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 20.10.R1 |
| Platforms | All |

group-name *reference*

| | |
|-----------|--|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |

Introduced 20.10.R1
 Platforms All

instance *number*

Synopsis Instance of the forwarding-plane ingress Queue Group for this SDP binding
 Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [instance](#) *number*
 Tree [instance](#)
 Range 1 to 65535
 Introduced 20.10.R1
 Platforms All

policy-name *reference*

Synopsis Network policy ID
 Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos](#) [network](#) *string*
 Introduced 20.10.R1
 Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end
 Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*
 Tree [vc-label](#)
 Range 1 to 1048575
 Introduced 20.10.R1
 Platforms All

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP prefix policy ID |
| Context | configure service ipipe <i>string</i> spoke-sdp <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-switching *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Use PW switching signaling for spoke SDPs in service |
| Context | configure service ipipe <i>string</i> vc-switching <i>boolean</i> |
| Tree | vc-switching |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VPN identifier for the service |
| Context | configure service ipipe <i>string vpn-id number</i> |
| Tree | vpn-id |
| Range | 1 to 2147483647 |
| Introduced | 20.10.R1 |
| Platforms | All |

mac-list [[name](#)] *string*

| | |
|-------------|---|
| Synopsis | Enter the mac-list list instance |
| Context | configure service mac-list <i>string</i> |
| Tree | mac-list |
| Description | Commands in this context specify the MAC addresses to be included in a MAC list to be used with the Auto-Learn MAC Protect (ALMP) functionality. The list is used to exclude certain MAC addresses from protection, for example, on SAPs or spoke SDPs configured with ALMP where certain MAC addresses (such as VRRP virtual MAC addresses) must be able to move to other objects. |
| Introduced | 20.5.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | MAC list name |
| Context | configure service mac-list <i>string</i> |
| Tree | mac-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service mac-list <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.5.R1 |
| Platforms | All |

mac [[address](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the mac list instance |
| Context | configure service mac-list <i>string</i> mac <i>string</i> |
| Tree | mac |
| Introduced | 20.5.R1 |
| Platforms | All |

[address] *string*

| | |
|------------|---|
| Synopsis | MAC address |
| Context | configure service mac-list <i>string</i> mac <i>string</i> |
| Tree | mac |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

mask *string*

| | |
|------------|--|
| Synopsis | Mask for the MAC address |
| Context | configure service mac-list <i>string</i> mac <i>string</i> mask <i>string</i> |
| Tree | mask |
| Default | ff:ff:ff:ff:ff:ff |
| Introduced | 20.5.R1 |
| Platforms | All |

md-auto-id

| | |
|------------|---|
| Synopsis | Enter the md-auto-id context |
| Context | configure service md-auto-id |
| Tree | md-auto-id |
| Introduced | 16.0.R1 |
| Platforms | All |

customer-id-range

| | |
|------------|---|
| Synopsis | Enable the customer-id-range context |
| Context | configure service md-auto-id customer-id-range |
| Tree | customer-id-range |
| Introduced | 16.0.R1 |
| Platforms | All |

end *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Upper bound of the ID range |
| Context | configure service md-auto-id customer-id-range end <i>number</i> |
| Tree | end |
| Range | 2 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

start *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|-----------------------------|
| Synopsis | Lower bound of the ID range |
|----------|-----------------------------|

| | |
|------------|---|
| Context | configure service md-auto-id customer-id-range start <i>number</i> |
| Tree | start |
| Range | 2 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

pw-template-id-range

| | |
|------------|--|
| Synopsis | Enable the pw-template-id-range context |
| Context | configure service md-auto-id pw-template-id-range |
| Tree | pw-template-id-range |
| Introduced | 16.0.R1 |
| Platforms | All |

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Upper bound of the PW template ID range |
| Context | configure service md-auto-id pw-template-id-range end <i>number</i> |
| Tree | end |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Lower bound of the PW template ID range |
|----------|---|

| | |
|------------|--|
| Context | configure service md-auto-id pw-template-id-range start <i>number</i> |
| Tree | start |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

service-id-range

| | |
|------------|--|
| Synopsis | Enable the service-id-range context |
| Context | configure service md-auto-id service-id-range |
| Tree | service-id-range |
| Introduced | 16.0.R1 |
| Platforms | All |

end *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Upper bound of the service ID range |
| Context | configure service md-auto-id service-id-range end <i>number</i> |
| Tree | end |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

start *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|-------------------------------------|
| Synopsis | Lower bound of the service ID range |
|----------|-------------------------------------|

| | |
|------------|--|
| Context | configure service md-auto-id service-id-range start <i>number</i> |
| Tree | start |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

mrp

| | |
|------------|------------------------------|
| Synopsis | Enter the mrp context |
| Context | configure service mrp |
| Tree | mrp |
| Introduced | 20.10.R1 |
| Platforms | All |

policy [[policy-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the policy list instance |
| Context | configure service mrp policy <i>string</i> |
| Tree | policy |
| Introduced | 20.10.R1 |
| Platforms | All |

[[policy-name](#)] *string*

| | |
|---------------|---|
| Synopsis | Specify the policy name associated with the MRP |
| Context | configure service mrp policy <i>string</i> |
| Tree | policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

default-action *keyword*

| | |
|------------|--|
| Synopsis | Action for packets not matching any MRP policy entries |
| Context | configure service mrp policy <i>string</i> default-action <i>keyword</i> |
| Tree | default-action |
| Default | allow |
| Options | block, allow |
| Introduced | 20.10.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service mrp policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | All |

entry [[entry-id](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> |
| Tree | entry |
| Introduced | 20.10.R1 |
| Platforms | All |

[entry-id] *number*

| | |
|------------|--|
| Synopsis | Specify an id for the MRP policy entry |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> |
| Tree | entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

action *keyword*

| | |
|------------|---|
| Synopsis | Action applied for matching packets |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> action <i>keyword</i> |
| Tree | action |
| Options | block, allow, end-station |
| Introduced | 20.10.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | All |

match

| | |
|------------|---|
| Synopsis | Enter the match context |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> match |
| Tree | match |
| Introduced | 20.10.R1 |
| Platforms | All |

isid [[value](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the isid list instance |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> match isid <i>number</i> |
| Tree | isid |
| Introduced | 20.10.R1 |
| Platforms | All |

[value] number

| | |
|------------|--|
| Synopsis | Lowest service instance ID to match the entry |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> match isid <i>number</i> |
| Tree | isid |
| Range | 0 to 16777215 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

higher-value number

| | |
|------------|---|
| Synopsis | Highest service instance ID to match the entry |
| Context | configure service mrp policy <i>string</i> entry <i>number</i> match isid <i>number</i> higher-value <i>number</i> |
| Tree | higher-value |
| Range | 0 to 16777215 |
| Introduced | 20.10.R1 |
| Platforms | All |

scope keyword

| | |
|------------|--|
| Synopsis | Specify the scope of the mrp-policy definition |
| Context | configure service mrp policy <i>string</i> scope <i>keyword</i> |
| Tree | scope |
| Default | template |
| Options | exclusive, template |
| Introduced | 20.10.R1 |
| Platforms | All |

nat

| | |
|------------|--|
| Synopsis | Enter the nat context |
| Context | configure service nat |
| Tree | nat |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

classifier [name] string

Synopsis Enter the **classifier** list instance
Context **configure service nat classifier** string
Tree **classifier**
Max. Instances 8
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] string

Synopsis NAT classifier name
Context **configure service nat classifier** string
Tree **classifier**
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default

Synopsis Enter the **default** context
Context **configure service nat classifier** string **default**
Tree **default**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis Enter the **action** context
Context **configure service nat classifier** string **default** **action**
Tree **action**

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

destination-nat

| | |
|------------|--|
| Synopsis | Enable the destination-nat context |
| Context | configure service nat classifier <i>string</i> default action destination-nat |
| Tree | destination-nat |
| Notes | The following elements are part of a choice: (destination-nat , dnat , and dnat-ip-address) or forward . |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-address *string*

| | |
|------------|---|
| Synopsis | Substitute destination IP address of matching packets |
| Context | configure service nat classifier <i>string</i> default action destination-nat ip-address <i>string</i> |
| Tree | ip-address |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

forward



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | Forward mode of operation |
| Context | configure service nat classifier <i>string</i> default action forward |
| Tree | forward |
| Notes | The following elements are part of a choice: (destination-nat , dnat , and dnat-ip-address) or forward . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dnat-ip-address *string***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | Default destination IP address for matching entries with dNAT action |
| Context | configure service nat classifier <i>string</i> default dnat-ip-address <i>string</i> |
| Tree | dnat-ip-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service nat classifier <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

entry [*id*] *number*

| | |
|----------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure service nat classifier <i>string</i> entry <i>number</i> |
| Tree | entry |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[id] *number*

| | |
|----------|--|
| Synopsis | Classifier rule entry ID |
| Context | configure service nat classifier <i>string</i> entry <i>number</i> |
| Tree | entry |
| Range | 1 to 1000 |
| Notes | This element is part of a list key. |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|---|
| Synopsis | Enter the action context |
| Context | configure service nat classifier <i>string entry number action</i> |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

destination-nat

| | |
|------------|--|
| Synopsis | Enable the destination-nat context |
| Context | configure service nat classifier <i>string entry number action destination-nat</i> |
| Tree | destination-nat |
| Notes | The following elements are part of a choice: (destination-nat , dnat , and dnat-ip-address) or forward . |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-address *string*

| | |
|------------|---|
| Synopsis | Replacement destination IP address for packets |
| Context | configure service nat classifier <i>string entry number action destination-nat ip-address string</i> |
| Tree | ip-address |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

forward



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|----------|---------------------------|
| Synopsis | Forward mode of operation |
|----------|---------------------------|

| | |
|------------|--|
| Context | configure service nat classifier <i>string entry number action forward</i> |
| Tree | forward |
| Notes | The following elements are part of a choice: (destination-nat , dnat , and dnat-ip-address) or forward . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service nat classifier <i>string entry number description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure service nat classifier <i>string entry number match</i> |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dst-port-range

| | |
|------------|---|
| Synopsis | Enter the dst-port-range context |
| Context | configure service nat classifier <i>string entry number match dst-port-range</i> |
| Tree | dst-port-range |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

end number**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|---|
| Synopsis | Upper bound of the port range |
| Context | configure service nat classifier string entry number match dst-port-range end number |
| Tree | end |
| Range | 0 1 to 65535 |
| Default | 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

start number**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|---|
| Synopsis | Lower bound of the port range |
| Context | configure service nat classifier string entry number match dst-port-range start number |
| Tree | start |
| Range | 0 1 to 65535 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

foreign-ip-address string**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|---|
| Synopsis | Foreign IP address as the match criterion |
| Context | configure service nat classifier string entry number match foreign-ip-address string |
| Tree | foreign-ip-address |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

protocol *keyword***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP protocol to match |
| Context | configure service nat classifier <i>string</i> entry number match protocol <i>keyword</i> |
| Tree | protocol |
| Default | udp |
| Options | tcp, udp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

deterministic-script

| | |
|------------|---|
| Synopsis | Enter the deterministic-script context |
| Context | configure service nat deterministic-script |
| Tree | deterministic-script |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

location *string*

| | |
|---------------|--|
| Synopsis | Remote location where Python script is exported |
| Context | configure service nat deterministic-script location <i>string</i> |
| Tree | location |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

firewall-policy [[name](#)] *string*

| | |
|-------------|---|
| Synopsis | Enter the firewall-policy list instance |
| Context | configure service nat firewall-policy <i>string</i> |
| Tree | firewall-policy |
| Description | Commands in this context configure the attributes of the firewall policy, for use in contexts where basic protection from outside attack vectors is required. |

Firewall policies cannot be deleted if they are in use.

| | |
|----------------|------------------------------------|
| Max. Instances | 2048 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | Firewall policy name |
| Context | configure service nat firewall-policy <i>string</i> |
| Tree | firewall-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

alg

| | |
|-------------|--|
| Synopsis | Enter the alg context |
| Context | configure service nat firewall-policy <i>string</i> alg |
| Tree | alg |
| Description | Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ftp *boolean*

| | |
|------------|---|
| Synopsis | Use FTP ALG for the policy |
| Context | configure service nat firewall-policy <i>string</i> alg ftp <i>boolean</i> |
| Tree | ftp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rtsp boolean

| | |
|-------------|--|
| Synopsis | Use RTSP ALG for the policy |
| Context | configure service nat firewall-policy string alg rtsp boolean |
| Tree | rtsp |
| Description | When configured to true , Real-Time Streaming Protocol (RTSP) ALG is used for the policy. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sip boolean

| | |
|------------|---|
| Synopsis | Use SIP ALG for the policy |
| Context | configure service nat firewall-policy string alg sip boolean |
| Tree | sip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service nat firewall-policy string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

domain

| | |
|-------------|--|
| Synopsis | Enter the domain context |
| Context | configure service nat firewall-policy string domain |
| Tree | domain |
| Description | Commands in this context configure the attributes of the domain for the firewall policy. All associated traffic must be part of the prefixes specified by this domain. |

| | |
|------------|---|
| Notes | The following elements are part of a choice: domain or I2-outside . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | Firewall domain name |
| Context | configure service nat firewall-policy string domain name string |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|-------------|---|
| Synopsis | Router or VPRN service name |
| Context | configure service nat firewall-policy string domain router-instance string |
| Tree | router-instance |
| Description | This command specifies the router instance or VPRN service for this domain. All associated traffic must be part of the prefixes specified by this domain. |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filtering *keyword*

| | |
|------------|---|
| Synopsis | Filtering method for inbound traffic for the policy |
| Context | configure service nat firewall-policy string filtering keyword |
| Tree | filtering |
| Default | endpoint-independent |
| Options | endpoint-independent, address-and-port-dependent |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-outside

| | |
|-------------|--|
| Synopsis | Use Layer 2 outside service address location |
| Context | configure service nat firewall-policy <i>string</i> I2-outside |
| Tree | I2-outside |
| Description | This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service. |
| Notes | The following elements are part of a choice: domain or I2-outside . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-limits

| | |
|------------|--|
| Synopsis | Enter the port-limits context |
| Context | configure service nat firewall-policy <i>string</i> port-limits |
| Tree | port-limits |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

forwarding *number*

| | |
|------------|---|
| Synopsis | Maximum number of port forwarding entries |
| Context | configure service nat firewall-policy <i>string</i> port-limits forwarding <i>number</i> |
| Tree | forwarding |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority-sessions

| | |
|------------|--|
| Synopsis | Enter the priority-sessions context |
| Context | configure service nat firewall-policy <i>string</i> priority-sessions |
| Tree | priority-sessions |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fc

| | |
|-------------|---|
| Synopsis | Enter the fc context |
| Context | configure service nat firewall-policy string priority-sessions fc |
| Tree | fc |
| Description | Commands in this context specify which Forwarding Class (FC) options have prioritized sessions. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

af boolean

| | |
|-------------|--|
| Synopsis | Prioritize traffic from AF forwarding classes |
| Context | configure service nat firewall-policy string priority-sessions fc af boolean |
| Tree | af |
| Description | When configured to true , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to false , AF traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

be boolean

| | |
|-------------|---|
| Synopsis | Prioritize traffic from BE forwarding classes |
| Context | configure service nat firewall-policy string priority-sessions fc be boolean |
| Tree | be |
| Description | When configured to true , traffic from Best Effort (BE) FC sessions is prioritized. When configured to false , BE traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ef boolean

| | |
|----------|---|
| Synopsis | Prioritize traffic from EF forwarding classes |
| Context | configure service nat firewall-policy string priority-sessions fc ef boolean |

| | |
|------------|------------------------------------|
| Tree | ef |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

h1 *boolean*

| | |
|-------------|---|
| Synopsis | Prioritize traffic from H1 forwarding classes |
| Context | configure service nat firewall-policy <i>string</i> priority-sessions fc h1 <i>boolean</i> |
| Tree | h1 |
| Description | When configured to true , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

h2 *boolean*

| | |
|------------|---|
| Synopsis | Prioritize traffic from H2 forwarding classes |
| Context | configure service nat firewall-policy <i>string</i> priority-sessions fc h2 <i>boolean</i> |
| Tree | h2 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

l1 *boolean*

| | |
|------------|---|
| Synopsis | Prioritize traffic from L1 forwarding classes |
| Context | configure service nat firewall-policy <i>string</i> priority-sessions fc l1 <i>boolean</i> |
| Tree | l1 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

l2 boolean

| | |
|-------------|--|
| Synopsis | Prioritize traffic from L2 forwarding classes |
| Context | configure service nat firewall-policy <i>string</i> priority-sessions fc l2 boolean |
| Tree | l2 |
| Description | When configured to true , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nc boolean

| | |
|------------|--|
| Synopsis | Prioritize traffic from NC forwarding classes |
| Context | configure service nat firewall-policy <i>string</i> priority-sessions fc nc boolean |
| Tree | nc |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

session-limits

| | |
|-------------|---|
| Synopsis | Enter the session-limits context |
| Context | configure service nat firewall-policy <i>string</i> session-limits |
| Tree | session-limits |
| Description | Commands in this context configure session-limit attributes for the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max number

| | |
|----------|--|
| Synopsis | Maximum number of sessions per subscriber |
| Context | configure service nat firewall-policy <i>string</i> session-limits max number |
| Tree | max |
| Range | 1 to 65535 |
| Default | 65535 |

| | |
|------------|------------------------------------|
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reserved *number*

| | |
|-------------|--|
| Synopsis | Number of sessions reserved for prioritized sessions |
| Context | configure service nat firewall-policy string session-limits reserved number |
| Tree | reserved |
| Description | This command configures the number of sessions per block that are reserved for prioritized sessions. |
| Range | 1 to 65534 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|-------------|---|
| Synopsis | Enable the watermarks context |
| Context | configure service nat firewall-policy string session-limits watermarks |
| Tree | watermarks |
| Description | This command configures watermarks for NAT resources. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high *number*

| | |
|-------------|---|
| Synopsis | High watermark percentage |
| Context | configure service nat firewall-policy string session-limits watermarks high number |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service nat firewall-policy string session-limits watermarks low number |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp

| | |
|-------------|--|
| Synopsis | Enter the tcp context |
| Context | configure service nat firewall-policy string tcp |
| Tree | tcp |
| Description | Commands in this context configure the transmission control protocol (TCP) attributes of the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mss-adjust number

| | |
|-------------|--|
| Synopsis | TCP MSS adjustment value |
| Context | configure service nat firewall-policy string tcp mss-adjust number |
| Tree | mss-adjust |
| Description | This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher. |
| Range | 160 to 10240 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

timeouts

| | |
|-------------|--|
| Synopsis | Enter the timeouts context |
| Context | configure service nat firewall-policy string timeouts |
| Tree | timeouts |
| Description | Commands in this context configure the attributes of session idle timeouts for the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp6-query *number*

| | |
|------------|---|
| Synopsis | Timeout applied to an ICMPv6 Query session |
| Context | configure service nat firewall-policy string timeouts icmp6-query number |
| Tree | icmp6-query |
| Range | 60 to 240 |
| Default | 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sip *number*

| | |
|------------|---|
| Synopsis | SIP inactive media timeout |
| Context | configure service nat firewall-policy string timeouts sip number |
| Tree | sip |
| Range | 10 to 7200 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp

| | |
|----------|--|
| Synopsis | Enter the tcp context |
| Context | configure service nat firewall-policy string timeouts tcp |
| Tree | tcp |

| | |
|-------------|--|
| Description | Commands in this context configure TCP timeout attributes. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

established *number*

| | |
|------------|---|
| Synopsis | Idle timeout for TCP session in established state |
| Context | configure service nat firewall-policy <i>string</i> timeouts tcp established <i>number</i> |
| Tree | established |
| Range | 60 to 86400 |
| Default | 7440 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rst *number*

| | |
|-------------|---|
| Synopsis | Suspend time for TCP connection ports closed by RST |
| Context | configure service nat firewall-policy <i>string</i> timeouts tcp rst <i>number</i> |
| Tree | rst |
| Description | This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations. |
| Range | 0 to 240 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

syn *number*

| | |
|----------|---|
| Synopsis | TCP session timeout when synchronizing initial sequence |
| Context | configure service nat firewall-policy <i>string</i> timeouts tcp syn <i>number</i> |
| Tree | syn |
| Range | 6 to 86400 |

| | |
|------------|------------------------------------|
| Default | 15 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

time-wait *number*

| | |
|------------|---|
| Synopsis | Timeout applied to a TCP session in the time-wait state |
| Context | configure service nat firewall-policy <i>string</i> timeouts tcp time-wait <i>number</i> |
| Tree | time-wait |
| Range | 0 to 240 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

transitory *number*

| | |
|------------|--|
| Synopsis | Idle timeout for TCP session in transitory state |
| Context | configure service nat firewall-policy <i>string</i> timeouts tcp transitory <i>number</i> |
| Tree | transitory |
| Range | 60 to 86400 |
| Default | 240 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

udp

| | |
|-------------|---|
| Synopsis | Enter the udp context |
| Context | configure service nat firewall-policy <i>string</i> timeouts udp |
| Tree | udp |
| Description | Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes. |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dns number

Synopsis Timeout applied to UDP session with destination port 53

Context **configure service nat firewall-policy string timeouts udp dns number**

Tree **dns**

Range 15 to 86400

Default 15

Units seconds

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis UDP mapping timeout applied to new sessions

Context **configure service nat firewall-policy string timeouts udp initial number**

Tree **initial**

Range 10 to 300

Default 15

Units seconds

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

normal number

Synopsis UDP mapping timeout

Context **configure service nat firewall-policy string timeouts udp normal number**

Tree **normal**

Range 60 to 86400

Default 300

Units seconds

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

unknown-protocol *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | Timeout for flows with an unknown protocol |
| Context | configure service nat firewall-policy <i>string</i> timeouts unknown-protocol <i>number</i> |
| Tree | unknown-protocol |
| Range | 60 to 86400 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

udp

| | |
|------------|--|
| Synopsis | Enter the udp context |
| Context | configure service nat firewall-policy <i>string</i> udp |
| Tree | udp |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inbound-refresh *boolean*

| | |
|-------------|---|
| Synopsis | Extend UDP session timeout on inbound traffic |
| Context | configure service nat firewall-policy <i>string</i> udp inbound-refresh <i>boolean</i> |
| Tree | inbound-refresh |
| Description | When configured to true , this command extends the UDP session timeout on inbound traffic.
When configured to false , the UDP session timeout is not extended. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

unknown-protocols

| | |
|-------------|---|
| Synopsis | Enter the unknown-protocols context |
| Context | configure service nat firewall-policy <i>string</i> unknown-protocols |
| Tree | unknown-protocols |
| Description | Commands in this context configure the treatment of flows of unknown Layer 4 protocols that cannot be natively handled by the system. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

all

| | |
|-------------|--|
| Synopsis | Allow all protocols to create unknown flows |
| Context | configure service nat firewall-policy <i>string</i> unknown-protocols all |
| Tree | all |
| Description | This command specifies that all protocols are permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS will not be treated as unknown protocols. |
| Notes | The following elements are part of a choice: all or protocol . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

protocol *number*

| | |
|----------------|---|
| Synopsis | IANA number of protocol allowed to create unknown flow |
| Context | configure service nat firewall-policy <i>string</i> unknown-protocols protocol <i>number</i> |
| Tree | protocol |
| Description | This command specifies the Internet Assigned Numbers Authority (IANA) number of a protocol that is permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS can be configured but will not be treated as unknown protocols. |
| Range | 0 to 255 |
| Max. Instances | 8 |
| Notes | The following elements are part of a choice: all or protocol . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

map-t

| | |
|------------|------------------------------------|
| Synopsis | Enter the map-t context |
| Context | configure service nat map-t |
| Tree | map-t |
| Introduced | 16.0.R4 |
| Platforms | VSR |

domain [name] string

| | |
|----------------|--|
| Synopsis | Enter the domain list instance |
| Context | configure service nat map-t domain string |
| Tree | domain |
| Max. Instances | 63 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

[name] string

| | |
|---------------|--|
| Synopsis | MAP domain name |
| Context | configure service nat map-t domain string |
| Tree | domain |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | VSR |

admin-state keyword

| | |
|----------|--|
| Synopsis | Administrative state of the MAP domain |
| Context | configure service nat map-t domain string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

Introduced 16.0.R4
 Platforms VSR

description *string*

Synopsis Text description
 Context **configure** [service nat map-t domain](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R4
 Platforms VSR

dmr-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The Default Mapping Rule prefix
 Context **configure** [service nat map-t domain](#) *string* [dmr-prefix](#) *string*
 Tree [dmr-prefix](#)
 Introduced 16.0.R4
 Platforms VSR

ip-fragmentation

Synopsis Enter the **ip-fragmentation** context
 Context **configure** [service nat map-t domain](#) *string* [ip-fragmentation](#)
 Tree [ip-fragmentation](#)
 Introduced 16.0.R4
 Platforms VSR

v6-frag-header *boolean*

Synopsis Enable insertion of fragmentation header in IPv6 packet
 Context **configure** [service nat map-t domain](#) *string* [ip-fragmentation](#) [v6-frag-header](#) *boolean*

| | |
|------------|--------------------------------|
| Tree | v6-frag-header |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | VSR |

mapping-rule [[rule-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the mapping-rule list instance |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> |
| Tree | mapping-rule |
| Max. Instances | 16383 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

[rule-name] *string*

| | |
|---------------|--|
| Synopsis | The name that identifies this mapping rule |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> |
| Tree | mapping-rule |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MAP rule |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

ea-length *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | The length of the EA bits field in the End-user IPv6 prefix part of the IPv6 Map Address |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> ea-length <i>number</i> |
| Tree | ea-length |
| Range | 0 to 48 |
| Default | 0 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

ipv4-prefix *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | The IPv4 prefix |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> ipv4-prefix <i>string</i> |
| Tree | ipv4-prefix |
| Introduced | 16.0.R4 |
| Platforms | VSR |

psid-offset *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | The offset of the Port Set ID (PSID) within a 16 bits wide port space |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> psid-offset <i>number</i> |
| Tree | psid-offset |
| Range | 0 to 16 |
| Default | 6 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

rule-prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | The IPv6 prefix |
| Context | configure service nat map-t domain <i>string</i> mapping-rule <i>string</i> rule-prefix <i>string</i> |
| Tree | rule-prefix |
| Introduced | 16.0.R4 |
| Platforms | VSR |

mtu *number*

| | |
|------------|---|
| Synopsis | Configure the MTU |
| Context | configure service nat map-t domain <i>string</i> mtu <i>number</i> |
| Tree | mtu |
| Range | 160 to 8686 |
| Default | 8686 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

tcp-mss-adjust *number*

| | |
|------------|---|
| Synopsis | The value to adjust the TCP Maximum Segment Size (MSS) option |
| Context | configure service nat map-t domain <i>string</i> tcp-mss-adjust <i>number</i> |
| Tree | tcp-mss-adjust |
| Range | 0 160 to 8626 |
| Default | 0 |
| Introduced | 16.0.R4 |
| Platforms | VSR |

nat-policy [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the nat-policy list instance |
| Context | configure service nat nat-policy <i>string</i> |
| Tree | nat-policy |
| Max. Instances | 4096 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | NAT policy name |
| Context | configure service nat nat-policy <i>string</i> |
| Tree | nat-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

alg

| | |
|----------|--|
| Synopsis | Enter the alg context |
| Context | configure service nat nat-policy <i>string</i> alg |
| Tree | alg |

| | |
|-------------|--|
| Description | Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ftp boolean

| | |
|------------|--|
| Synopsis | Use FTP ALG for the policy |
| Context | configure service nat nat-policy string alg ftp boolean |
| Tree | ftp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pptp boolean

| | |
|-------------|---|
| Synopsis | Use PPTP ALG for the policy |
| Context | configure service nat nat-policy string alg pptp boolean |
| Tree | pptp |
| Description | <p>When configured to true, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.</p> <p>PPTP sessions can only be initiated from NAT inside.</p> <p>GRE traffic is allowed through NAT only if the corresponding mapping exists.</p> <p>There can be seven calls (GRE tunnels) per control session.</p> <p>When configured to false, PPTP ALG is not used.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rtsp boolean

| | |
|-------------|--|
| Synopsis | Use RTSP ALG for the policy |
| Context | configure service nat nat-policy string alg rtsp boolean |
| Tree | rtsp |
| Description | When configured to true , Real-Time Streaming Protocol (RTSP) ALG is used for the policy. |

| | |
|------------|--|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sip boolean

| | |
|------------|--|
| Synopsis | Use SIP ALG for the policy |
| Context | configure service nat nat-policy string alg sip boolean |
| Tree | sip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

block-limit number

| | |
|------------|---|
| Synopsis | Maximum number of port blocks per subscriber |
| Context | configure service nat nat-policy string block-limit number |
| Tree | block-limit |
| Range | 1 to 40 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service nat nat-policy string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dnat

| | |
|----------|-------------------------------|
| Synopsis | Enter the dnat context |
|----------|-------------------------------|

| | |
|------------|---|
| Context | configure service nat nat-policy string dnat |
| Tree | dnat |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

classifier reference



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|-------------|---|
| Synopsis | NAT classifier |
| Context | configure service nat nat-policy string dnat classifier reference |
| Tree | classifier |
| Description | When configured within the NAT policy, this command references a NAT classifier that activates DNAT functionality. The configuration uses a filter-like approach to identify the traffic that is subjected to DNAT. It is required for translation of the destination IP address. |
| Reference | configure service nat classifier string |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dnat-only

| | |
|-------------|--|
| Synopsis | Enable the dnat-only context |
| Context | configure service nat nat-policy string dnat-only |
| Tree | dnat-only |
| Description | Commands in this context configure the attributes of DNAT-only. When DNAT-only is configured, no source or port NAT (SNAPT) is performed. Only the destination IP address (going from inside to outside) is translated; the source IP address and port are not translated. |
| Notes | The following elements are part of a choice: dnat-only , I2-outside , or pool . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | NAT group |
| Context | configure service nat nat-policy <i>string</i> dnat-only nat-group <i>reference</i> |
| Tree | nat-group |
| Description | This command configures the NAT group in which DNAT translation takes place for the outside routing context. |
| Reference | configure isa nat-group <i>number</i> |
| Notes | The following elements are part of a mandatory choice: nat-group or wlan-gw-group . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|---|
| Synopsis | Router name or VPRN service name |
| Context | configure service nat nat-policy <i>string</i> dnat-only router-instance <i>string</i> |
| Tree | router-instance |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | WLAN GW group used for NAT |
| Context | configure service nat nat-policy <i>string</i> dnat-only wlan-gw-group <i>reference</i> |
| Tree | wlan-gw-group |
| Description | This command configures the NAT WLAN Gateway (GW) group in which DNAT translation takes place for the outside routing context. |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Notes | The following elements are part of a mandatory choice: nat-group or wlan-gw-group . |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filtering *keyword*

| | |
|------------|--|
| Synopsis | Filtering method for inbound traffic for the policy |
| Context | configure service nat nat-policy <i>string</i> filtering <i>keyword</i> |
| Tree | filtering |
| Default | endpoint-independent |
| Options | endpoint-independent, address-and-port-dependent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

flow-log-policy

| | |
|------------|---|
| Synopsis | Enter the flow-log-policy context |
| Context | configure service nat nat-policy <i>string</i> flow-log-policy |
| Tree | flow-log-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipfix *reference*

| | |
|----------|--|
| Synopsis | IPFIX export policy |
| Context | configure service nat nat-policy <i>string</i> flow-log-policy ipfix <i>reference</i> |

| | |
|-------------|--|
| Tree | ipfix |
| Description | This command specifies an IP flow information export policy for the flow-log policy. |
| Reference | configure service ipfix export-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

syslog *reference*

| | |
|-------------|---|
| Synopsis | Syslog export policy name |
| Context | configure service nat nat-policy <i>string</i> flow-log-policy syslog <i>reference</i> |
| Tree | syslog |
| Description | This command configures a syslog export policy with a set of transport parameters used to transmit NAT flow records in syslog format to an external collector node. The policy name is referenced from the NAT policy applied to an inside routing context. |
| Reference | configure service nat syslog export-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-outside

| | |
|-------------|--|
| Synopsis | Use Layer 2 outside service address location |
| Context | configure service nat nat-policy <i>string</i> I2-outside |
| Tree | I2-outside |
| Description | This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service. |
| Notes | The following elements are part of a choice: dnat-only , I2-outside , or pool . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool

| | |
|----------|--|
| Synopsis | Enter the pool context |
| Context | configure service nat nat-policy <i>string</i> pool |
| Tree | pool |
| Notes | The following elements are part of a choice: dnat-only , I2-outside , or pool . |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|---------------|---|
| Synopsis | NAT pool name |
| Context | configure service nat nat-policy <i>string</i> pool name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | Router or VPRN service name |
| Context | configure service nat nat-policy <i>string</i> pool router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-forwarding-range-end *number*

| | |
|-------------|--|
| Synopsis | End of the port forwarding range |
| Context | configure service nat nat-policy <i>string</i> port-forwarding-range-end <i>number</i> |
| Tree | port-forwarding-range-end |
| Description | <p>This command specifies the end of the port range available for port forwarding. The start of the range is always equal to one.</p> <p>The number of ports that can be configured is half of the available block => $64512 / 2 = 32256$. In combination with the configured value for port-forwarding-range-end, the formulas are:</p> <p>max port-reservation blocks = $65535 - \text{port-forwarding-range-end}$</p> |

$\text{max port-reservation ports} = (65535 - \text{port-forwarding-range-end}) / 2$

If **port-reservation** is already configured, the following applies for the maximum port-forwarding-range-end:

$\text{max port-forwarding-range-end} = 65535 - \text{port-reservation blocks}$
 $\text{max port-forwarding-range-end} = 65535 - (\text{port-reservation ports} * 2)$

| | |
|------------|--|
| Range | 1023 to 65535 |
| Default | 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-limits

| | |
|------------|--|
| Synopsis | Enter the port-limits context |
| Context | configure service nat nat-policy string port-limits |
| Tree | port-limits |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

forwarding *number*

| | |
|------------|--|
| Synopsis | Maximum number of port forwarding entries |
| Context | configure service nat nat-policy string port-limits forwarding number |
| Tree | forwarding |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reserved *number*

| | |
|-------------|---|
| Synopsis | Number of ports reserved for prioritized sessions |
| Context | configure service nat nat-policy string port-limits reserved number |
| Tree | reserved |
| Description | This command configures the number of ports per block that are reserved for prioritized sessions. |
| Range | 1 to 65534 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context
Context **configure service nat nat-policy string port-limits watermarks**
Tree [watermarks](#)
Description This command configures watermarks for NAT resources.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis High watermark percentage
Context **configure service nat nat-policy string port-limits watermarks high number**
Tree [high](#)
Description This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

low number

Synopsis Low watermark percentage
Context **configure service nat nat-policy string port-limits watermarks low number**
Tree [low](#)
Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range 0 to 100
Units percent
Notes This element is mandatory.
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

priority-sessions

Synopsis Enter the **priority-sessions** context

Context **configure service nat nat-policy string priority-sessions**

Tree [priority-sessions](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fc

Synopsis Enter the **fc** context

Context **configure service nat nat-policy string priority-sessions fc**

Tree [fc](#)

Description Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

af boolean

Synopsis Prioritize traffic from AF forwarding classes

Context **configure service nat nat-policy string priority-sessions fc af boolean**

Tree [af](#)

Description When configured to **true**, traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to **false**, AF traffic is not prioritized.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

be boolean

Synopsis Prioritize traffic from BE forwarding classes

Context **configure service nat nat-policy string priority-sessions fc be boolean**

Tree [be](#)

| | |
|-------------|---|
| Description | When configured to true , traffic from Best Effort (BE) FC sessions is prioritized. When configured to false , BE traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ef boolean

| | |
|------------|--|
| Synopsis | Prioritize traffic from EF forwarding classes |
| Context | configure service nat nat-policy <i>string</i> priority-sessions fc ef boolean |
| Tree | ef |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

h1 boolean

| | |
|-------------|--|
| Synopsis | Prioritize traffic from H1 forwarding classes |
| Context | configure service nat nat-policy <i>string</i> priority-sessions fc h1 boolean |
| Tree | h1 |
| Description | When configured to true , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

h2 boolean

| | |
|------------|--|
| Synopsis | Prioritize traffic from H2 forwarding classes |
| Context | configure service nat nat-policy <i>string</i> priority-sessions fc h2 boolean |
| Tree | h2 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I1 *boolean*

| | |
|------------|--|
| Synopsis | Prioritize traffic from L1 forwarding classes |
| Context | configure service nat nat-policy <i>string</i> priority-sessions fc l1 <i>boolean</i> |
| Tree | l1 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2 *boolean*

| | |
|-------------|--|
| Synopsis | Prioritize traffic from L2 forwarding classes |
| Context | configure service nat nat-policy <i>string</i> priority-sessions fc l2 <i>boolean</i> |
| Tree | l2 |
| Description | When configured to true , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nc *boolean*

| | |
|------------|--|
| Synopsis | Prioritize traffic from NC forwarding classes |
| Context | configure service nat nat-policy <i>string</i> priority-sessions fc nc <i>boolean</i> |
| Tree | nc |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

session-limits

| | |
|-------------|--|
| Synopsis | Enter the session-limits context |
| Context | configure service nat nat-policy <i>string</i> session-limits |
| Tree | session-limits |
| Description | Commands in this context configure session-limit attributes for the policy. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max number

Synopsis Maximum number of sessions per subscriber
 Context **configure service nat nat-policy string session-limits max number**
 Tree **max**
 Range 1 to 65535
 Default 65535
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reserved number

Synopsis Number of sessions reserved for prioritized sessions
 Context **configure service nat nat-policy string session-limits reserved number**
 Tree **reserved**
 Description This command configures the number of sessions per block that are reserved for prioritized sessions.
 Range 1 to 65534
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

watermarks

Synopsis Enable the **watermarks** context
 Context **configure service nat nat-policy string session-limits watermarks**
 Tree **watermarks**
 Description This command configures watermarks for NAT resources.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

high number

Synopsis High watermark percentage

| | |
|-------------|---|
| Context | configure service nat nat-policy <i>string session-limits watermarks high number</i> |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service nat nat-policy <i>string session-limits watermarks low number</i> |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp

| | |
|-------------|--|
| Synopsis | Enter the tcp context |
| Context | configure service nat nat-policy <i>string tcp</i> |
| Tree | tcp |
| Description | Commands in this context configure the transmission control protocol (TCP) attributes of the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mss-adjust *number*

| | |
|-------------|--|
| Synopsis | TCP MSS adjustment value |
| Context | configure service nat nat-policy <i>string</i> tcp mss-adjust <i>number</i> |
| Tree | mss-adjust |
| Description | This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher. |
| Range | 160 to 10240 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reset-unknown *boolean*

| | |
|-------------|---|
| Synopsis | Generate TCP reset for packets from unknown flows |
| Context | configure service nat nat-policy <i>string</i> tcp reset-unknown <i>boolean</i> |
| Tree | reset-unknown |
| Description | When configured to true , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow.
When configured to false , no TCP reset is generated. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

timeouts

| | |
|-------------|--|
| Synopsis | Enter the timeouts context |
| Context | configure service nat nat-policy <i>string</i> timeouts |
| Tree | timeouts |
| Description | Commands in this context configure the attributes of session idle timeouts for the policy. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp-query *number*

| | |
|----------|---|
| Synopsis | Timeout applied to an ICMP Query session |
| Context | configure service nat nat-policy <i>string</i> timeouts icmp-query <i>number</i> |

| | |
|------------|--|
| Tree | icmp-query |
| Range | 60 to 240 |
| Default | 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sip number

| | |
|------------|--|
| Synopsis | SIP inactive media timeout |
| Context | configure service nat nat-policy string timeouts sip number |
| Tree | sip |
| Range | 10 to 7200 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber-retention number

| | |
|-------------|--|
| Synopsis | IP address hold time after host and port blocks expire |
| Context | configure service nat nat-policy string timeouts subscriber-retention number |
| Tree | subscriber-retention |
| Description | This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address. |
| Range | 0 to 1440 |
| Default | 0 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp

| | |
|----------|------------------------------|
| Synopsis | Enter the tcp context |
|----------|------------------------------|

| | |
|-------------|---|
| Context | configure service nat nat-policy string timeouts tcp |
| Tree | tcp |
| Description | Commands in this context configure TCP timeout attributes. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

established number

| | |
|------------|--|
| Synopsis | Idle timeout for TCP session in established state |
| Context | configure service nat nat-policy string timeouts tcp established number |
| Tree | established |
| Range | 60 to 86400 |
| Default | 7440 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rst number

| | |
|-------------|---|
| Synopsis | Suspend time for TCP connection ports closed by RST |
| Context | configure service nat nat-policy string timeouts tcp rst number |
| Tree | rst |
| Description | This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations. |
| Range | 0 to 240 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

syn number

| | |
|----------|--|
| Synopsis | TCP session timeout when synchronizing initial sequence |
| Context | configure service nat nat-policy string timeouts tcp syn number |

| | |
|------------|--|
| Tree | syn |
| Range | 6 to 86400 |
| Default | 15 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

time-wait *number*

| | |
|------------|--|
| Synopsis | Timeout applied to a TCP session in the time-wait state |
| Context | configure service nat nat-policy <i>string</i> timeouts tcp time-wait <i>number</i> |
| Tree | time-wait |
| Range | 0 to 240 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

transitory *number*

| | |
|------------|---|
| Synopsis | Idle timeout for TCP session in transitory state |
| Context | configure service nat nat-policy <i>string</i> timeouts tcp transitory <i>number</i> |
| Tree | transitory |
| Range | 60 to 86400 |
| Default | 240 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

udp

| | |
|----------|--|
| Synopsis | Enter the udp context |
| Context | configure service nat nat-policy <i>string</i> timeouts udp |
| Tree | udp |

| | |
|-------------|---|
| Description | Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dns number

| | |
|------------|---|
| Synopsis | Timeout applied to UDP session with destination port 53 |
| Context | configure service nat nat-policy <i>string</i> timeouts udp dns number |
| Tree | dns |
| Range | 15 to 86400 |
| Default | 15 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|---|
| Synopsis | UDP mapping timeout applied to new sessions |
| Context | configure service nat nat-policy <i>string</i> timeouts udp initial number |
| Tree | initial |
| Range | 10 to 300 |
| Default | 15 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

normal number

| | |
|----------|--|
| Synopsis | UDP mapping timeout |
| Context | configure service nat nat-policy <i>string</i> timeouts udp normal number |
| Tree | normal |
| Range | 60 to 86400 |
| Default | 300 |
| Units | seconds |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

udp

| | |
|------------|--|
| Synopsis | Enter the udp context |
| Context | configure service nat nat-policy string udp |
| Tree | udp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inbound-refresh *boolean*

| | |
|-------------|---|
| Synopsis | Extend UDP session timeout on inbound traffic |
| Context | configure service nat nat-policy string udp inbound-refresh boolean |
| Tree | inbound-refresh |
| Description | When configured to true , this command extends the UDP session timeout on inbound traffic.
When configured to false , the UDP session timeout is not extended. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pcp-server-policy [*name*] *string*

| | |
|------------|---|
| Synopsis | Enter the pcp-server-policy list instance |
| Context | configure service nat pcp-server-policy string |
| Tree | pcp-server-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[*name*] *string*

| | |
|----------|---|
| Synopsis | PCP server policy name |
| Context | configure service nat pcp-server-policy string |

| | |
|---------------|--|
| Tree | pcp-server-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service nat pcp-server-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lifetime

| | |
|------------|---|
| Synopsis | Enter the lifetime context |
| Context | configure service nat pcp-server-policy <i>string</i> lifetime |
| Tree | lifetime |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

maximum *number*

| | |
|------------|---|
| Synopsis | Maximum lifetime of explicit mappings made by the PCP servers |
| Context | configure service nat pcp-server-policy <i>string</i> lifetime maximum <i>number</i> |
| Tree | maximum |
| Range | 61 to 86400 |
| Default | 86400 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

minimum *number*

| | |
|------------|--|
| Synopsis | Minimum lifetime of explicit mappings made by the PCP servers |
| Context | configure service nat pcp-server-policy <i>string lifetime minimum number</i> |
| Tree | minimum |
| Range | 60 to 86399 |
| Default | 120 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-description-size *number*

| | |
|------------|--|
| Synopsis | Maximum length of mapping descriptions made by the PCP servers |
| Context | configure service nat pcp-server-policy <i>string max-description-size number</i> |
| Tree | max-description-size |
| Range | 1 to 64 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

opcode

| | |
|------------|---|
| Synopsis | Enter the opcode context |
| Context | configure service nat pcp-server-policy <i>string opcode</i> |
| Tree | opcode |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

announce *boolean*

| | |
|------------|--|
| Synopsis | Process the announce PCP requests |
| Context | configure service nat pcp-server-policy <i>string opcode announce boolean</i> |
| Tree | announce |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

get *boolean*

| | |
|------------|--|
| Synopsis | Process the get PCP requests |
| Context | configure service nat pcp-server-policy <i>string</i> opcode get <i>boolean</i> |
| Tree | get |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

map *boolean*

| | |
|------------|--|
| Synopsis | Process the map PCP requests |
| Context | configure service nat pcp-server-policy <i>string</i> opcode map <i>boolean</i> |
| Tree | map |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

option

| | |
|------------|---|
| Synopsis | Enter the option context |
| Context | configure service nat pcp-server-policy <i>string</i> option |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *boolean*

| | |
|------------|--|
| Synopsis | Text description |
| Context | configure service nat pcp-server-policy <i>string</i> option description <i>boolean</i> |
| Tree | description |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

next *boolean*

| | |
|------------|--|
| Synopsis | Process the PCP requests that contain the next option |
| Context | configure service nat pcp-server-policy string option next <i>boolean</i> |
| Tree | next |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-reservation *boolean*

| | |
|------------|--|
| Synopsis | Process the PCP requests that contain the prefer failure option |
| Context | configure service nat pcp-server-policy string option port-reservation <i>boolean</i> |
| Tree | port-reservation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-set *boolean*

| | |
|-------------|---|
| Synopsis | Support the PORT_SET option in PCP MAP requests |
| Context | configure service nat pcp-server-policy string option port-set <i>boolean</i> |
| Tree | port-set |
| Description | <p>When configured to true, the PCP MAP option optimizes PCP performance for applications that require multiple sets of port forwards. A range of consecutive port forwards can be requested by the PCP client with a single PCP request.</p> <p>When configured to false, the default behavior is applied, where a plain MAP option is used to allocate a single port in a single request.</p> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefer-failure *boolean*

| | |
|----------|--|
| Synopsis | Process the PCP requests that contain the port reservation option |
| Context | configure service nat pcp-server-policy string option prefer-failure <i>boolean</i> |

| | |
|------------|--|
| Tree | prefer-failure |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

third-party *boolean*

| | |
|------------|--|
| Synopsis | Process the PCP requests that contain the third party option |
| Context | configure service nat pcp-server-policy <i>string</i> option third-party <i>boolean</i> |
| Tree | third-party |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reuse-external-ip-address *boolean*

| | |
|-------------|--|
| Synopsis | Reuse external IP address for NAT subscriber |
| Context | configure service nat pcp-server-policy <i>string</i> reuse-external-ip-address <i>boolean</i> |
| Tree | reuse-external-ip-address |
| Description | <p>When configured to true, the system reuses the external IP address assigned to a subscriber when the requested well-known port or external IP mapping is not available.</p> <p>When configured to false, a request for a well-known port is allocated as requested on a different external IP address if the port is already allocated to another subscriber sharing the same external IP address. The existing external IP address is initially allocated to the subscriber as a result of the initial traffic flow.</p> <p>This configuration flag can be set dynamically but the flag affects only PCP port forwards that are created after the flag has been set.</p> |
| Default | false |
| Introduced | 19.10.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

version

| | |
|------------|--|
| Synopsis | Enter the version context |
| Context | configure service nat pcp-server-policy <i>string</i> version |
| Tree | version |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis Maximum protocol version supported by the PCP servers

Context **configure** [service nat pcp-server-policy](#) *string version maximum number*

Tree [maximum](#)

Range 1 to 255

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

Synopsis Minimum protocol version supported by the PCP servers

Context **configure** [service nat pcp-server-policy](#) *string version minimum number*

Tree [minimum](#)

Range 1 to 255

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix-list [[name](#)] *string*

Synopsis Enter the **prefix-list** list instance

Context **configure** [service nat prefix-list](#) *string*

Tree [prefix-list](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[name](#)] *string*

Synopsis NAT prefix list name

Context **configure** [service nat prefix-list](#) *string*

Tree [prefix-list](#)

| | |
|---------------|--|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

application *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Prefix list for the application |
| Context | configure service nat prefix-list <i>string</i> application <i>keyword</i> |
| Tree | application |
| Default | I2-aware-dest-to-policy |
| Options | I2-aware-dest-to-policy, dnat-only-subscribers |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix [[ip-prefix](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure service nat prefix-list <i>string</i> prefix <i>string</i> |
| Tree | prefix |
| Max. Instances | 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[ip-prefix] *string*

| | |
|----------|---|
| Synopsis | NAT prefix |
| Context | configure service nat prefix-list <i>string</i> prefix <i>string</i> |
| Tree | prefix |

| | |
|------------|--|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | NAT policy for LSN |
| Context | configure service nat prefix-list <i>string prefix string nat-policy reference</i> |
| Tree | nat-policy |
| Reference | configure service nat nat-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

syslog

| | |
|------------|---|
| Synopsis | Enter the syslog context |
| Context | configure service nat syslog |
| Tree | syslog |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

export-policy [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the export-policy list instance |
| Context | configure service nat syslog export-policy <i>string</i> |
| Tree | export-policy |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Syslog export policy name

Context **configure** [service nat syslog export-policy](#) *string*

Tree [export-policy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

collector [router-instance](#) *string* [ip-address](#) *string*

Synopsis Enter the **collector** list instance

Context **configure** [service nat syslog export-policy](#) *string* [collector router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Max. Instances 2

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance

Context **configure** [service nat syslog export-policy](#) *string* [collector router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis IPv4 address of the external collector node

| | |
|------------|--|
| Context | configure service nat syslog export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> |
| Tree | collector |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the collector node |
| Context | configure service nat syslog export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

destination-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Destination port |
| Context | configure service nat syslog export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> destination-port <i>number</i> |
| Tree | destination-port |
| Range | 1 to 65535 |
| Default | 514 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4-source-address *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IPv4 source address |
| Context | configure service nat syslog export-policy <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> ipv4-source-address <i>string</i> |
| Tree | ipv4-source-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service nat syslog export-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

facility *keyword*

| | |
|------------|---|
| Synopsis | Facility number in the PRI part of the NAT SYSLOG messages |
| Context | configure service nat syslog export-policy <i>string</i> facility <i>keyword</i> |
| Tree | facility |
| Default | local0 |
| Options | kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

include

| | |
|----------|--|
| Synopsis | Enter the include context |
| Context | configure service nat syslog export-policy <i>string</i> include |

| | |
|------------|--|
| Tree | include |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

destination-ip *boolean*

| | |
|------------|---|
| Synopsis | Include the translated destination IP address |
| Context | configure service nat syslog export-policy <i>string</i> include destination-ip <i>boolean</i> |
| Tree | destination-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

foreign-ip *boolean*

| | |
|------------|---|
| Synopsis | Include the original destination IPv4 address |
| Context | configure service nat syslog export-policy <i>string</i> include foreign-ip <i>boolean</i> |
| Tree | foreign-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

foreign-port *boolean*

| | |
|------------|---|
| Synopsis | Include the original destination port |
| Context | configure service nat syslog export-policy <i>string</i> include foreign-port <i>boolean</i> |
| Tree | foreign-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-policy-name *boolean*

| | |
|----------|--|
| Synopsis | Include the NAT policy name in the flow log |
| Context | configure service nat syslog export-policy <i>string</i> include nat-policy-name <i>boolean</i> |

| | |
|------------|--|
| Tree | nat-policy-name |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sub-id *boolean*

| | |
|------------|---|
| Synopsis | Subscriber ID in subscriber aware NAT |
| Context | configure service nat syslog export-policy <i>string</i> include sub-id <i>boolean</i> |
| Tree | sub-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

log-prefix *string*

| | |
|---------------|--|
| Synopsis | Optional prefix text in the MSG part of the NAT syslog messages |
| Context | configure service nat syslog export-policy <i>string</i> log-prefix <i>string</i> |
| Tree | log-prefix |
| String Length | 1 to 32 |
| Default | TMNX |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-tx-delay *number*

| | |
|------------|--|
| Synopsis | Maximum time a syslog message delays in the output buffer to aggregate multiple events |
| Context | configure service nat syslog export-policy <i>string</i> max-tx-delay <i>number</i> |
| Tree | max-tx-delay |
| Range | 0 to 100 |
| Default | 3 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mtu *number*

| | |
|------------|--|
| Synopsis | Maximum transmission unit |
| Context | configure service nat syslog export-policy <i>string</i> mtu <i>number</i> |
| Tree | mtu |
| Range | 512 to 9000 |
| Default | 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rate-limit *number*

| | |
|------------|---|
| Synopsis | Frame limit |
| Context | configure service nat syslog export-policy <i>string</i> rate-limit <i>number</i> |
| Tree | rate-limit |
| Range | 10 to 2147483647 |
| Units | packets per second |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

severity-level *keyword*

| | |
|------------|--|
| Synopsis | Severity level in the PRI part of the syslog messages |
| Context | configure service nat syslog export-policy <i>string</i> severity-level <i>keyword</i> |
| Tree | severity-level |
| Default | info |
| Options | emergency, alert, critical, error, warning, notice, info, debug |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-nat-policy [[name](#)] *string*

| | |
|----------|--|
| Synopsis | Enter the up-nat-policy list instance |
| Context | configure service nat up-nat-policy <i>string</i> |
| Tree | up-nat-policy |

| | |
|----------------|--|
| Max. Instances | 32 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | UP NAT policy name |
| Context | configure <i>service nat up-nat-policy string</i> |
| Tree | <i>up-nat-policy</i> |
| Description | This command specifies the UP NAT policy name. The name default has a special meaning representing the default UP NAT policy template. The system uses the default template when the BNG CPF does not receive a more specific name when the subscriber is instantiated. |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

alg

| | |
|-------------|--|
| Synopsis | Enter the alg context |
| Context | configure <i>service nat up-nat-policy string alg</i> |
| Tree | <i>alg</i> |
| Description | Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ftp *boolean*

| | |
|------------|--|
| Synopsis | Use FTP ALG for the policy |
| Context | configure <i>service nat up-nat-policy string alg ftp boolean</i> |
| Tree | <i>ftp</i> |
| Default | true |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pptp *boolean*

Synopsis Use PPTP ALG for the policy

Context **configure** **service nat up-nat-policy** *string alg pptp boolean*

Tree [pptp](#)

Description When configured to **true**, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.

PPTP sessions can only be initiated from NAT inside.

GRE traffic is allowed through NAT only if the corresponding mapping exists.

There can be seven calls (GRE tunnels) per control session.

When configured to **false**, PPTP ALG is not used.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rtsp *boolean*

Synopsis Use RTSP ALG for the policy

Context **configure** **service nat up-nat-policy** *string alg rtsp boolean*

Tree [rtsp](#)

Description When configured to **true**, Real-Time Streaming Protocol (RTSP) ALG is used for the policy.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *boolean*

Synopsis Use SIP ALG for the policy

Context **configure** **service nat up-nat-policy** *string alg sip boolean*

Tree [sip](#)

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

block-limit *number*

Synopsis Maximum number of port blocks per NAT subscriber

Context **configure service nat up-nat-policy** *string* **block-limit** *number*

Tree [block-limit](#)

Range 1 to 10

Default 1

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-host

Synopsis Enable the **default-host** context

Context **configure service nat up-nat-policy** *string* **default-host**

Tree [default-host](#)

Description Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.

Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.

The rate of redirected unknown traffic can be restricted by configuration.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside-router-instance *string*

Synopsis Router instance of the DMZ

Context **configure service nat up-nat-policy** *string* **default-host** **inside-router-instance** *string*

Tree [inside-router-instance](#)

Description This command configures the router instance on the inside where the default DMZ host resides.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-address *string*

Synopsis IP address of the default DMZ host

Context **configure service nat up-nat-policy** *string* **default-host ip-address** *string*

Tree [ip-address](#)

Description This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate-limit *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure service nat up-nat-policy** *string* **default-host rate-limit** *number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Default 10

Units megabps

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure service nat up-nat-policy** *string* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filtering *keyword*

Synopsis Filtering method for inbound traffic for the policy
 Context **configure service nat up-nat-policy** *string filtering keyword*
 Tree [filtering](#)
 Default endpoint-independent
 Options endpoint-independent, address-and-port-dependent
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

flow-log-policy

Synopsis Enter the **flow-log-policy** context
 Context **configure service nat up-nat-policy** *string flow-log-policy*
 Tree [flow-log-policy](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipfix *reference*

Synopsis IPFIX export policy
 Context **configure service nat up-nat-policy** *string flow-log-policy ipfix reference*
 Tree [ipfix](#)
 Description This command specifies an IP flow information export policy for the flow-log policy.
 Reference **configure service ipfix export-policy** *string*
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-echo-reply *boolean*

Synopsis Enable replies to ICMP Echo Request messages
 Context **configure service nat up-nat-policy** *string icmp-echo-reply boolean*
 Tree [icmp-echo-reply](#)

| | |
|------------|--|
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-block-extension

| | |
|-------------|---|
| Synopsis | Enable the port-block-extension context |
| Context | configure service nat up-nat-policy string port-block-extension |
| Tree | port-block-extension |
| Description | Commands in this context configure the attributes for dynamic allocation of NAT port-blocks beyond the initial port-blocks. |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ports number

| | |
|------------|---|
| Synopsis | Number of ports per dynamic port block |
| Context | configure service nat up-nat-policy string port-block-extension ports number |
| Tree | ports |
| Range | 10 to 5000 |
| Notes | This element is mandatory. |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|------------|---|
| Synopsis | Enable the watermarks context |
| Context | configure service nat up-nat-policy string port-block-extension watermarks |
| Tree | watermarks |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high number

| | |
|----------|---------------------------|
| Synopsis | High watermark percentage |
|----------|---------------------------|

| | |
|-------------|--|
| Context | configure service nat up-nat-policy <i>string</i> port-block-extension watermarks high <i>number</i> |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low *number*

| | |
|-------------|---|
| Synopsis | Low watermark percentage |
| Context | configure service nat up-nat-policy <i>string</i> port-block-extension watermarks low <i>number</i> |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-limits

| | |
|------------|---|
| Synopsis | Enter the port-limits context |
| Context | configure service nat up-nat-policy <i>string</i> port-limits |
| Tree | port-limits |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reserved *number*

| | |
|----------|--|
| Synopsis | Number of ports reserved for prioritized sessions |
| Context | configure service nat up-nat-policy <i>string</i> port-limits reserved <i>number</i> |

| | |
|-------------|---|
| Tree | reserved |
| Description | This command configures the number of ports per block that are reserved for prioritized sessions. |
| Range | 1 to 65534 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|-------------|---|
| Synopsis | Enable the watermarks context |
| Context | configure service nat up-nat-policy <i>string</i> port-limits watermarks |
| Tree | watermarks |
| Description | This command configures watermarks for NAT resources. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high *number*

| | |
|-------------|--|
| Synopsis | High watermark percentage |
| Context | configure service nat up-nat-policy <i>string</i> port-limits watermarks <i>high number</i> |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low *number*

| | |
|----------|---|
| Synopsis | Low watermark percentage |
| Context | configure service nat up-nat-policy <i>string</i> port-limits watermarks <i>low number</i> |
| Tree | low |

| | |
|-------------|--|
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority-sessions

| | |
|------------|---|
| Synopsis | Enter the priority-sessions context |
| Context | configure service nat up-nat-policy string priority-sessions |
| Tree | priority-sessions |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fc

| | |
|-------------|---|
| Synopsis | Enter the fc context |
| Context | configure service nat up-nat-policy string priority-sessions fc |
| Tree | fc |
| Description | Commands in this context specify which Forwarding Class (FC) options have prioritized sessions. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

af boolean

| | |
|-------------|--|
| Synopsis | Prioritize traffic from AF forwarding classes |
| Context | configure service nat up-nat-policy string priority-sessions fc af boolean |
| Tree | af |
| Description | When configured to true , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to false , AF traffic is not prioritized. |
| Default | false |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

be *boolean*

Synopsis Prioritize traffic from BE forwarding classes

Context **configure service nat up-nat-policy** *string* **priority-sessions fc be** *boolean*

Tree **be**

Description When configured to **true**, traffic from Best Effort (BE) FC sessions is prioritized. When configured to **false**, BE traffic is not prioritized.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ef *boolean*

Synopsis Prioritize traffic from EF forwarding classes

Context **configure service nat up-nat-policy** *string* **priority-sessions fc ef** *boolean*

Tree **ef**

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h1 *boolean*

Synopsis Prioritize traffic from H1 forwarding classes

Context **configure service nat up-nat-policy** *string* **priority-sessions fc h1** *boolean*

Tree **h1**

Description When configured to **true**, traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

h2 *boolean*

Synopsis Prioritize traffic from H2 forwarding classes

| | |
|------------|--|
| Context | configure service nat up-nat-policy <i>string</i> priority-sessions fc h2 <i>boolean</i> |
| Tree | h2 |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I1 *boolean*

| | |
|------------|--|
| Synopsis | Prioritize traffic from L1 forwarding classes |
| Context | configure service nat up-nat-policy <i>string</i> priority-sessions fc I1 <i>boolean</i> |
| Tree | I1 |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2 *boolean*

| | |
|-------------|--|
| Synopsis | Prioritize traffic from L2 forwarding classes |
| Context | configure service nat up-nat-policy <i>string</i> priority-sessions fc I2 <i>boolean</i> |
| Tree | I2 |
| Description | When configured to true , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nc *boolean*

| | |
|------------|--|
| Synopsis | Prioritize traffic from NC forwarding classes |
| Context | configure service nat up-nat-policy <i>string</i> priority-sessions fc nc <i>boolean</i> |
| Tree | nc |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

session-limits

| | |
|-------------|---|
| Synopsis | Enter the session-limits context |
| Context | configure service nat up-nat-policy string session-limits |
| Tree | session-limits |
| Description | Commands in this context configure session-limit attributes for the policy. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max number

| | |
|------------|---|
| Synopsis | Maximum number of sessions per subscriber |
| Context | configure service nat up-nat-policy string session-limits max number |
| Tree | max |
| Range | 1 to 65535 |
| Default | 65535 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reserved number

| | |
|-------------|--|
| Synopsis | Number of sessions reserved for prioritized sessions |
| Context | configure service nat up-nat-policy string session-limits reserved number |
| Tree | reserved |
| Description | This command configures the number of sessions per block that are reserved for prioritized sessions. |
| Range | 1 to 65534 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|-------------|---|
| Synopsis | Enable the watermarks context |
| Context | configure service nat up-nat-policy string session-limits watermarks |
| Tree | watermarks |
| Description | This command configures watermarks for NAT resources. |

| | |
|------------|--|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high number

| | |
|-------------|---|
| Synopsis | High watermark percentage |
| Context | configure service nat up-nat-policy <i>string session-limits watermarks high number</i> |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service nat up-nat-policy <i>string session-limits watermarks low number</i> |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp

| | |
|----------|--|
| Synopsis | Enter the tcp context |
| Context | configure service nat up-nat-policy <i>string tcp</i> |
| Tree | tcp |

| | |
|-------------|--|
| Description | Commands in this context configure the transmission control protocol (TCP) attributes of the policy. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mss-adjust *number*

| | |
|-------------|--|
| Synopsis | TCP MSS adjustment value |
| Context | configure service nat up-nat-policy <i>string tcp mss-adjust number</i> |
| Tree | mss-adjust |
| Description | This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher. |
| Range | 160 to 10240 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reset-unknown *boolean*

| | |
|-------------|---|
| Synopsis | Generate TCP reset for packets from unknown flows |
| Context | configure service nat up-nat-policy <i>string tcp reset-unknown boolean</i> |
| Tree | reset-unknown |
| Description | When configured to true , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow.
When configured to false , no TCP reset is generated. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

timeouts

| | |
|-------------|--|
| Synopsis | Enter the timeouts context |
| Context | configure service nat up-nat-policy <i>string timeouts</i> |
| Tree | timeouts |
| Description | Commands in this context configure the attributes of session idle timeouts for the policy. |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

icmp-query *number*

Synopsis Timeout applied to an ICMP Query session

Context **configure service nat up-nat-policy** *string timeouts icmp-query number*

Tree [icmp-query](#)

Range 60 to 240

Default 60

Units seconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sip *number*

Synopsis SIP inactive media timeout

Context **configure service nat up-nat-policy** *string timeouts sip number*

Tree [sip](#)

Range 10 to 7200

Default 120

Units seconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-retention *number*

Synopsis IP address hold time after host and port blocks expire

Context **configure service nat up-nat-policy** *string timeouts subscriber-retention number*

Tree [subscriber-retention](#)

Description This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.

Range 0 to 1440

Default 0

Units minutes

| | |
|------------|--|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp

| | |
|-------------|--|
| Synopsis | Enter the tcp context |
| Context | configure service nat up-nat-policy string timeouts tcp |
| Tree | tcp |
| Description | Commands in this context configure TCP timeout attributes. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

established *number*

| | |
|------------|--|
| Synopsis | Idle timeout for TCP session in established state |
| Context | configure service nat up-nat-policy string timeouts tcp established <i>number</i> |
| Tree | established |
| Range | 60 to 86400 |
| Default | 7440 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rst *number*

| | |
|-------------|---|
| Synopsis | Suspend time for TCP connection ports closed by RST |
| Context | configure service nat up-nat-policy string timeouts tcp rst <i>number</i> |
| Tree | rst |
| Description | This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations. |
| Range | 0 to 240 |
| Default | 0 |
| Units | seconds |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

syn number

Synopsis TCP session timeout when synchronizing initial sequence

Context **configure service nat up-nat-policy** *string timeouts tcp syn number*

Tree [syn](#)

Range 6 to 86400

Default 15

Units seconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

time-wait number

Synopsis Timeout applied to a TCP session in the time-wait state

Context **configure service nat up-nat-policy** *string timeouts tcp time-wait number*

Tree [time-wait](#)

Range 0 to 240

Default 0

Units seconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

transitory number

Synopsis Idle timeout for TCP session in transitory state

Context **configure service nat up-nat-policy** *string timeouts tcp transitory number*

Tree [transitory](#)

Range 60 to 86400

Default 240

Units seconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

udp

| | |
|-------------|---|
| Synopsis | Enter the udp context |
| Context | configure service nat up-nat-policy <i>string</i> timeouts udp |
| Tree | udp |
| Description | Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dns *number*

| | |
|------------|--|
| Synopsis | Timeout applied to UDP session with destination port 53 |
| Context | configure service nat up-nat-policy <i>string</i> timeouts udp dns <i>number</i> |
| Tree | dns |
| Range | 15 to 86400 |
| Default | 15 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial *number*

| | |
|------------|--|
| Synopsis | UDP mapping timeout applied to new sessions |
| Context | configure service nat up-nat-policy <i>string</i> timeouts udp initial <i>number</i> |
| Tree | initial |
| Range | 10 to 300 |
| Default | 15 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

normal *number*

| | |
|----------|---------------------|
| Synopsis | UDP mapping timeout |
|----------|---------------------|

| | |
|------------|---|
| Context | configure service nat up-nat-policy <i>string</i> timeouts udp normal <i>number</i> |
| Tree | normal |
| Range | 60 to 86400 |
| Default | 300 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

udp

| | |
|------------|---|
| Synopsis | Enter the udp context |
| Context | configure service nat up-nat-policy <i>string</i> udp |
| Tree | udp |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inbound-refresh *boolean*

| | |
|-------------|---|
| Synopsis | Extend UDP session timeout on inbound traffic |
| Context | configure service nat up-nat-policy <i>string</i> udp inbound-refresh <i>boolean</i> |
| Tree | inbound-refresh |
| Description | When configured to true , this command extends the UDP session timeout on inbound traffic.
When configured to false , the UDP session timeout is not extended. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

oper-group [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the oper-group list instance |
| Context | configure service oper-group <i>string</i> |
| Tree | oper-group |
| Max. Instances | 32768 |
| Introduced | 16.0.R1 |

Platforms All

[name] *string*

Synopsis Operational group name
 Context **configure** [service oper-group](#) *string*
 Tree [oper-group](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

bfd-liveness

Synopsis Enable the **bfd-liveness** context
 Context **configure** [service oper-group](#) *string* **bfd-liveness**
 Tree [bfd-liveness](#)
 Introduced 16.0.R1
 Platforms All

dest-ip *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Destination address for BFD
 Context **configure** [service oper-group](#) *string* **bfd-liveness** **dest-ip** *string*
 Tree [dest-ip](#)
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

interface-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Source interface name |
| Context | configure service oper-group <i>string</i> bfd-liveness interface-name <i>string</i> |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

router-instance *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Routing context used for route lookup |
| Context | configure service oper-group <i>string</i> bfd-liveness router-instance <i>string</i> |
| Tree | router-instance |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time

| | |
|------------|---|
| Synopsis | Enter the hold-time context |
| Context | configure service oper-group <i>string</i> hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | All |

down *number*

| | |
|------------|---|
| Synopsis | Oper group hold down time |
| Context | configure service oper-group <i>string</i> hold-time down <i>number</i> |
| Tree | down |
| Range | 1 to 3600 |
| Units | seconds |
| Introduced | 16.0.R3 |
| Platforms | All |

up *number*

| | |
|------------|---|
| Synopsis | Oper group hold up time |
| Context | configure service oper-group <i>string</i> hold-time up <i>number</i> |
| Tree | up |
| Range | 0 to 3600 |
| Default | 4 |
| Units | seconds |
| Introduced | 16.0.R3 |
| Platforms | All |

pbb

| | |
|------------|---|
| Synopsis | Enter the pbb context |
| Context | configure service pbb |
| Tree | pbb |
| Introduced | 16.0.R1 |
| Platforms | All |

mac [[name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the mac list instance |
| Context | configure service pbb mac <i>string</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | MAC name for the MAC address |
| Context | configure service pbb mac <i>string</i> |
| Tree | mac |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|------------|--|
| Synopsis | IEEE address assigned to the MAC name |
| Context | configure service pbb mac <i>string</i> address <i>string</i> |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-notification

| | |
|------------|---|
| Synopsis | Enter the mac-notification context |
| Context | configure service pbb mac-notification |
| Tree | mac-notification |
| Introduced | 16.0.R1 |
| Platforms | All |

count *number*

| | |
|------------|---|
| Synopsis | MAC notification messages count |
| Context | configure service pbb mac-notification count <i>number</i> |
| Tree | count |
| Range | 1 to 10 |
| Default | 3 |
| Introduced | 16.0.R1 |

Platforms All

interval *number*

Synopsis Interval for MAC-notification messages

Context **configure** [service pbb mac-notification interval](#) *number*

Tree [interval](#)

Range 1 to 100

Default 1

Units deciseconds

Introduced 16.0.R1

Platforms All

source-bmac

Synopsis Enter the **source-bmac** context

Context **configure** [service pbb source-bmac](#)

Tree [source-bmac](#)

Introduced 16.0.R1

Platforms All

address *string*

Synopsis Source B-VPLS MAC address to use with PBB

Context **configure** [service pbb source-bmac address](#) *string*

Tree [address](#)

Introduced 16.0.R1

Platforms All

evpn-etree-leaf-address *string*

Synopsis Source Backbone VPLS MAC address to use with Provider Backbone Bridging (PBB)

Context **configure** [service pbb source-bmac evpn-etree-leaf-address](#) *string*

Tree [evpn-etree-leaf-address](#)

Introduced 16.0.R1

Platforms All

proxy-arp-nd

Synopsis Enter the **proxy-arp-nd** context

Context **configure** [service proxy-arp-nd](#)

Tree [proxy-arp-nd](#)

Introduced 16.0.R1

Platforms All

mac-list

Synopsis Enter the **mac-list** context

Context **configure** [service proxy-arp-nd mac-list](#)

Tree [mac-list](#)

Introduced 16.0.R1

Platforms All

list [[list-name](#)] *string*

Synopsis Enter the **list** list instance

Context **configure** [service proxy-arp-nd mac-list list](#) *string*

Tree [list](#)

Introduced 16.0.R1

Platforms All

[[list-name](#)] *string*

Synopsis Specify name for mac list

Context **configure** [service proxy-arp-nd mac-list list](#) *string*

Tree [list](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

mac [[address](#)] *string*

| | |
|----------------|--|
| Synopsis | Add a list entry for mac |
| Context | configure service proxy-arp-nd mac-list list <i>string mac string</i> |
| Tree | mac |
| Max. Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

[address] *string*

| | |
|------------|--|
| Synopsis | MAC address to be added to the list |
| Context | configure service proxy-arp-nd mac-list list <i>string mac string</i> |
| Tree | mac |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

pw-template [[pw-template-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the pw-template list instance |
| Context | configure service pw-template <i>string</i> |
| Tree | pw-template |
| Max. Instances | 2048 |
| Introduced | 16.0.R1 |
| Platforms | All |

[pw-template-name] *string*

| | |
|---------------|--|
| Synopsis | SDP template name |
| Context | configure service pw-template <i>string</i> |
| Tree | pw-template |
| String Length | 1 to 64 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-policy *number*

| | |
|------------|--|
| Synopsis | Accounting policy |
| Context | configure service pw-template <i>string</i> accounting-policy <i>number</i> |
| Tree | accounting-policy |
| Range | 1 to 99 |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-fragmentation *boolean*

| | |
|------------|---|
| Synopsis | Allow packets to be sent without setting DF bit |
| Context | configure service pw-template <i>string</i> allow-fragmentation <i>boolean</i> |
| Tree | allow-fragmentation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-gre-sdp *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Use a GRE tunnel to automatically create an SDP |
| Context | configure service pw-template <i>string</i> auto-gre-sdp <i>boolean</i> |
| Tree | auto-gre-sdp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

block-on-peer-fault *boolean*

| | |
|------------|---|
| Synopsis | Enable block traffic on peer fault |
| Context | configure service pw-template <i>string</i> block-on-peer-fault <i>boolean</i> |
| Tree | block-on-peer-fault |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect statistics |
| Context | configure service pw-template <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Enable/Disable the use of ControlWord |
| Context | configure service pw-template <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service pw-template <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service pw-template <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip string

| | |
|---------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service pw-template <i>string</i> egress filter ip <i>string</i> |
| Tree | ip |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 string

| | |
|---------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service pw-template <i>string</i> egress filter ipv6 <i>string</i> |
| Tree | ipv6 |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

mac string

| | |
|---------------|--|
| Synopsis | MAC filter policy name |
| Context | configure service pw-template <i>string</i> egress filter mac <i>string</i> |
| Tree | mac |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

mfib-allowed-mda-destinations

| | |
|------------|---|
| Synopsis | Enter the mfib-allowed-mda-destinations context |
| Context | configure service pw-template <i>string</i> egress mfib-allowed-mda-destinations |
| Tree | mfib-allowed-mda-destinations |
| Introduced | 16.0.R1 |
| Platforms | All |

mda [[mda-id](#)] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for mda |
| Context | configure service pw-template <i>string</i> egress mfib-allowed-mda-destinations mda <i>string</i> |
| Tree | mda |
| Introduced | 16.0.R1 |
| Platforms | All |

[[mda-id](#)] *string*

| | |
|------------|---|
| Synopsis | MFIB allowed MDA destination |
| Context | configure service pw-template <i>string</i> egress mfib-allowed-mda-destinations mda <i>string</i> |
| Tree | mda |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service pw-template <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|----------|----------------------------------|
| Synopsis | Enter the network context |
|----------|----------------------------------|

| | |
|------------|---|
| Context | configure service pw-template <i>string</i> egress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *string*

| | |
|---------------|--|
| Synopsis | Network policy ID |
| Context | configure service pw-template <i>string</i> egress qos network policy-name <i>string</i> |
| Tree | policy-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

port-redirect-group

| | |
|------------|--|
| Synopsis | Enter the port-redirect-group context |
| Context | configure service pw-template <i>string</i> egress qos network port-redirect-group |
| Tree | port-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *string*

| | |
|---------------|--|
| Synopsis | Name of the egress port queue group template |
| Context | configure service pw-template <i>string</i> egress qos network port-redirect-group group-name <i>string</i> |
| Tree | group-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|----------|-------------------------------------|
| Synopsis | Instance for FP ingress queue group |
|----------|-------------------------------------|

| | |
|------------|--|
| Context | configure service pw-template <i>string</i> egress qos network port-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

encryption-keygroup

| | |
|------------|--|
| Synopsis | Enter the encryption-keygroup context |
| Context | configure service pw-template <i>string</i> encryption-keygroup |
| Tree | encryption-keygroup |
| Introduced | 19.10.R1 |
| Platforms | VSR |

inbound *number*

| | |
|------------|--|
| Synopsis | Keygroup identifier in the inbound direction |
| Context | configure service pw-template <i>string</i> encryption-keygroup inbound <i>number</i> |
| Tree | inbound |
| Range | 1 to 127 |
| Introduced | 19.10.R1 |
| Platforms | VSR |

outbound *number*

| | |
|------------|---|
| Synopsis | Keygroup identifier in the outbound direction |
| Context | configure service pw-template <i>string</i> encryption-keygroup outbound <i>number</i> |
| Tree | outbound |
| Range | 1 to 127 |
| Introduced | 19.10.R1 |
| Platforms | VSR |

entropy-label

| | |
|----------|------------------------------------|
| Synopsis | Enable the use of an entropy label |
|----------|------------------------------------|

| | |
|------------|--|
| Context | configure service pw-template <i>string</i> entropy-label |
| Tree | entropy-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure service pw-template <i>string</i> fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|------------|---|
| Synopsis | Enable automatic update of MAC protect list |
| Context | configure service pw-template <i>string</i> fdb auto-learn-mac-protect <i>boolean</i> |
| Tree | auto-learn-mac-protect |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect-exclude-list *string*

| | |
|---------------|---|
| Synopsis | Name of the MAC protect exclusion list |
| Context | configure service pw-template <i>string</i> fdb auto-learn-mac-protect-exclude-list <i>string</i> |
| Tree | auto-learn-mac-protect-exclude-list |
| Description | <p>This command configures the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p> |
| String Length | 1 to 32 |
| Introduced | 20.5.R1 |

Platforms All

discard-unknown-source *boolean*

Synopsis Discard frames with unknown source
Context **configure** [service pw-template](#) *string* [fdb discard-unknown-source](#) *boolean*
Tree [discard-unknown-source](#)
Default false
Introduced 16.0.R1
Platforms All

limit-mac-move *keyword*

Synopsis MAC move limit
Context **configure** [service pw-template](#) *string* [fdb limit-mac-move](#) *keyword*
Tree [limit-mac-move](#)
Default blockable
Options blockable, non-blockable
Introduced 16.0.R1
Platforms All

mac-learning

Synopsis Enter the **mac-learning** context
Context **configure** [service pw-template](#) *string* [fdb mac-learning](#)
Tree [mac-learning](#)
Introduced 16.0.R1
Platforms All

aging *boolean*

Synopsis Enable aging of MAC addresses
Context **configure** [service pw-template](#) *string* [fdb mac-learning aging](#) *boolean*
Tree [aging](#)
Default true

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

learning *boolean*

| | |
|------------|---|
| Synopsis | Enable learning of new MAC addresses |
| Context | configure service pw-template <i>string</i> fdb mac-learning learning <i>boolean</i> |
| Tree | learning |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-pinning *boolean*

| | |
|------------|---|
| Synopsis | Enable MAC address pinning on this spoke SDP |
| Context | configure service pw-template <i>string</i> fdb mac-pinning <i>boolean</i> |
| Tree | mac-pinning |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-mac-addresses *number*

| | |
|----------|--|
| Synopsis | Maximum number of MAC address entries in the FDB |
| Context | configure service pw-template <i>string</i> fdb maximum-mac-addresses <i>number</i> |
| Tree | maximum-mac-addresses |

Description This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this PW template.

When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.

When the configured limit is reached and the **configure service pw-template fdb discard-unknown-source** command is set to **true** for this PW template, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the PW template uses the global MAC learning limitations.

| | |
|------------|-------------|
| Range | 1 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|--|
| Synopsis | Action for protected source MAC restriction |
| Context | configure service pw-template <i>string</i> fdb protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sdp-bind-oper-down, alarm-only, discard |
| Introduced | 16.0.R1 |
| Platforms | All |

force-vc-forwarding *keyword*

| | |
|------------|---|
| Synopsis | VC forwarding action |
| Context | configure service pw-template <i>string</i> force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 16.0.R1 |
| Platforms | All |

hash-label

| | |
|------------|---|
| Synopsis | Enable the hash-label context |
| Context | configure service pw-template <i>string</i> hash-label |
| Tree | hash-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

signal-capability

| | |
|----------|---|
| Synopsis | Hash label capability that is signaled to the remote PE |
|----------|---|

| | |
|------------|--|
| Context | configure service pw-template string hash-label signal-capability |
| Tree | signal-capability |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|---|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service pw-template string igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-leave *boolean*

| | |
|------------|---|
| Synopsis | Allow IGMP fast leave processing |
| Context | configure service pw-template string igmp-snooping fast-leave <i>boolean</i> |
| Tree | fast-leave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *string*

| | |
|---------------|---|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service pw-template string igmp-snooping import-policy <i>string</i> |
| Tree | import-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-groups *number*

| | |
|----------|---|
| Synopsis | Maximum multicast groups |
| Context | configure service pw-template string igmp-snooping maximum-number-groups <i>number</i> |

| | |
|------------|---------------------------------------|
| Tree | maximum-number-groups |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service pw-template <i>string</i> igmp-snooping query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|------------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure service pw-template <i>string</i> igmp-snooping query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|----------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service pw-template <i>string</i> igmp-snooping query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |

| | |
|------------|---------|
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|------------|--|
| Synopsis | Number of retries after expected message loss |
| Context | configure service pw-template <i>string</i> igmp-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 2 to 7 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

send-queries *boolean*

| | |
|------------|---|
| Synopsis | Generate IGMP general queries |
| Context | configure service pw-template <i>string</i> igmp-snooping send-queries <i>boolean</i> |
| Tree | send-queries |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP version |
| Context | configure service pw-template <i>string</i> igmp-snooping version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service pw-template string ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service pw-template string ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip *string*

| | |
|---------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service pw-template string ingress filter ip string |
| Tree | ip |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *string*

| | |
|---------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service pw-template string ingress filter ipv6 string |
| Tree | ipv6 |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|---------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service pw-template <i>string</i> ingress filter mac <i>string</i> |
| Tree | mac |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service pw-template <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service pw-template <i>string</i> ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service pw-template <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *string*

| | |
|----------|---|
| Synopsis | Name of the forwarding plane queue group template |
|----------|---|

| | |
|---------------|---|
| Context | configure service pw-template <i>string</i> ingress qos network fp-redirect-group group-name <i>string</i> |
| Tree | group-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Instance for FP ingress queue group |
| Context | configure service pw-template <i>string</i> ingress qos network fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *string*

| | |
|---------------|--|
| Synopsis | Network policy ID |
| Context | configure service pw-template <i>string</i> ingress qos network policy-name <i>string</i> |
| Tree | policy-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

l2pt

| | |
|------------|---|
| Synopsis | Enter the l2pt context |
| Context | configure service pw-template <i>string</i> l2pt |
| Tree | l2pt |
| Introduced | 16.0.R1 |
| Platforms | All |

termination

| | |
|------------|--|
| Synopsis | Enable the termination context |
| Context | configure service pw-template string l2pt termination |
| Tree | termination |
| Introduced | 16.0.R1 |
| Platforms | All |

protocols

| | |
|------------|--|
| Synopsis | Enter the protocols context |
| Context | configure service pw-template string l2pt termination protocols |
| Tree | protocols |
| Introduced | 16.0.R1 |
| Platforms | All |

cdp *boolean*

| | |
|------------|---|
| Synopsis | Enable Cisco discovery protocol |
| Context | configure service pw-template string l2pt termination protocols cdp <i>boolean</i> |
| Tree | cdp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

dtp *boolean*

| | |
|------------|---|
| Synopsis | Enable dynamic trunking protocol |
| Context | configure service pw-template string l2pt termination protocols dtp <i>boolean</i> |
| Tree | dtp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pagp *boolean*

| | |
|------------|---|
| Synopsis | Enable port aggregation protocol |
| Context | configure service pw-template <i>string</i> l2pt termination protocols pagp <i>boolean</i> |
| Tree | pagp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

stp *boolean*

| | |
|------------|--|
| Synopsis | Enable all spanning tree protocols |
| Context | configure service pw-template <i>string</i> l2pt termination protocols stp <i>boolean</i> |
| Tree | stp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

udld *boolean*

| | |
|------------|---|
| Synopsis | Enable unidirectional link detection |
| Context | configure service pw-template <i>string</i> l2pt termination protocols udld <i>boolean</i> |
| Tree | udld |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vtp *boolean*

| | |
|------------|--|
| Synopsis | Enable virtual trunk protocol |
| Context | configure service pw-template <i>string</i> l2pt termination protocols vtp <i>boolean</i> |
| Tree | vtp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

provisioned-sdp *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Provisioned SDP type |
| Context | configure service pw-template <i>string</i> provisioned-sdp <i>keyword</i> |
| Tree | provisioned-sdp |
| Options | use, prefer |
| Introduced | 16.0.R1 |
| Platforms | All |

pw-template-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | PW Template Id |
| Context | configure service pw-template <i>string</i> pw-template-id <i>number</i> |
| Tree | pw-template-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

sdp-exclude [[group-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for sdp-exclude |
| Context | configure service pw-template <i>string</i> sdp-exclude <i>reference</i> |
| Tree | sdp-exclude |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-name] *reference*

| | |
|----------|----------------|
| Synopsis | SDP group name |
|----------|----------------|

| | |
|------------|---|
| Context | configure service pw-template string sdp-exclude reference |
| Tree | sdp-exclude |
| Reference | configure service sdp-group group-name string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

sdp-include [[group-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for sdp-include |
| Context | configure service pw-template string sdp-include reference |
| Tree | sdp-include |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-name] *reference*

| | |
|------------|---|
| Synopsis | SDP group name |
| Context | configure service pw-template string sdp-include reference |
| Tree | sdp-include |
| Reference | configure service sdp-group group-name string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

split-horizon-group

| | |
|------------|---|
| Synopsis | Enter the split-horizon-group context |
| Context | configure service pw-template string split-horizon-group |
| Tree | split-horizon-group |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service pw-template <i>string</i> split-horizon-group description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|--|
| Synopsis | Enter the fdb context |
| Context | configure service pw-template <i>string</i> split-horizon-group fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

saps

| | |
|------------|---|
| Synopsis | Enter the saps context |
| Context | configure service pw-template <i>string</i> split-horizon-group fdb saps |
| Tree | saps |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|------------|---|
| Synopsis | Enable automatic update of MAC protect list |
| Context | configure service pw-template <i>string</i> split-horizon-group fdb saps auto-learn-mac-protect <i>boolean</i> |
| Tree | auto-learn-mac-protect |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

discard-unprotected-dest-mac *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable unprotected dest MAC restriction |
| Context | configure service pw-template <i>string</i> split-horizon-group fdb saps discard-unprotected-dest-mac <i>boolean</i> |
| Tree | discard-unprotected-dest-mac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|---|
| Synopsis | Action for protected source MAC restriction |
| Context | configure service pw-template <i>string</i> split-horizon-group fdb saps protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sap-oper-down, alarm-only, discard |
| Introduced | 16.0.R1 |
| Platforms | All |

name *string*

| | |
|---------------|---|
| Synopsis | Split horizon group name to which the SDP belongs |
| Context | configure service pw-template <i>string</i> split-horizon-group name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

stp

| | |
|------------|--|
| Synopsis | Enter the stp context |
| Context | configure service pw-template <i>string</i> stp |
| Tree | stp |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of STP |
| Context | configure service pw-template <i>string</i> stp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

auto-edge *boolean*

| | |
|------------|---|
| Synopsis | Enable automatic detection of edge port characteristics |
| Context | configure service pw-template <i>string</i> stp auto-edge <i>boolean</i> |
| Tree | auto-edge |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

edge-port *boolean*

| | |
|------------|---|
| Synopsis | Designate SAP or SDP as an edge port |
| Context | configure service pw-template <i>string</i> stp edge-port <i>boolean</i> |
| Tree | edge-port |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

link-type *keyword*

| | |
|------------|---|
| Synopsis | Configure STP link-type |
| Context | configure service pw-template <i>string</i> stp link-type <i>keyword</i> |
| Tree | link-type |
| Default | pt-pt |
| Options | pt-pt, shared |
| Introduced | 16.0.R4 |

Platforms All

path-cost *number*

Synopsis Configure path-cost
Context **configure** [service pw-template](#) *string* **stp path-cost** *number*
Tree [path-cost](#)
Range 1 to 200000000
Default 10
Introduced 16.0.R4
Platforms All

priority *number*

Synopsis Configure STP priority
Context **configure** [service pw-template](#) *string* **stp priority** *number*
Tree [priority](#)
Range 0 to 255
Default 128
Introduced 16.0.R4
Platforms All

root-guard *boolean*

Synopsis Enable/disable STP root-guard
Context **configure** [service pw-template](#) *string* **stp root-guard** *boolean*
Tree [root-guard](#)
Default false
Introduced 16.0.R4
Platforms All

vc-type *keyword*

Synopsis Virtual circuit type associated with the SDP bind
Context **configure** [service pw-template](#) *string* **vc-type** *keyword*

| | |
|------------|-------------------------|
| Tree | vc-type |
| Default | ether |
| Options | ether, vlan |
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-vc-tag *number*

| | |
|------------|---|
| Synopsis | VLAN VC tag |
| Context | configure service pw-template <i>string</i> vlan-vc-tag <i>number</i> |
| Tree | vlan-vc-tag |
| Range | 0 to 4094 |
| Introduced | 16.0.R1 |
| Platforms | All |

sdp [[sdp-id](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the sdp list instance |
| Context | configure service sdp <i>number</i> |
| Tree | sdp |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-id] *number*

| | |
|------------|--|
| Synopsis | Service Distribution Point (SDP) identifier |
| Context | configure service sdp <i>number</i> |
| Tree | sdp |
| Range | 1 to 32767 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-policy *reference*

| | |
|-------------|---|
| Synopsis | Accounting policy associated with an SDP |
| Context | configure service sdp number accounting-policy reference |
| Tree | accounting-policy |
| Description | This command associates an accounting policy with an SDP.
When unconfigured, there is no accounting policy applied to the SDP. |
| Reference | configure log accounting-policy number |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SDP |
| Context | configure service sdp number admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

adv-mtu-override *boolean*

| | |
|------------|--|
| Synopsis | Override the advertised VC-type MTU using the SDP ID |
| Context | configure service sdp number adv-mtu-override boolean |
| Tree | adv-mtu-override |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-fragmentation *boolean*

| | |
|----------|---|
| Synopsis | Allow packets to be sent without setting DF bit |
| Context | configure service sdp number allow-fragmentation boolean |
| Tree | allow-fragmentation |
| Default | false |

Introduced 16.0.R1
Platforms All

bgp-tunnel *boolean*

Synopsis Allow use of BGP route tunnels to reach far-end nodes
Context **configure** [service sdp number](#) **bgp-tunnel** *boolean*
Tree [bgp-tunnel](#)
Default false
Introduced 16.0.R1
Platforms All

booking-factor *number*

Synopsis Percentage of SDP max available bandwidth for VLL CAC
Context **configure** [service sdp number](#) **booking-factor** *number*
Tree [booking-factor](#)
Range 0 to 1000
Default 100
Introduced 16.0.R1
Platforms All

class-forwarding

Synopsis Enable the **class-forwarding** context
Context **configure** [service sdp number](#) **class-forwarding**
Tree [class-forwarding](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of class-based forwarding
Context **configure** [service sdp number](#) **class-forwarding** **admin-state** *keyword*
Tree [admin-state](#)

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

default-lsp *reference*

| | |
|------------|--|
| Synopsis | Default LSP for class-based forwarding on the SDP |
| Context | configure service sdp number class-forwarding default-lsp reference |
| Tree | default-lsp |
| Reference | configure service sdp number lsp string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

enforce-diffserv-lsp-fc *boolean*

| | |
|------------|--|
| Synopsis | Enable RSVP validation of FC support by the LSP |
| Context | configure service sdp number class-forwarding enforce-diffserv-lsp-fc boolean |
| Tree | enforce-diffserv-lsp-fc |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fc [[fc-name](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the fc list instance |
| Context | configure service sdp number class-forwarding fc keyword |
| Tree | fc |
| Introduced | 16.0.R1 |
| Platforms | All |

[fc-name] *keyword*

| | |
|----------|---------------------------------|
| Synopsis | Forwarding class to LSP mapping |
|----------|---------------------------------|

| | |
|------------|---|
| Context | configure service sdp number class-forwarding fc keyword |
| Tree | fc |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

lsp reference

| | |
|------------|---|
| Synopsis | LSP name used to forward service packets |
| Context | configure service sdp number class-forwarding fc keyword lsp reference |
| Tree | lsp |
| Reference | configure service sdp number lsp string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast-lsp reference

| | |
|------------|--|
| Synopsis | LSP to forward all multicast traffic |
| Context | configure service sdp number class-forwarding multicast-lsp reference |
| Tree | multicast-lsp |
| Reference | configure service sdp number lsp string |
| Introduced | 16.0.R1 |
| Platforms | All |

collect-stats boolean

| | |
|------------|---|
| Synopsis | Collect accounting statistics for this SDP |
| Context | configure service sdp number collect-stats boolean |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

delivery-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Delivery type used by the SDP |
| Context | configure service sdp number delivery-type <i>keyword</i> |
| Tree | delivery-type |
| Options | gre, mpls, l2tpv3, gre-eth-bridged |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service sdp number description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

far-end

| | |
|------------|---|
| Synopsis | Enter the far-end context |
| Context | configure service sdp number far-end |
| Tree | far-end |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | IP address of the far end destination router |
|----------|--|

| | |
|------------|---|
| Context | configure service sdp number far-end ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | ip-address |
| Introduced | 16.0.R3 |
| Platforms | All |

keep-alive

| | |
|------------|--|
| Synopsis | Enter the keep-alive context |
| Context | configure service sdp number keep-alive |
| Tree | keep-alive |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of keepalive mechanism for the SDP |
| Context | configure service sdp number keep-alive admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Time period between SDP keepalive messages |
| Context | configure service sdp number keep-alive hello-time number |
| Tree | hello-time |
| Range | 1 to 3600 |
| Default | 10 |
| Units | seconds |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down-time *number*

| | |
|------------|--|
| Synopsis | Minimum time the SDP remains in the down state |
| Context | configure service sdp <i>number</i> keep-alive hold-down-time <i>number</i> |
| Tree | hold-down-time |
| Range | 0 to 3600 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-drop-count *number*

| | |
|------------|--|
| Synopsis | Maximum failed request attempts when SDP is down |
| Context | configure service sdp <i>number</i> keep-alive maximum-drop-count <i>number</i> |
| Tree | maximum-drop-count |
| Range | 1 to 5 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

message-length *number*

| | |
|------------|--|
| Synopsis | Length of the keepalive request messages transmitted |
| Context | configure service sdp <i>number</i> keep-alive message-length <i>number</i> |
| Tree | message-length |
| Range | 40 to 9198 |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|---|
| Synopsis | Time SDP waits before tearing down the session |
| Context | configure service sdp number keep-alive timeout number |
| Tree | timeout |
| Range | 1 to 10 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ldp *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable LDP-signaled LSPs |
| Context | configure service sdp number ldp boolean |
| Tree | ldp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

local-end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Local end address of tunnel defined by the SDP |
| Context | configure service sdp number local-end (ipv4-address-no-zone ipv6-address-no-zone) |
| Tree | local-end |
| Introduced | 16.0.R1 |
| Platforms | All |

lsp [*lsp-name*] *string*

| | |
|----------------|---|
| Synopsis | Add a list entry for lsp |
| Context | configure service sdp <i>number lsp string</i> |
| Tree | lsp |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[lsp-name] *string*

| | |
|---------------|---|
| Synopsis | LSP name to associate with the SDP |
| Context | configure service sdp <i>number lsp string</i> |
| Tree | lsp |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

metric *number*

| | |
|------------|--|
| Synopsis | Metric used in tunnel table manager for decision making |
| Context | configure service sdp <i>number metric number</i> |
| Tree | metric |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

mixed-lsp-mode

| | |
|------------|---|
| Synopsis | Enable the mixed-lsp-mode context |
| Context | configure service sdp <i>number mixed-lsp-mode</i> |
| Tree | mixed-lsp-mode |
| Introduced | 16.0.R1 |
| Platforms | All |

revert-time (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Delay before SDP can revert to higher priority LSP type |
| Context | configure <i>service sdp number mixed-lsp-mode revert-time</i> (<i>number</i> <i>keyword</i>) |
| Tree | revert-time |
| Range | 1 to 600 |
| Default | immediate |
| Units | seconds |
| Options | never, immediate |
| Introduced | 16.0.R1 |
| Platforms | All |

network-domain *reference*

| | |
|------------|---|
| Synopsis | Network domain name associated with the SDP |
| Context | configure <i>service sdp number network-domain reference</i> |
| Tree | network-domain |
| Reference | configure <i>router string network-domains network-domain string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

path-mtu *number*

| | |
|------------|--|
| Synopsis | Maximum Transmission Unit (MTU) the SDP can transmit |
| Context | configure <i>service sdp number path-mtu number</i> |
| Tree | path-mtu |
| Range | 576 to 9782 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

pbb-etype *string*

| | |
|----------|---|
| Synopsis | Ethertype used for PBB |
| Context | configure <i>service sdp number pbb-etype string</i> |

| | |
|---------------|---------------------------|
| Tree | pbb-etype |
| String Length | 5 to 6 |
| Default | 0x88E7 |
| Introduced | 16.0.R1 |
| Platforms | All |

pw-port

| | |
|------------|---|
| Synopsis | Enter the pw-port context |
| Context | configure service sdp number pw-port |
| Tree | pw-port |
| Introduced | 16.0.R4 |
| Platforms | All |

binding-port *string*

| | |
|------------|---|
| Synopsis | Binding port |
| Context | configure service sdp number pw-port binding-port string |
| Tree | binding-port |
| Introduced | 16.0.R4 |
| Platforms | All |

sdp-group [[group-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for sdp-group |
| Context | configure service sdp number sdp-group reference |
| Tree | sdp-group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-name] *reference*

| | |
|----------|---|
| Synopsis | SDP administrative group name |
| Context | configure service sdp number sdp-group reference |
| Tree | sdp-group |

| | |
|------------|---|
| Reference | configure service sdp-group <i>group-name string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

signaling *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Signaling protocol used to obtain pseudowire labels |
| Context | configure service sdp <i>number signaling keyword</i> |
| Tree | signaling |
| Description | <p>This command specifies the signaling protocol used to obtain the ingress and egress pseudowire labels in frames transmitted and received on the SDP. The signaling value can only be changed while the administrative status of the SDP is down. Additionally, the signaling can only be changed on an SDP if the SDP is not in use by BGP-AD or BGP-VPLS. BGP signaling can only be enabled if the SDP does not already have pseudowires signaled over it. Also, BGP signaling is not supported with mixed mode LSP SDPs.</p> <p>Note: If the tldp option is selected as the mechanism for exchanging service labels over an MPLS or GRE SDP and the T-LDP session is automatically established, an explicit T-LDP session that is subsequently configured takes precedence over the automatic T-LDP session. However, if the explicit, manually-configured session is then removed, the system does not revert to the automatic session and the automatic session is also deleted. To address this, recreate the T-LDP session by using the admin-state command to administratively disable and then enable the SDP.</p> |
| Options | off, tldp, bgp |
| Introduced | 16.0.R1 |
| Platforms | All |

source-bmac-lsb

| | |
|------------|--|
| Synopsis | Enter the source-bmac-lsb context |
| Context | configure service sdp <i>number source-bmac-lsb</i> |
| Tree | source-bmac-lsb |
| Introduced | 16.0.R1 |
| Platforms | All |

control-pw-vc-id *number*

| | |
|------------|---|
| Synopsis | VC ID of the control pseudowire |
| Context | configure service sdp <i>number</i> source-bmac-lsb control-pw-vc-id <i>number</i> |
| Tree | control-pw-vc-id |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

value *string*

| | |
|------------|--|
| Synopsis | 16 least significant bits of virtual backbone MAC |
| Context | configure service sdp <i>number</i> source-bmac-lsb value <i>string</i> |
| Tree | value |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-isis *boolean*

| | |
|------------|--|
| Synopsis | Enable Segment Routing for IS-IS |
| Context | configure service sdp <i>number</i> sr-isis <i>boolean</i> |
| Tree | sr-isis |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-ospf *boolean*

| | |
|------------|--|
| Synopsis | Enable an MPLS SDP of LSP type OSPF Segment Routing |
| Context | configure service sdp <i>number</i> sr-ospf <i>boolean</i> |
| Tree | sr-ospf |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tunnel-far-end (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | System address of the far-end router for the SDP |
| Context | configure service sdp number tunnel-far-end (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | tunnel-far-end |
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-vc-etype *string*

| | |
|---------------|---|
| Synopsis | VLAN VC Ethertype |
| Context | configure service sdp number vlan-vc-etype <i>string</i> |
| Tree | vlan-vc-etype |
| String Length | 5 to 6 |
| Default | 0x8100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weighted-ecmp *boolean*

| | |
|------------|--|
| Synopsis | Allow weighted load-balancing on an SDP |
| Context | configure service sdp number weighted-ecmp <i>boolean</i> |
| Tree | weighted-ecmp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sdp-group

| | |
|----------|------------------------------------|
| Synopsis | Enter the sdp-group context |
| Context | configure service sdp-group |

| | |
|------------|---------------------------|
| Tree | sdp-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name [[group-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the group-name list instance |
| Context | configure service sdp-group group-name <i>string</i> |
| Tree | group-name |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-name] *string*

| | |
|---------------|---|
| Synopsis | SDP administrative group name |
| Context | configure service sdp-group group-name <i>string</i> |
| Tree | group-name |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

value *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Unique group value associated with the SDP admin group |
| Context | configure service sdp-group group-name <i>string</i> value <i>number</i> |
| Tree | value |
| Range | 0 to 31 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

system

| | |
|------------|---------------------------------|
| Synopsis | Enter the system context |
| Context | configure service system |
| Tree | system |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp

| | |
|------------|-------------------------------------|
| Synopsis | Enter the bgp context |
| Context | configure service system bgp |
| Tree | bgp |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn

| | |
|------------|--|
| Synopsis | Enter the evpn context |
| Context | configure service system bgp evpn |
| Tree | evpn |
| Introduced | 16.0.R1 |
| Platforms | All |

ad-per-es-route

| | |
|------------|--|
| Synopsis | Enter the ad-per-es-route context |
| Context | configure service system bgp evpn ad-per-es-route |
| Tree | ad-per-es-route |
| Introduced | 16.0.R1 |
| Platforms | All |

extended-evi-range *boolean*

| | |
|----------|--|
| Synopsis | Reserve extended RD comm-values for AD per-ES routes |
|----------|--|

| | |
|-------------|--|
| Context | configure service system bgp evpn ad-per-es-route extended-evi-range <i>boolean</i> |
| Tree | extended-evi-range |
| Description | When configured to true , the system reserves the Route Distinguisher (RD) comm-values 1 to 65535 out of the type 1 RD that is used for AD per-ES routes. If ad-per-es-route route-target-type is also configured to evi-route-target-set , the system can pack the maximum number of EVI route targets in the AD per-ES routes

When configured to false , this command only reserves comm-values 1 to 512. |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

route-distinguisher-ip-address *string*

| | |
|------------|---|
| Synopsis | IP address for route distinguisher for EVPN AD-ES routes |
| Context | configure service system bgp evpn ad-per-es-route route-distinguisher-ip-address <i>string</i> |
| Tree | route-distinguisher-ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

route-target-type *keyword*

| | |
|------------|---|
| Synopsis | Method for the AD per-ES routes advertisement |
| Context | configure service system bgp evpn ad-per-es-route route-target-type <i>keyword</i> |
| Tree | route-target-type |
| Default | evi-route-target |
| Options | evi-route-target, evi-route-target-set |
| Introduced | 16.0.R1 |
| Platforms | All |

ethernet-segment [[ethernet-segment-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the ethernet-segment list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> |
| Tree | ethernet-segment |
| Max. Instances | 4095 |

Introduced 16.0.R1
 Platforms All

[**ethernet-segment-name**] *string*

Synopsis Specify name for Ethernet segment
 Context **configure service system bgp evpn ethernet-segment** *string*
 Tree [ethernet-segment](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

ac-df-capability *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis AC-influenced DF election capability
 Context **configure service system bgp evpn ethernet-segment** *string ac-df-capability* *keyword*
 Tree [ac-df-capability](#)
 Description This command configures the Attachment Circuit-influenced (AC-influenced) designated forwarder (DF) election capability (AC-DF) into the DF election for the Ethernet Segment (ES).
 AC-DF supports EVPN Auto-Discovery per EVI/ES (AD per EVI/ES) routes for a specific PE, to ensure the PE is included in the candidate DF election list.
 When AC-DF is excluded on a specific ES, the presence or absence of the AD per EVI/ES routes from the ES peers does not modify the candidate DF election list for the ES. Excluding the AC-DF is recommended in ESs that use an operational group monitored by the access LAG to signal the standby LACP or to power-off.
 Default include
 Options include, exclude
 Introduced 21.5.R1
 Platforms All

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the Ethernet segment instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

association

| | |
|------------|--|
| Synopsis | Enter the association context |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association |
| Tree | association |
| Introduced | 16.0.R1 |
| Platforms | All |

lag [[lag-name](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the lag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag <i>reference</i> |
| Tree | lag |
| Max. Instances | 1 |
| Notes | The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop . |
| Introduced | 16.0.R1 |
| Platforms | All |

[lag-name] *reference*

| | |
|-----------|---|
| Synopsis | LAG multi-homed with the Ethernet segment entry |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag <i>reference</i> |
| Tree | lag |
| Reference | configure lag <i>string</i> |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 21.2.R1 |
| Platforms | All |

virtual-ranges

| | |
|------------|--|
| Synopsis | Enter the virtual-ranges context |
| Context | configure service system bgp evpn ethernet-segment string association lag reference
virtual-ranges |
| Tree | virtual-ranges |
| Introduced | 16.0.R4 |
| Platforms | All |

dot1q

| | |
|------------|--|
| Synopsis | Enter the dot1q context |
| Context | configure service system bgp evpn ethernet-segment string association lag reference
virtual-ranges dot1q |
| Tree | dot1q |
| Introduced | 16.0.R4 |
| Platforms | All |

q-tag [[start](#)] (*number* | *keyword*)

| | |
|----------------|---|
| Synopsis | Enter the q-tag list instance |
| Context | configure service system bgp evpn ethernet-segment string association lag reference
virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) |
| Tree | q-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[\[start\]](#) (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Lower bound of the q-tag VLAN ID range |
|----------|--|

| | |
|------------|---|
| Context | configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges dot1q q-tag (number keyword)</i> |
| Tree | q-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end (*number | keyword*)

| | |
|------------|--|
| Synopsis | Upper bound of the q-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges dot1q q-tag (number keyword) end (number keyword)</i> |
| Tree | end |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

qinq

| | |
|------------|---|
| Synopsis | Enter the qinq context |
| Context | configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges qinq</i> |
| Tree | qinq |
| Introduced | 16.0.R4 |
| Platforms | All |

s-tag [[start](#)] (*number | keyword*)

| | |
|----------|--|
| Synopsis | Enter the s-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association lag reference virtual-ranges qinq s-tag (number keyword)</i> |
| Tree | s-tag |

| | |
|----------------|---------|
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[start] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Lower bound of the s-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) |
| Tree | s-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Upper bound of the s-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>) |
| Tree | end |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

s-tag-c-tag [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Enter the s-tag-c-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |

| | |
|----------------|---------|
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[s-tag] (*number | keyword*)

| | |
|------------|---|
| Synopsis | Starting value of the qinq s-tag range associated with a virtual ethernet segment |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number keyword</i>) c-tag-start (<i>number keyword</i>) |
| Tree | s-tag-c-tag |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

c-tag-start (*number | keyword*)

| | |
|------------|---|
| Synopsis | Starting value of the qinq c-tag range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number keyword</i>) c-tag-start (<i>number keyword</i>) |
| Tree | s-tag-c-tag |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

c-tag-end (*number | keyword*)

| | |
|----------|---|
| Synopsis | End value of the qinq c-tag range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association lag reference virtual-ranges qinq s-tag-c-tag (<i>number keyword</i>) c-tag-start (<i>number keyword</i>) c-tag-end (<i>number keyword</i>) |
| Tree | c-tag-end |

| | |
|------------|----------------------------|
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

network-interconnect-vxlan [[network-interconnect-vxlan-id](#)] *number*

| | |
|----------------|---|
| Synopsis | Enter the network-interconnect-vxlan list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association network-interconnect-vxlan number</i> |
| Tree | network-interconnect-vxlan |
| Max. Instances | 1 |
| Notes | The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop . |
| Introduced | 16.0.R1 |
| Platforms | All |

[network-interconnect-vxlan-id] *number*

| | |
|------------|---|
| Synopsis | VXLAN instance ID associated with the virtual ES |
| Context | configure service system bgp evpn ethernet-segment <i>string association network-interconnect-vxlan number</i> |
| Tree | network-interconnect-vxlan |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

virtual-ranges

| | |
|----------|--|
| Synopsis | Enter the virtual-ranges context |
| Context | configure service system bgp evpn ethernet-segment <i>string association network-interconnect-vxlan number virtual-ranges</i> |
| Tree | virtual-ranges |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

service-id [[start](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the service-id list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i> virtual-ranges service-id <i>number</i> |
| Tree | service-id |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[start] *number*

| | |
|------------|--|
| Synopsis | Lower bound of the service ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i> virtual-ranges service-id <i>number</i> |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end *number*

| | |
|------------|---|
| Synopsis | Upper bound of the service ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association network-interconnect-vxlan <i>number</i> virtual-ranges service-id <i>number</i> end <i>number</i> |
| Tree | end |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

port [port-id] reference

| | |
|----------------|---|
| Synopsis | Enter the port list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association port <i>reference</i> |
| Tree | port |
| Max. Instances | 1 |
| Notes | The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop . |
| Introduced | 16.0.R1 |
| Platforms | All |

[port-id] reference

| | |
|------------|---|
| Synopsis | Port multi-homed with this Ethernet segment entry |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association port <i>reference</i> |
| Tree | port |
| Reference | configure port <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

virtual-ranges

| | |
|------------|---|
| Synopsis | Enter the virtual-ranges context |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association port <i>reference</i>
virtual-ranges |
| Tree | virtual-ranges |
| Introduced | 16.0.R4 |
| Platforms | All |

dot1q

| | |
|----------|---|
| Synopsis | Enter the dot1q context |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association port <i>reference</i>
virtual-ranges dot1q |

| | |
|------------|-----------------------|
| Tree | dot1q |
| Introduced | 16.0.R4 |
| Platforms | All |

q-tag [[start](#)] (*number | keyword*)

| | |
|----------------|---|
| Synopsis | Enter the q-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges dot1q q-tag</i> (<i>number keyword</i>) |
| Tree | q-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[start] (*number | keyword*)

| | |
|------------|---|
| Synopsis | Lower bound of the q-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges dot1q q-tag</i> (<i>number keyword</i>) |
| Tree | q-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end (*number | keyword*)

| | |
|----------|--|
| Synopsis | Upper bound of the q-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges dot1q q-tag</i> (<i>number keyword</i>) end (<i>number keyword</i>) |
| Tree | end |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is mandatory. |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

qinq

| | |
|------------|--|
| Synopsis | Enter the qinq context |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq</i> |
| Tree | qinq |
| Introduced | 16.0.R4 |
| Platforms | All |

s-tag [[start](#)] (*number | keyword*)

| | |
|----------------|---|
| Synopsis | Enter the s-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag (number keyword)</i> |
| Tree | s-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[\[start\]](#) (*number | keyword*)

| | |
|------------|---|
| Synopsis | Lower bound of the s-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag (number keyword)</i> |
| Tree | s-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Upper bound of the s-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag</i> (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>) |
| Tree | end |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

s-tag-c-tag [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

| | |
|----------------|---|
| Synopsis | Enter the s-tag-c-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag-c-tag</i> (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[s-tag] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Starting value of the qinq s-tag range associated with a virtual ethernet segment |
| Context | configure service system bgp evpn ethernet-segment <i>string association port reference virtual-ranges qinq s-tag-c-tag</i> (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

c-tag-start (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Starting value of the qinq c-tag range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

c-tag-end (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | End value of the qinq c-tag range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) c-tag-end (<i>number</i> <i>keyword</i>) |
| Tree | c-tag-end |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

pw-port [[pw-port-id](#)] *reference*

| | |
|----------------|--|
| Synopsis | Enter the pw-port list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port <i>reference</i> |
| Tree | pw-port |
| Max. Instances | 1 |
| Notes | The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop . |
| Introduced | 16.0.R4 |
| Platforms | All |

[pw-port-id] reference

| | |
|------------|--|
| Synopsis | Pw-port multi-homed with this Ethernet segment entry |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference |
| Tree | pw-port |
| Reference | configure pw-port number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

pw-port-headend boolean**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Control state of PW SAPs on PW port using EVPN |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference pw-port-headend boolean |
| Tree | pw-port-headend |
| Description | When configured to true , this command allows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port.

When configured to false , this command disallows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port. |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

virtual-ranges

| | |
|------------|---|
| Synopsis | Enter the virtual-ranges context |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference virtual-ranges |
| Tree | virtual-ranges |
| Introduced | 16.0.R4 |
| Platforms | All |

dot1q

| | |
|------------|--|
| Synopsis | Enter the dot1q context |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges dot1q |
| Tree | dot1q |
| Introduced | 16.0.R4 |
| Platforms | All |

q-tag [*start*] (*number* | *keyword*)

| | |
|----------------|---|
| Synopsis | Enter the q-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) |
| Tree | q-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[start] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Lower bound of the q-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) |
| Tree | q-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Upper bound of the q-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges dot1q q-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>) |

| | |
|------------|----------------------------|
| Tree | end |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

qinq

| | |
|------------|---|
| Synopsis | Enter the qinq context |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference virtual-ranges qinq |
| Tree | qinq |
| Introduced | 16.0.R4 |
| Platforms | All |

s-tag [[start](#)] (*number* | *keyword*)

| | |
|----------------|--|
| Synopsis | Enter the s-tag list instance |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) |
| Tree | s-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[[start](#)] (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Lower bound of the s-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) |
| Tree | s-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

end (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Upper bound of the s-tag VLAN ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag (<i>number</i> <i>keyword</i>) end (<i>number</i> <i>keyword</i>) |
| Tree | end |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

s-tag-c-tag [[s-tag](#)] (*number* | *keyword*) [c-tag-start](#) (*number* | *keyword*)

| | |
|----------------|---|
| Synopsis | Enter the s-tag-c-tag list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[s-tag] (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Starting value of the qinq s-tag range associated with a virtual ethernet segment |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

c-tag-start (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Starting value of the qinq c-tag range |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) |
| Tree | s-tag-c-tag |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

c-tag-end (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | End value of the qinq c-tag range |
| Context | configure service system bgp evpn ethernet-segment string association pw-port reference virtual-ranges qinq s-tag-c-tag (<i>number</i> <i>keyword</i>) c-tag-start (<i>number</i> <i>keyword</i>) c-tag-end (<i>number</i> <i>keyword</i>) |
| Tree | c-tag-end |
| Range | 0 to 4094 |
| Options | tag-*, null |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

sdp [[sdp-id](#)] *reference*

| | |
|----------------|--|
| Synopsis | Enter the sdp list instance |
| Context | configure service system bgp evpn ethernet-segment string association sdp <i>reference</i> |
| Tree | sdp |
| Max. Instances | 1 |

| | |
|------------|---|
| Notes | The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop . |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-id] *reference*

| | |
|------------|---|
| Synopsis | Sdp multi-homed with this Ethernet segment entry |
| Context | configure service system bgp evpn ethernet-segment <i>string association sdp reference</i> |
| Tree | sdp |
| Reference | configure service sdp <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

virtual-ranges

| | |
|------------|--|
| Synopsis | Enter the virtual-ranges context |
| Context | configure service system bgp evpn ethernet-segment <i>string association sdp reference virtual-ranges</i> |
| Tree | virtual-ranges |
| Introduced | 16.0.R4 |
| Platforms | All |

vc-id [*start*] *number*

| | |
|----------------|--|
| Synopsis | Enter the vc-id list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association sdp reference virtual-ranges vc-id</i> <i>number</i> |
| Tree | vc-id |
| Max. Instances | 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

[start] *number*

| | |
|------------|---|
| Synopsis | Lower bound of the VC-ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association sdp reference virtual-ranges vc-id number</i> |
| Tree | vc-id |
| Range | 1 to 4294967295 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

end *number*

| | |
|------------|--|
| Synopsis | Upper bound of the VC-ID range |
| Context | configure service system bgp evpn ethernet-segment <i>string association sdp reference virtual-ranges vc-id number end number</i> |
| Tree | end |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

vprn-next-hop [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|----------------|---|
| Synopsis | Enter the vprn-next-hop list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string association vprn-next-hop (ipv4-address-no-zone ipv6-address-no-zone)</i> |
| Tree | vprn-next-hop |
| Description | Commands in this list instance are used to associate an IPv4 or IPv6 address to an Ethernet segment. A virtual Ethernet segment using this VPRN next-hop association represents a Layer 3 Ethernet segment as described in <i>draft-sajassi-bess-evpn-ip-aliasing</i> . This IP address must be installed in the route table of the VPRN service identified by the EVI so that the Auto-Discovery per-ES or EVI routes for the ES are advertised. Only one VPRN next hop is supported per Ethernet segment. |
| Max. Instances | 1 |
| Notes | The following elements are part of a choice: lag , network-interconnect-vxlan , port , pw-port , sdp , or vprn-next-hop . |

Introduced 22.10.R1
 Platforms All

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis VPRN next-hop address
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [vprn-next-hop](#)
(ipv4-address-no-zone | ipv6-address-no-zone)
 Tree [vprn-next-hop](#)
 Notes This element is part of a list key.
 Introduced 22.10.R1
 Platforms All

virtual-ranges

Synopsis Enter the **virtual-ranges** context
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [vprn-next-hop](#)
(ipv4-address-no-zone | ipv6-address-no-zone) [virtual-ranges](#)
 Tree [virtual-ranges](#)
 Introduced 22.10.R1
 Platforms All

evi [[start](#)] *number*

Synopsis Add a list entry for **evi**
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [vprn-next-hop](#)
(ipv4-address-no-zone | ipv6-address-no-zone) [virtual-ranges](#) [evi](#) *number*
 Tree [evi](#)
 Max. 1
 Instances
 Introduced 22.10.R1
 Platforms All

[start] *number*

Synopsis EVI range start information

| | |
|------------|---|
| Context | configure service system bgp evpn ethernet-segment <i>string association vprn-next-hop (ipv4-address-no-zone ipv6-address-no-zone) virtual-ranges evi number</i> |
| Tree | evi |
| Range | 1 to 16777215 |
| Notes | This element is part of a list key. |
| Introduced | 22.10.R1 |
| Platforms | All |

auto-esi *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | EVPN Ethernet segment auto-ESI type |
| Context | configure service system bgp evpn ethernet-segment <i>string auto-esi keyword</i> |
| Tree | auto-esi |
| Description | This command configures the auto-ESI type to use in the Ethernet segment (ES).When type-1 is configured, a manual ESI cannot be configured and the ESI is automatically derived in accordance with the RFC 7432 ESI type 1 definition.When configured to none , a manual ESI must be configured. |
| Default | none |
| Options | none, type-1 |
| Introduced | 21.5.R1 |
| Platforms | All |

df-election

| | |
|------------|---|
| Synopsis | Enter the df-election context |
| Context | configure service system bgp evpn ethernet-segment <i>string df-election</i> |
| Tree | df-election |
| Introduced | 16.0.R1 |
| Platforms | All |

es-activation-timer *number*

| | |
|----------|---------------------------------------|
| Synopsis | Activation timer per Ethernet segment |
|----------|---------------------------------------|

| | |
|------------|--|
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election es-activation-timer <i>number</i> |
| Tree | es-activation-timer |
| Range | 0 to 100 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

manual

| | |
|------------|---|
| Synopsis | Enter the manual context |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual |
| Tree | manual |
| Introduced | 16.0.R1 |
| Platforms | All |

evi [[start](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the evi list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual evi <i>number</i> |
| Tree | evi |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[start\]](#) *number*

| | |
|------------|---|
| Synopsis | Lower bound of EVI range for which the PE is primary |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual evi <i>number</i> |
| Tree | evi |
| Range | 1 to 16777215 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

end number

| | |
|------------|---|
| Synopsis | Upper bound of EVI range for which the PE is primary |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual evi number end number |
| Tree | end |
| Range | 1 to 16777215 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

isid [start] number

| | |
|------------|---|
| Synopsis | Enter the isid list instance |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual isid number |
| Tree | isid |
| Introduced | 16.0.R1 |
| Platforms | All |

[start] number

| | |
|------------|---|
| Synopsis | Lower bound of ISID range for which the PE is primary |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual isid number |
| Tree | isid |
| Range | 1 to 16777215 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

end number

| | |
|----------|--|
| Synopsis | Upper bound of ISID range for which the PE is primary |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> df-election manual isid number end number |

| | |
|------------|----------------------------|
| Tree | end |
| Range | 1 to 16777215 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

preference

| | |
|------------|--|
| Synopsis | Enable the preference context |
| Context | configure service system bgp evpn ethernet-segment string df-election manual preference |
| Tree | preference |
| Introduced | 16.0.R1 |
| Platforms | All |

mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Method used to elect the DF |
| Context | configure service system bgp evpn ethernet-segment string df-election manual preference mode <i>keyword</i> |
| Tree | mode |
| Default | revertive |
| Options | revertive, non-revertive |
| Introduced | 16.0.R1 |
| Platforms | All |

value *number*

| | |
|----------|--|
| Synopsis | Preference that is used to elect the designated forwarder |
| Context | configure service system bgp evpn ethernet-segment string df-election manual preference value <i>number</i> |
| Tree | value |
| Range | 0 to 65535 |

| | |
|------------|---------|
| Default | 32767 |
| Introduced | 16.0.R1 |
| Platforms | All |

service-carving-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Mode of service carving enabled per EVPN associated with this Ethernet segment entry |
| Context | configure service system bgp evpn ethernet-segment <i>string df-election service-carving-mode keyword</i> |
| Tree | service-carving-mode |
| Default | auto |
| Options | auto, manual, off |
| Introduced | 16.0.R1 |
| Platforms | All |

esi *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Ethernet segment identifier |
| Context | configure service system bgp evpn ethernet-segment <i>string esi string</i> |
| Tree | esi |
| Introduced | 16.0.R1 |
| Platforms | All |

multi-homing-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Multi-homing mode of the Ethernet segment |
|----------|---|

| | |
|------------|---|
| Context | configure service system bgp evpn ethernet-segment <i>string</i> multi-homing-mode <i>keyword</i> |
| Tree | multi-homing-mode |
| Default | none |
| Options | none, single-active, single-active-no-esi-label, all-active |
| Introduced | 16.0.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|--|
| Synopsis | Operational group ID |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 19.10.R1 |
| Platforms | All |

orig-ip (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Originating IP address advertised in the ES route |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> orig-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | orig-ip |
| Introduced | 16.0.R4 |
| Platforms | All |

pbb

| | |
|------------|--|
| Synopsis | Enter the pbb context |
| Context | configure service system bgp evpn ethernet-segment <i>string</i> pbb |
| Tree | pbb |
| Introduced | 16.0.R1 |

Platforms All

es-bmac-table-size *number*

Synopsis Size of virtual backbone mac table for this ethernet segment

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [pbb](#) **es-bmac-table-size** *number*

Tree [es-bmac-table-size](#)

Range 1 to 511999

Default 8

Introduced 16.0.R1

Platforms All

source-bmac-lsb *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Least significant bytes of the B-MAC for packet source

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* [pbb](#) **source-bmac-lsb** *string*

Tree [source-bmac-lsb](#)

Introduced 16.0.R1

Platforms All

route-next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Next-hop IP address for ES and AD per ES routes

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ethernet-segment](#) *string* **route-next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [route-next-hop](#)

Introduced 16.0.R4

Platforms All

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Ethernet Segment type |
| Context | configure <i>service</i> <i>system</i> <i>bgp evpn ethernet-segment</i> <i>string</i> <i>type</i> <i>keyword</i> |
| Tree | <i>type</i> |
| Default | none |
| Options | none, virtual |
| Introduced | 16.0.R1 |
| Platforms | All |

etree-leaf-label *boolean*

| | |
|-------------|---|
| Synopsis | Enable E-Tree leaf label for PE |
| Context | configure <i>service</i> <i>system</i> <i>bgp evpn etree-leaf-label</i> <i>boolean</i> |
| Tree | <i>etree-leaf-label</i> |
| Description | <p>When configured to true, this command enables EVPN Ethernet-Tree (E-Tree) VPLS services on the router (not B-VPLS), allocates an E-Tree leaf label for the Provider Edge (PE) device, and configures the ILM entry. This command ensures that in-flight traffic can perform an ILM entry lookup at any time, and avoids discards when administratively enabling or disabling services, or reduces the timing window so that it does not occur during normal operation or configuration. The value for the E-Tree leaf label is set via the etree-leaf-label-value command.</p> <p>When configured to false, PE leaf labels are not supported. The bgp-evpn mpls admin-state command in the configure service epipe context cannot be administratively enabled if this command is set to false.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

etree-leaf-label-value (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Global E-tree leaf label for PE in EVPN E-Tree services |
| Context | configure <i>service</i> <i>system</i> <i>bgp evpn etree-leaf-label-value</i> (<i>number</i> <i>keyword</i>) |
| Tree | <i>etree-leaf-label-value</i> |

| | |
|------------|--------------|
| Range | 32 to 524526 |
| Default | dynamic |
| Options | dynamic |
| Introduced | 21.7.R1 |
| Platforms | All |

ip-prefix-routes

| | |
|------------|---|
| Synopsis | Enter the ip-prefix-routes context |
| Context | configure service system bgp evpn ip-prefix-routes |
| Tree | ip-prefix-routes |
| Introduced | 21.2.R1 |
| Platforms | All |

d-path-length-ignore *boolean*

| | |
|------------|---|
| Synopsis | Ignore D-PATH length for BGP path selection of EVPN-IFF |
| Context | configure service system bgp evpn ip-prefix-routes d-path-length-ignore <i>boolean</i> |
| Tree | d-path-length-ignore |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

iff-attribute-uniform-propagation *boolean*

| | |
|-------------|--|
| Synopsis | Enable uniform propagation of BGP attributes |
| Context | configure service system bgp evpn ip-prefix-routes iff-attribute-uniform-propagation <i>boolean</i> |
| Tree | iff-attribute-uniform-propagation |
| Description | When configured to true , this command enables the uniform propagation of BGP attributes for EVPN-IFF (Interfaceful) routes. EVPN-IFF is used in R-VPLS services with bgp-evpn ip-route-advertisement . When enabled, the received EVPN-IFF routes for the R-VPLS can be propagated with the original BGP path attributes into EVPN-IFL, IPVPN, EVPN-IFF (in other R-VPLS services) or BGP IP routes advertised for the attached VPRN. The command also enables the attribute propagation in the opposite direction, for example, from EVPN-IFL/IPVPN/IP/EVPN-IFF routes into EVPN-IFF routes. |

The propagation follows the uniform mode defined in draft-ietf-bess-evpn-ipvpn-interworking.

When configured to **false**, this command re-originates the BGP Path Attributes when propagating EVPN-IFF routes into other Inter-Subnet Forwarding families.

| | |
|------------|---------|
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

iff-bgp-path-selection *boolean*

| | |
|-------------|---|
| Synopsis | Enable BGP path selection for EVPN-IFF routes |
| Context | configure service system bgp evpn ip-prefix-routes iff-bgp-path-selection <i>boolean</i> |
| Tree | iff-bgp-path-selection |
| Description | <p>When configured to true, this command enables the EVPN-IFF routes to be ordered and selected in a similar manner as IPVPN or EVPN-IFL routes, that is, based on the regular BGP path selection process.</p> <p>When configured to false, this command makes the system order EVPN-IFF routes based on their {RVPLS Iindex, RD, Ethernet Tag}. For example, if two EVPN-IFF routes are received for the same prefix on the same R-VPLS and with different RDs (Route Distinguishers), the route with the lowest RD is selected.</p> |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

multicast-leave-sync-propagation *number*

| | |
|-------------|---|
| Synopsis | Multicast leave group synchronization delay |
| Context | configure service system bgp evpn multicast-leave-sync-propagation <i>number</i> |
| Tree | multicast-leave-sync-propagation |
| Description | <p>This command configures the additional amount of time that the system waits before removing a multicast state that was synchronized in an Ethernet Segment via Multicast Join or Leave Synch routes. This value represents a delta corresponding to the time it takes for a BGP advertisement to propagate to ES peers.</p> <p>The node triggering the route computes the maximum response time as the product of the locally configured values, Last Member Query Count and Last Member Query Interval, and adds the delta value to the maximum response time. The query count value is configured in the configure services vrpn igmp robust-count command. The query interval value is taken from the configure service vpls sap igmp-snooping last-member-query-interval or the configure service vpls spoke-sdp igmp-snooping last-member-query-interval configuration, depending on the Ethernet Segment.</p> |

Increasing the maximum response time by this value can help minimize the churn of removing and recreating the state on the node.

This value should be configured consistently in all ES peers.

| | |
|------------|----------|
| Range | 0 to 300 |
| Default | 5 |
| Units | seconds |
| Introduced | 20.7.R1 |
| Platforms | All |

route-distinguisher *string*

| | |
|------------|--|
| Synopsis | Route distinguisher for ES routes |
| Context | configure service system bgp evpn route-distinguisher <i>string</i> |
| Tree | route-distinguisher |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-auto-rd-range

| | |
|------------|---|
| Synopsis | Enter the bgp-auto-rd-range context |
| Context | configure service system bgp-auto-rd-range |
| Tree | bgp-auto-rd-range |
| Introduced | 16.0.R1 |
| Platforms | All |

community-value

| | |
|------------|---|
| Synopsis | Enter the community-value context |
| Context | configure service system bgp-auto-rd-range community-value |
| Tree | community-value |
| Introduced | 16.0.R1 |
| Platforms | All |

end *number*

| | |
|----------|--|
| Synopsis | Upper bound of BGP route distinguisher community range |
|----------|--|

| | |
|------------|---|
| Context | configure service system bgp-auto-rd-range community-value end <i>number</i> |
| Tree | end |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

start number

| | |
|------------|---|
| Synopsis | Lower bound of BGP route distinguisher community range |
| Context | configure service system bgp-auto-rd-range community-value start <i>number</i> |
| Tree | start |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address string

| | |
|------------|--|
| Synopsis | IP address used for selecting the route distinguisher |
| Context | configure service system bgp-auto-rd-range ip-address <i>string</i> |
| Tree | ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

extended-default-qinq-sap-lookup boolean

| | |
|------------|---|
| Synopsis | Control the forwarding of the packets |
| Context | configure service system extended-default-qinq-sap-lookup <i>boolean</i> |
| Tree | extended-default-qinq-sap-lookup |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

fdb

| | |
|----------|-------------------------------------|
| Synopsis | Enter the fdb context |
| Context | configure service system fdb |

| | |
|------------|---------------------|
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

table-size *number*

| | |
|-------------|--|
| Synopsis | Maximum FDB entries in the system |
| Context | configure service system fdb table-size <i>number</i> |
| Tree | table-size |
| Description | This command determines the maximum number of MAC entries in the forwarding database (FDB) for the system instance on this node.

Do not configure the table-size command. This command is automatically initialized by SR OS on boot up. |
| Range | 4095 to 2047999 |
| Introduced | 16.0.R1 |
| Platforms | All |

gre-eth-bridged

| | |
|------------|---|
| Synopsis | Enter the gre-eth-bridged context |
| Context | configure service system gre-eth-bridged |
| Tree | gre-eth-bridged |
| Introduced | 16.0.R1 |
| Platforms | All |

tunnel-termination [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Enter the tunnel-termination list instance |
| Context | configure service system gre-eth-bridged tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | tunnel-termination |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Tunnel end-point IP address in the SR OS node |
| Context | configure service system gre-eth-bridged tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | tunnel-termination |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

fpe-id *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | FPE ID |
| Context | configure service system gre-eth-bridged tunnel-termination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) fpe-id <i>reference</i> |
| Tree | fpe-id |
| Reference | configure fwd-path-ext fpe <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

pw-port-list

| | |
|------------|--|
| Synopsis | Enter the pw-port-list context |
| Context | configure service system pw-port-list |
| Tree | pw-port-list |
| Introduced | 16.0.R6 |
| Platforms | VSR |

port [[port-id](#)] *string*

| | |
|----------|---|
| Synopsis | Add a list entry for port |
| Context | configure service system pw-port-list port <i>string</i> |

| | |
|------------|----------------------|
| Tree | port |
| Introduced | 16.0.R6 |
| Platforms | VSR |

[port-id] string

| | |
|------------|---|
| Synopsis | Port ID |
| Context | configure service system pw-port-list port <i>string</i> |
| Tree | port |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R6 |
| Platforms | VSR |

vpn-gre-source-ip string

| | |
|------------|---|
| Synopsis | VPN GRE source ip-address |
| Context | configure service system vpn-gre-source-ip <i>string</i> |
| Tree | vpn-gre-source-ip |
| Introduced | 16.0.R4 |
| Platforms | All |

vxlan

| | |
|------------|---|
| Synopsis | Enter the vxlan context |
| Context | configure service system vxlan |
| Tree | vxlan |
| Introduced | 16.0.R1 |
| Platforms | All |

assisted-replication

| | |
|------------|--|
| Synopsis | Enter the assisted-replication context |
| Context | configure service system vxlan assisted-replication |
| Tree | assisted-replication |
| Introduced | 16.0.R1 |

Platforms All

ip-address *string*

Synopsis IP address for assisted replication in the router
 Context **configure service system vxlan assisted-replication ip-address** *string*
 Tree [ip-address](#)
 Introduced 16.0.R1
 Platforms All

tunnel-termination [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **tunnel-termination** list instance
 Context **configure service system vxlan tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [tunnel-termination](#)
 Introduced 16.0.R1
 Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Non-system IP address that terminates the VXLAN
 Context **configure service system vxlan tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 Tree [tunnel-termination](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

fpe-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FPE id for this entry

| | |
|------------|---|
| Context | configure service system vxlan tunnel-termination (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) <i>fpe-id reference</i> |
| Tree | fpe-id |
| Reference | configure fwd-path-ext fpe <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

template

| | |
|------------|-----------------------------------|
| Synopsis | Enter the template context |
| Context | configure service template |
| Tree | template |
| Introduced | 16.0.R1 |
| Platforms | All |

epipe-sap-template [*name*] *string*

| | |
|------------|--|
| Synopsis | Enter the epipe-sap-template list instance |
| Context | configure service template epipe-sap-template <i>string</i> |
| Tree | epipe-sap-template |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[*name*] *string*

| | |
|---------------|--|
| Synopsis | SAP template name |
| Context | configure service template epipe-sap-template <i>string</i> |
| Tree | epipe-sap-template |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service template epipe-sap-template <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service template epipe-sap-template <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service template epipe-sap-template <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service template epipe-sap-template <i>string</i> egress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac reference

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service template epipe-sap-template <i>string</i> egress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service template epipe-sap-template <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name reference

| | |
|------------|--|
| Synopsis | SAP egress QoS policy name to apply to the SAP |
| Context | configure service template epipe-sap-template <i>string</i> egress qos policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service template epipe-sap-template <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service template epipe-sap-template <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service template epipe-sap-template <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service template epipe-sap-template <i>string</i> ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac reference

| | |
|------------|--|
| Synopsis | MAC filter policy name |
| Context | configure service template epipe-sap-template <i>string</i> ingress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service template epipe-sap-template <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | SAP ingress QoS policy name to apply to the SAP |
| Context | configure service template epipe-sap-template <i>string</i> ingress qos policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queuing-type *keyword*

| | |
|------------|--|
| Synopsis | Queuing type |
| Context | configure service template epipe-sap-template <i>string</i> ingress qos queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

upnp

| | |
|-------------|---|
| Synopsis | Enter the upnp context |
| Context | configure service upnp |
| Tree | upnp |
| Description | Commands in this context configure Universal Plug 'n Play (UPnP) for the service. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the policy list instance |
| Context | configure service upnp policy <i>string</i> |
| Tree | <i>policy</i> |
| Description | Commands in this context configure the attributes of the UPnP policy. |
| Max. Instances | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | UPnP policy name |
| Context | configure service upnp policy <i>string</i> |
| Tree | <i>policy</i> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service upnp policy <i>string</i> description <i>string</i> |
| Tree | <i>description</i> |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mapping-limit *number*

| | |
|----------|---|
| Synopsis | Maximum number of UPnP mappings per subscriber |
| Context | configure service upnp policy <i>string</i> mapping-limit <i>number</i> |
| Tree | <i>mapping-limit</i> |

| | |
|------------|--|
| Range | 1 to 256 |
| Default | 256 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port number

| | |
|------------|---|
| Synopsis | HTTP TCP port to which the UPnP IGD listens |
| Context | configure service upnp policy string port number |
| Tree | port |
| Range | 1 to 65535 |
| Default | 5000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

strict-mode boolean

| | |
|-------------|---|
| Synopsis | Enable UPnP strict mode |
| Context | configure service upnp policy string strict-mode boolean |
| Tree | strict-mode |
| Description | When configured to true , this command enables UPnP strict mode, in which the system only allows changes to an existing UPnP mapping if the request comes from the same UPnP client. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vpls [service-name] string

| | |
|------------|--------------------------------------|
| Synopsis | Enter the vpls list instance |
| Context | configure service vpls string |
| Tree | vpls |
| Introduced | 16.0.R1 |
| Platforms | All |

[service-name] *string*

| | |
|---------------|---|
| Synopsis | Administrative service name |
| Context | configure service vpls <i>string</i> |
| Tree | vpls |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the service |
| Context | configure service vpls <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp [[bgp-instance](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the bgp list instance |
| Context | configure service vpls <i>string</i> bgp <i>number</i> |
| Tree | bgp |
| Introduced | 16.0.R1 |
| Platforms | All |

[bgp-instance] *number*

| | |
|------------|--|
| Synopsis | BGP instance |
| Context | configure service vpls <i>string</i> bgp <i>number</i> |
| Tree | bgp |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

adv-service-mtu *number*

Synopsis Advertised service MTU value

Context **configure** [service vpls string](#) [bgp number](#) **adv-service-mtu** *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.

Range 0 to 9782

Introduced 22.2.R1

Platforms All

pw-template-binding [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure** [service vpls string](#) [bgp number](#) **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

[pw-template-name] *reference*

Synopsis Policy name

Context **configure** [service vpls string](#) [bgp number](#) **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Reference **configure** [service pw-template](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

bfd-liveness *boolean*

| | |
|------------|--|
| Synopsis | Enable BFD |
| Context | configure service vpls string bgp number pw-template-binding reference bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-template *reference*

| | |
|------------|--|
| Synopsis | BFD template name for PW-Template binding |
| Context | configure service vpls string bgp number pw-template-binding reference bfd-template <i>reference</i> |
| Tree | bfd-template |
| Reference | configure bfd bfd-template <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

import-rt *string*

| | |
|----------------|--|
| Synopsis | Import route-target communities |
| Context | configure service vpls string bgp number pw-template-binding reference import-rt <i>string</i> |
| Tree | import-rt |
| String Length | 10 to 28 |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*

| | |
|----------|--|
| Synopsis | Operational group to monitor |
| Context | configure service vpls string bgp number pw-template-binding reference monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |

| | |
|------------|---|
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group |
| Context | configure service vpls <i>string</i> bgp number pw-template-binding <i>reference</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

split-horizon-group *string*

| | |
|---------------|---|
| Synopsis | Split horizon group |
| Context | configure service vpls <i>string</i> bgp number pw-template-binding <i>reference</i> split-horizon-group <i>string</i> |
| Tree | split-horizon-group |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

route-distinguisher (*keyword* | *vpn-route-distinguisher*)

| | |
|------------|--|
| Synopsis | High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI |
| Context | configure service vpls <i>string</i> bgp number route-distinguisher (<i>keyword</i> <i>vpn-route-distinguisher</i>) |
| Tree | route-distinguisher |
| Options | auto-rd |
| Introduced | 16.0.R1 |
| Platforms | All |

route-target

| | |
|------------|--|
| Synopsis | Enter the route-target context |
| Context | configure service vpls string bgp number route-target |
| Tree | route-target |
| Introduced | 16.0.R1 |
| Platforms | All |

export string

| | |
|---------------|--|
| Synopsis | Extended community name for default import policy |
| Context | configure service vpls string bgp number route-target export string |
| Tree | export |
| String Length | 10 to 28 |
| Introduced | 16.0.R1 |
| Platforms | All |

import string

| | |
|---------------|--|
| Synopsis | Extended community name for default import policy |
| Context | configure service vpls string bgp number route-target import string |
| Tree | import |
| String Length | 10 to 28 |
| Introduced | 16.0.R1 |
| Platforms | All |

vsi-export reference

| | |
|----------------|--|
| Synopsis | VSI export policies |
| Context | configure service vpls string bgp number vsi-export reference |
| Tree | vsi-export |
| Reference | configure policy-options policy-statement string |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

vsi-import *reference*

| | |
|----------------|--|
| Synopsis | VSI import policies |
| Context | configure service vpls string bgp number vsi-import reference |
| Tree | vsi-import |
| Reference | configure policy-options policy-statement string |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-ad

| | |
|------------|---|
| Synopsis | Enable the bgp-ad context |
| Context | configure service vpls string bgp-ad |
| Tree | bgp-ad |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BGP Auto-Discovery |
| Context | configure service vpls string bgp-ad admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

vpls-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VPLS identifier as a 8-byte route distinguisher |
| Context | configure service vpls string bgp-ad vpls-id string |
| Tree | vpls-id |
| Introduced | 16.0.R1 |
| Platforms | All |

vsi-id-prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VSI prefix value |
| Context | configure service vpls string bgp-ad vsi-id-prefix string |
| Tree | vsi-id-prefix |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-evpn

| | |
|------------|---|
| Synopsis | Enable the bgp-evpn context |
| Context | configure service vpls string bgp-evpn |
| Tree | bgp-evpn |
| Introduced | 16.0.R1 |
| Platforms | All |

accept-ivpls-evpn-flush *boolean*

| | |
|----------|---|
| Synopsis | Accept and process non-zero ethernet-tag MAC routes |
| Context | configure service vpls string bgp-evpn accept-ivpls-evpn-flush boolean |
| Tree | accept-ivpls-evpn-flush |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

evi number

| | |
|-------------|---|
| Synopsis | EVPN ID |
| Context | configure service vpls string bgp-evpn evi number |
| Tree | evi |
| Description | <p>This command configures a 2-byte EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>If not specified, the EVPN ID value is zero and no route distinguisher or route targets are auto-derived from it.</p> <p>If the EVI ID value is specified and no other route-distinguisher or route-target is configured in the service, the following rules apply:</p> <ul style="list-style-type: none"> • the route distinguisher is derived from <system_ip>:evi • the route target is derived from <autonomous-system>:evi <p>If VSI import and export policies are configured, the route target must be configured in the policies and those values take precedence over the auto-derived route targets. If bgp-ad vpls-id and bgp-evpn evi are both configured on the same service, the VPLS ID auto-derived route target or route distinguisher takes precedence over the values auto-derived from the EVI. Use the show service id bgp command to display the operational route target for a service.</p> |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-mtu-mismatch boolean

| | |
|-------------|---|
| Synopsis | Ignore MTU mismatch |
| Context | configure service vpls string bgp-evpn ignore-mtu-mismatch boolean |
| Tree | ignore-mtu-mismatch |
| Description | <p>When configured to true, the system ignores the received Layer 2 MTU in the L2 Attributes extended community of the IMET route for a peer.</p> <p>When configured to false, the system compares the local service MTU against the received Layer 2 MTU and if there is a mismatch, keeps the EVPN destination to the peer with operational state down.</p> |
| Default | false |
| Introduced | 23.3.R1 |

Platforms All

incl-mcast-orig-ip *string*

Synopsis Originating IP address
 Context **configure service vpls string bgp-evpn incl-mcast-orig-ip string**
 Tree [incl-mcast-orig-ip](#)
 Introduced 16.0.R1
 Platforms All

isid-route-target

Synopsis Enter the **isid-route-target** context
 Context **configure service vpls string bgp-evpn isid-route-target**
 Tree [isid-route-target](#)
 Introduced 16.0.R1
 Platforms All

range [[start](#)] *number*

Synopsis Enter the **range** list instance
 Context **configure service vpls string bgp-evpn isid-route-target range number**
 Tree [range](#)
 Max. Instances 8192
 Introduced 16.0.R1
 Platforms All

[start] *number*

Synopsis Lower bound of the ISID range
 Context **configure service vpls string bgp-evpn isid-route-target range number**
 Tree [range](#)
 Range 1 to 16777215
 Notes This element is part of a list key.

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the ISID range |
| Context | configure service vpls string <i>bgp-evpn isid-route-target range number end number</i> |
| Tree | <i>end</i> |
| Range | 1 to 16777215 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

route-target string**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Route for the ISID range |
| Context | configure service vpls string <i>bgp-evpn isid-route-target range number route-target string</i> |
| Tree | <i>route-target</i> |
| String Length | 10 to 28 |
| Introduced | 16.0.R1 |
| Platforms | All |

type keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Method used to support the PBB-EVPN ISID-based route target advertisement |
| Context | configure service vpls string <i>bgp-evpn isid-route-target range number type keyword</i> |
| Tree | <i>type</i> |
| Default | auto |

| | |
|------------|------------------|
| Options | auto, configured |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-duplication

| | |
|------------|---|
| Synopsis | Enter the mac-duplication context |
| Context | configure service vpls string bgp-evpn mac-duplication |
| Tree | mac-duplication |
| Introduced | 16.0.R1 |
| Platforms | All |

blackhole *boolean*

| | |
|------------|--|
| Synopsis | Enable black hole dup MAC configuration |
| Context | configure service vpls string bgp-evpn mac-duplication blackhole <i>boolean</i> |
| Tree | blackhole |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

detect

| | |
|------------|--|
| Synopsis | Enter the detect context |
| Context | configure service vpls string bgp-evpn mac-duplication detect |
| Tree | detect |
| Introduced | 16.0.R1 |
| Platforms | All |

num-moves *number*

| | |
|----------|--|
| Synopsis | BGP EVPN MAC duplication detection number of moves |
| Context | configure service vpls string bgp-evpn mac-duplication detect num-moves <i>number</i> |
| Tree | num-moves |
| Range | 3 to 10 |

| | |
|------------|---------|
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

window number

| | |
|------------|--|
| Synopsis | BGP EVPN MAC duplication detection window |
| Context | configure service vpls string bgp-evpn mac-duplication detect window number |
| Tree | window |
| Range | 1 to 15 |
| Default | 3 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

retry (number | keyword)

| | |
|------------|--|
| Synopsis | BGP EVPN MAC duplication retry |
| Context | configure service vpls string bgp-evpn mac-duplication retry (number keyword) |
| Tree | retry |
| Range | 2 to 60 |
| Default | 9 |
| Units | minutes |
| Options | never |
| Introduced | 16.0.R1 |
| Platforms | All |

mpls [bgp-instance] number

| | |
|------------|---|
| Synopsis | Enter the mpls list instance |
| Context | configure service vpls string bgp-evpn mpls number |
| Tree | mpls |
| Introduced | 16.0.R1 |
| Platforms | All |

[bgp-instance] number

| | |
|------------|---|
| Synopsis | BGP instance |
| Context | configure service vpls string bgp-evpn mpls number |
| Tree | mpls |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of BGP EVPN MPLS |
| Context | configure service vpls string bgp-evpn mpls number admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-bind-tunnel

| | |
|------------|--|
| Synopsis | Enter the auto-bind-tunnel context |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel |
| Tree | auto-bind-tunnel |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-flex-algo-fallback boolean

| | |
|----------|---|
| Synopsis | Enable flexible algorithm fallback |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel allow-flex-algo-fallback boolean |
| Tree | allow-flex-algo-fallback |

| | |
|-------------|--|
| Description | When configured to true , a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.
When configured to false , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

ecmp number

| | |
|------------|--|
| Synopsis | Maximum ECMP routes information |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel ecmp number |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |
| Introduced | 19.10.R1 |
| Platforms | All |

enforce-strict-tunnel-tagging boolean

| | |
|------------|--|
| Synopsis | Enable/disable enforcement of strict tunnel tagging |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel enforce-strict-tunnel-tagging boolean |
| Tree | enforce-strict-tunnel-tagging |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

resolution keyword

| | |
|----------|---|
| Synopsis | Resolution method for tunnel selection |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution keyword |
| Tree | resolution |
| Default | none |

| | |
|------------|-------------------|
| Options | none, filter, any |
| Introduced | 16.0.R1 |
| Platforms | All |

resolution-filter

| | |
|------------|---|
| Synopsis | Enter the resolution-filter context |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter |
| Tree | resolution-filter |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp *boolean*

| | |
|-------------|---|
| Synopsis | Use BGP tunneling for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter
bgp <i>boolean</i> |
| Tree | bgp |
| Description | When configured to true , BGP searches the BGP LSP for the address of the BGP next hop.

When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ldp *boolean*

| | |
|-------------|--|
| Synopsis | Use LDP tunneling for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter
ldp <i>boolean</i> |
| Tree | ldp |
| Description | When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.

When configured to false , LDP tunneling is not used for next-hop resolution. |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

mpls-fwd-policy *boolean*

| | |
|-------------|---|
| Synopsis | Use MPLS forwarding policy for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter mpls-fwd-policy <i>boolean</i> |
| Tree | mpls-fwd-policy |
| Description | When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.

When configured to false , the MPLS forwarding policy is not used for next-hop resolution. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

rib-api *boolean*

| | |
|-------------|---|
| Synopsis | Use RIB API gRPC service for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter rib-api <i>boolean</i> |
| Tree | rib-api |
| Description | When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.

When configured to false , the RIB API service tunnels are not used for next-hop resolution. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

rsvp *boolean*

| | |
|----------|--|
| Synopsis | Use RSVP tunneling for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter rsvp <i>boolean</i> |
| Tree | rsvp |

| | |
|-------------|---|
| Description | When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.

When configured to false , the RSVP LSP is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-isis boolean

| | |
|-------------|---|
| Synopsis | Use IS-IS SR tunneling for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-isis boolean |
| Tree | sr-isis |
| Description | When configured to true , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.

When configured to false , IS-IS tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sr-ospf boolean

| | |
|-------------|--|
| Synopsis | Use OSPF SR tunneling for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf boolean |
| Tree | sr-ospf |
| Description | When configured to true , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.

When configured to false , OSPF tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

sr-ospf3 *boolean*

Synopsis Use OSPFv3 SR tunneling for next-hop resolution

Context **configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf3 boolean**

Tree [sr-ospf3](#)

Description When configured to **true**, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.

When configured to **false**, OSPF3 tunneling is not used for next-hop resolution.

Default false

Introduced 19.10.R1

Platforms All

sr-policy *boolean*

Synopsis Use SR policies for next-hop resolution

Context **configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-policy boolean**

Tree [sr-policy](#)

Description When configured to **true**, this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.

When configured to **false**, SR policies are not used for next-hop resolution.

Default false

Introduced 19.5.R1

Platforms All

sr-te *boolean*

Synopsis Use SR-TE tunneling for next-hop resolution

Context **configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-te boolean**

Tree [sr-te](#)

| | |
|-------------|--|
| Description | When configured to true , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.
The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.
When configured to false , SR-TE tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

udp boolean

| | |
|-------------|--|
| Synopsis | Use MPLS over UDP tunneling for next-hop resolution |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel resolution-filter
udp boolean |
| Tree | udp |
| Description | When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.
When configured to false , MPLS over UDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

weighted-ecmp boolean

| | |
|-------------|--|
| Synopsis | Allow weighted load balancing |
| Context | configure service vpls string bgp-evpn mpls number auto-bind-tunnel weighted-ecmp
boolean |
| Tree | weighted-ecmp |
| Description | When configured to true , this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.
When configured to false , this command disables weighted ECMP for next-hop tunnel selection. |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | All |

control-word *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Allow use of the CW bit in the label message |
| Context | configure <i>service vpls string bgp-evpn mpls number control-word boolean</i> |
| Tree | <i>control-word</i> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

default-route-tag *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure <i>service vpls string bgp-evpn mpls number default-route-tag string</i> |
| Tree | <i>default-route-tag</i> |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

dynamic-egress-label-limit *boolean*

| | |
|-------------|---|
| Synopsis | Enables dynamic egress label limit |
| Context | configure service vpls string bgp-evpn mpls number dynamic-egress-label-limit <i>boolean</i> |
| Tree | dynamic-egress-label-limit |
| Description | <p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p> |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

ecmp *number*

| | |
|------------|--|
| Synopsis | Maximum ECMP routes information |
| Context | configure service vpls string bgp-evpn mpls number ecmp <i>number</i> |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label *boolean*

| | |
|------------|--|
| Synopsis | Allow use of entropy labels for spoke SDPs |
| Context | configure service vpls string bgp-evpn mpls number entropy-label <i>boolean</i> |
| Tree | entropy-label |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

evi-three-byte-auto-rt *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Auto-derive the BGP EVPN route target |
| Context | configure <i>service vpls string bgp-evpn mpls number evi-three-byte-auto-rt boolean</i> |
| Tree | <i>evi-three-byte-auto-rt</i> |
| Description | <p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p> |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

fdb

| | |
|------------|--|
| Synopsis | Enter the fdb context |
| Context | configure <i>service vpls string bgp-evpn mpls number fdb</i> |
| Tree | <i>fdb</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|----------|---|
| Synopsis | Relearn request for a protected MAC is received action |
| Context | configure <i>service vpls string bgp-evpn mpls number fdb protected-src-mac-violation-action keyword</i> |

| | |
|------------|--|
| Tree | protected-src-mac-violation-action |
| Options | discard |
| Introduced | 16.0.R1 |
| Platforms | All |

force-vc-forwarding *keyword*

| | |
|------------|---|
| Synopsis | VC forwarding action |
| Context | configure service vpls string bgp-evpn mpls number force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress-replication-bum-label *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use the same label as the one advertised for unicast traffic |
| Context | configure service vpls string bgp-evpn mpls number ingress-replication-bum-label <i>boolean</i> |
| Tree | ingress-replication-bum-label |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Multihoming mode |
| Context | configure service vpls string bgp-evpn mpls number mh-mode <i>keyword</i> |
| Tree | mh-mode |

| | |
|-------------|---|
| Description | This command configures each BGP-EVPN instance to behave as either network or access.

You can only configure one network instance for the service. If the service has a provider tunnel enabled, it requires a network instance. |
| Default | network |
| Options | access, network |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

oper-group *reference*

| | |
|------------|--|
| Synopsis | Operational group ID |
| Context | configure service vpls string bgp-evpn mpls number oper-group reference |
| Tree | oper-group |
| Reference | configure service oper-group string |
| Introduced | 19.10.R1 |
| Platforms | All |

route-next-hop

| | |
|-------------|--|
| Synopsis | Enter the route-next-hop context |
| Context | configure service vpls string bgp-evpn mpls number route-next-hop |
| Tree | route-next-hop |
| Description | Commands in this context configure the next hop of the EVPN routes. |
| Introduced | 19.10.R1 |
| Platforms | All |

ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | IP address of the next-hop for the service EVPN route |
| Context | configure service vpls string bgp-evpn mpls number route-next-hop ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | ip-address |

| | |
|------------|---|
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 19.10.R1 |
| Platforms | All |

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | System IPv4 address for service EVPN route next hop |
| Context | configure service vpls string bgp-evpn mpls number route-next-hop system-ipv4 |
| Tree | system-ipv4 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 19.10.R1 |
| Platforms | All |

system-ipv6



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | System IPv6 address for service EVPN route next hop |
| Context | configure service vpls string bgp-evpn mpls number route-next-hop system-ipv6 |
| Tree | system-ipv6 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 19.10.R1 |
| Platforms | All |

send-tunnel-encap

| | |
|------------|---|
| Synopsis | Enter the send-tunnel-encap context |
| Context | configure service vpls string bgp-evpn mpls number send-tunnel-encap |
| Tree | send-tunnel-encap |
| Introduced | 16.0.R1 |

Platforms All

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS encapsulation

Context **configure** [service vpls](#) [string](#) [bgp-evpn mpls](#) [number](#) [send-tunnel-encap mpls](#) *boolean*

Tree [mpls](#)

Default true

Introduced 16.0.R1

Platforms All

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS over UDP encapsulation

Context **configure** [service vpls](#) [string](#) [bgp-evpn mpls](#) [number](#) [send-tunnel-encap mpls-over-udp](#) *boolean*

Tree [mpls-over-udp](#)

Default false

Introduced 16.0.R1

Platforms All

split-horizon-group *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Split horizon group

Context **configure** [service vpls](#) [string](#) [bgp-evpn mpls](#) [number](#) [split-horizon-group](#) *reference*

Tree [split-horizon-group](#)

| | |
|-------------|---|
| Description | This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances. |
| Reference | configure service vpls string split-horizon-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

routes

| | |
|------------|--|
| Synopsis | Enter the routes context |
| Context | configure service vpls string bgp-evpn routes |
| Tree | routes |
| Introduced | 16.0.R1 |
| Platforms | All |

incl-mcast

| | |
|------------|---|
| Synopsis | Enter the incl-mcast context |
| Context | configure service vpls string bgp-evpn routes incl-mcast |
| Tree | incl-mcast |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-ingress-replication *boolean*

| | |
|------------|--|
| Synopsis | BGP EVPN IMET-IR route advertisement |
| Context | configure service vpls string bgp-evpn routes incl-mcast advertise-ingress-replication <i>boolean</i> |
| Tree | advertise-ingress-replication |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-l2-attributes *boolean*

| | |
|----------|--|
| Synopsis | Advertise L2 attributes |
| Context | configure service vpls string bgp-evpn routes incl-mcast advertise-l2-attributes <i>boolean</i> |

| | |
|-------------|--|
| Tree | advertise-l2-attributes |
| Description | <p>When configured to true, the service advertises of the Layer-2 Attributes extended community including:</p> <ul style="list-style-type: none"> • Service-MTU in the Layer 2 MTU field • C bit, which is set based on the configuration of the <code>control-word</code> command (when enabled, sets the C bit, otherwise it is unset) <p>Upon reception, the service compares the Layer 2 MTU for a peer with the local service MTU. If there is a mismatch, the EVPN destination is operational state down, except if the bgp-evpn ignore-mtu-mismatch command is enabled.</p> <p>The received C bit from a peer is compared with the local control-word setting. Upon a mismatch, the EVPN destination becomes operationally down.</p> <p>When configured to false, the router cannot advertise the Layer 2 Attributes extended community along with the Inclusive Multicast Ethernet Tag route for the service.</p> |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | All |

ip-prefix

| | |
|------------|--|
| Synopsis | Enter the ip-prefix context |
| Context | configure service vpls string bgp-evpn routes ip-prefix |
| Tree | ip-prefix |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise *boolean*

| | |
|------------|---|
| Synopsis | Status for the IP prefix routes advertisement |
| Context | configure service vpls string bgp-evpn routes ip-prefix advertise <i>boolean</i> |
| Tree | advertise |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

domain-id *string*

| | |
|----------|--|
| Synopsis | Domain ID of received BGP route before readvertisement |
|----------|--|

| | |
|-------------|--|
| Context | configure service vpls string <i>bgp-evpn routes ip-prefix domain-id string</i> |
| Tree | domain-id |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> |
| Introduced | 21.10.R1 |
| Platforms | All |

include-direct-interface-host *boolean*

| | |
|------------|---|
| Synopsis | Advertise the interface host address in EVPN |
| Context | configure service vpls string <i>bgp-evpn routes ip-prefix include-direct-interface-host boolean</i> |
| Tree | include-direct-interface-host |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

link-bandwidth

| | |
|----------|--|
| Synopsis | Enter the link-bandwidth context |
| Context | configure service vpls string <i>bgp-evpn routes ip-prefix link-bandwidth</i> |
| Tree | link-bandwidth |

| | |
|------------|---------|
| Introduced | 22.7.R1 |
| Platforms | All |

advertise

| | |
|------------|--|
| Synopsis | Enable the advertise context |
| Context | configure service vpls <i>string</i> bgp-evpn routes ip-prefix link-bandwidth advertise |
| Tree | advertise |
| Introduced | 22.7.R1 |
| Platforms | All |

max-dynamic-weight *number*

| | |
|------------|---|
| Synopsis | Maximum weight of the advertised evpn-iff route |
| Context | configure service vpls <i>string</i> bgp-evpn routes ip-prefix link-bandwidth advertise max-dynamic-weight <i>number</i> |
| Tree | max-dynamic-weight |
| Range | 1 to 128 |
| Default | 128 |
| Introduced | 22.7.R1 |
| Platforms | All |

weight (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Weight of the advertised evpn-iff route |
| Context | configure service vpls <i>string</i> bgp-evpn routes ip-prefix link-bandwidth advertise weight (<i>number</i> <i>keyword</i>) |
| Tree | weight |
| Range | 1 to 128 |
| Default | dynamic |
| Options | dynamic |
| Introduced | 22.7.R1 |
| Platforms | All |

weighted-ecmp *boolean*

| | |
|------------|--|
| Synopsis | Enable weighted ECMP |
| Context | configure service vpls string bgp-evpn routes ip-prefix link-bandwidth weighted-ecmp <i>boolean</i> |
| Tree | weighted-ecmp |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | All |

mac-ip

| | |
|------------|---|
| Synopsis | Enter the mac-ip context |
| Context | configure service vpls string bgp-evpn routes mac-ip |
| Tree | mac-ip |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise *boolean*

| | |
|------------|--|
| Synopsis | Status for the BGP-EVPN MAC/IP routes advertisement |
| Context | configure service vpls string bgp-evpn routes mac-ip advertise <i>boolean</i> |
| Tree | advertise |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

arp-nd-extended-community *boolean*

| | |
|-------------|---|
| Synopsis | Enable ARP/ND extended community |
| Context | configure service vpls string bgp-evpn routes mac-ip arp-nd-extended-community <i>boolean</i> |
| Tree | arp-nd-extended-community |
| Description | When configured to true , the system advertises the RFC9047 ARP/ND extended community along with the MAC/IP routes advertised for local static and dynamic proxy ARP or ND entries. The system also processes the ARP/ND extended community and selects the ARP or ND entries based on the immutable flag. |

When configured to **false**, the system does not advertise the RFC9047 ARP/ND extended community.

| | |
|------------|---------|
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | All |

cfm-mac *boolean*

| | |
|------------|--|
| Synopsis | Enable advertisement and withdrawal of MAC address |
| Context | configure service vpls string bgp-evpn routes mac-ip cfm-mac <i>boolean</i> |
| Tree | cfm-mac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

unknown-mac *boolean*

| | |
|------------|--|
| Synopsis | Enable advertisement of unknown MAC route in BGP |
| Context | configure service vpls string bgp-evpn routes mac-ip unknown-mac <i>boolean</i> |
| Tree | unknown-mac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sel-mcast

| | |
|------------|--|
| Synopsis | Enter the sel-mcast context |
| Context | configure service vpls string bgp-evpn routes sel-mcast |
| Tree | sel-mcast |
| Introduced | 19.10.R2 |
| Platforms | All |

advertise *boolean*

| | |
|----------|---|
| Synopsis | Advertise Selective Multicast Ethernet Tag routes |
| Context | configure service vpls string bgp-evpn routes sel-mcast advertise <i>boolean</i> |

| | |
|------------|---------------------------|
| Tree | advertise |
| Default | false |
| Introduced | 19.10.R2 |
| Platforms | All |

segment-routing-v6 [[bgp-instance](#)] *number*

| | |
|----------------|---|
| Synopsis | Enter the segment-routing-v6 list instance |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Max. Instances | 1 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[bgp-instance] *number*

| | |
|------------|---|
| Synopsis | BGP instance |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of segment routing over IPv6 |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-route-tag *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number default-route-tag string |
| Tree | default-route-tag |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

ecmp *number*

| | |
|------------|--|
| Synopsis | Maximum ECMP value configured on the service |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number ecmp number |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

evi-three-byte-auto-rt *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Auto-derive the BGP EVPN route target |
| Context | configure <i>service vpls string bgp-evpn segment-routing-v6 number evi-three-byte-auto-rt boolean</i> |
| Tree | <i>evi-three-byte-auto-rt</i> |
| Description | <p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).</p> <p>Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p> |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

fdb

| | |
|------------|--|
| Synopsis | Enter the fdb context |
| Context | configure <i>service vpls string bgp-evpn segment-routing-v6 number fdb</i> |
| Tree | <i>fdb</i> |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

protected-src-mac-violation-action *keyword*

| | |
|----------|---|
| Synopsis | Relearn request for a protected MAC is received action |
| Context | configure <i>service vpls string bgp-evpn segment-routing-v6 number fdb protected-src-mac-violation-action keyword</i> |

| | |
|------------|--|
| Tree | protected-src-mac-violation-action |
| Options | discard |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

force-vc-forwarding *keyword*

| | |
|-------------|--|
| Synopsis | Datapath forwarding to force vlan-vc-type |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Description | <p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the sap ingress vlan-translation command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p> |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

mh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Multihoming mode |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number mh-mode <i>keyword</i> |
| Tree | mh-mode |
| Default | network |
| Options | access, network |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

oper-group *reference*

| | |
|-------------|--|
| Synopsis | Operational group |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number oper-group reference |
| Tree | oper-group |
| Description | <p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> <p>The operational group will be down when it is applied on a BGP EVPN instance as well as:</p> <ul style="list-style-type: none"> • the service is admin-state disable • the BGP EVPN MPLS and VXLAN are admin-state disable • all the EVPN destinations in the instance are removed <p>When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. The ES operational group should be monitored on the LAG associated to the ES, along with single-active multi-homing, so that the NDF state can be signaled to the CE by LAG standby signaling.</p> |
| Reference | configure service oper-group string |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

resolution *keyword*

| | |
|------------|--|
| Synopsis | Resolution options for routes |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number resolution keyword |
| Tree | resolution |
| Default | route-table |
| Options | route-table, tunnel-table, fallback-tunnel-to-route-table |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

route-next-hop

| | |
|-------------|--|
| Synopsis | Enter the route-next-hop context |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop |
| Tree | route-next-hop |
| Description | Commands in this context configure the next hop of the EVPN routes. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP address of the next-hop for the service EVPN route |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ip-address |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

system-ipv4



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | System IPv4 address for service EVPN route next hop |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-next-hop system-ipv4 |
| Tree | system-ipv4 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

system-ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | System IPv6 address for service EVPN route next hop |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number route-next-hop system-ipv6 |
| Tree | system-ipv6 |
| Notes | The following elements are part of a choice: ip-address , system-ipv4 , or system-ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

source-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Source IPv6 address |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number source-address string |
| Tree | source-address |
| Description | <p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.</p> <p>A source IPv6 address must be configured in this context or in the base router context.</p> <p>The system does not check if the address entered is a valid local address.</p> |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

split-horizon-group *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Split horizon group |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number split-horizon-group reference |
| Tree | split-horizon-group |
| Description | This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances. |
| Reference | configure service vpls string split-horizon-group string |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

srv6

| | |
|------------|--|
| Synopsis | Enter the srv6 context |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number srv6 |
| Tree | srv6 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-locator *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Default route locator |
| Context | configure service vpls string bgp-evpn segment-routing-v6 number srv6 default-locator string |
| Tree | default-locator |
| Description | This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

instance *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Segment Routing SRv6 instance |
| Context | configure service vpls <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 <i>instance reference</i> |
| Tree | instance |
| Reference | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vxlan [[bgp-instance](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the vxlan list instance |
| Context | configure service vpls <i>string</i> bgp-evpn vxlan <i>number</i> |
| Tree | vxlan |
| Introduced | 16.0.R1 |
| Platforms | All |

[bgp-instance] *number*

| | |
|------------|--|
| Synopsis | BGP instance |
| Context | configure service vpls <i>string</i> bgp-evpn vxlan <i>number</i> |
| Tree | vxlan |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of VXLAN auto-bindings creation |
| Context | configure service vpls <i>string</i> bgp-evpn vxlan <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure service vpls string bgp-evpn vxlan number default-route-tag <i>string</i> |
| Tree | default-route-tag |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

ecmp *number*

| | |
|----------|--|
| Synopsis | Number of paths to reach a specified MAC address |
| Context | configure service vpls string bgp-evpn vxlan number ecmp <i>number</i> |
| Tree | ecmp |
| Range | 1 to 32 |
| Default | 1 |

| | |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms | All |

evi-three-byte-auto-rt *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Auto-derive the BGP EVPN route target |
| Context | configure <i>service vpls string bgp-evpn vxlan number evi-three-byte-auto-rt boolean</i> |
| Tree | <i>evi-three-byte-auto-rt</i> |
| Description | <p>When configured to true, the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).
Where:</p> <ul style="list-style-type: none"> • Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken • A=0 (for auto-derivation) • Type=4 (EVI-based route-target) • D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance • Service ID=3-octet EVI <p>When configured to false, route target derivation is not allowed.</p> |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

mh-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Multi-homing mode |
| Context | configure <i>service vpls string bgp-evpn vxlan number mh-mode keyword</i> |
| Tree | <i>mh-mode</i> |
| Default | access |

| | |
|------------|-----------------|
| Options | access, network |
| Introduced | 19.5.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group ID |
| Context | configure service vpls string bgp-evpn vxlan number oper-group reference |
| Tree | oper-group |
| Reference | configure service oper-group string |
| Introduced | 19.10.R1 |
| Platforms | All |

routes

| | |
|------------|---|
| Synopsis | Enter the routes context |
| Context | configure service vpls string bgp-evpn vxlan number routes |
| Tree | routes |
| Introduced | 19.5.R1 |
| Platforms | All |

auto-disc

| | |
|------------|---|
| Synopsis | Enter the auto-disc context |
| Context | configure service vpls string bgp-evpn vxlan number routes auto-disc |
| Tree | auto-disc |
| Introduced | 19.5.R1 |
| Platforms | All |

advertise *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|------------------------------------|
| Synopsis | Advertise routes on auto-discovery |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service vpls string bgp-evpn vxlan number routes auto-disc advertise boolean |
| Tree | advertise |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

send-incl-mcast-ir-on-ndf *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Allow IMET-IR on NDF |
| Context | configure service vpls string bgp-evpn vxlan number send-incl-mcast-ir-on-ndf boolean |
| Tree | send-incl-mcast-ir-on-ndf |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

send-tunnel-encap *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Send VXLAN value in encapsulation extended community |
| Context | configure service vpls string bgp-evpn vxlan number send-tunnel-encap boolean |
| Tree | send-tunnel-encap |
| Description | <p>When configured to true, this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities.</p> <p>When configured to false, no encapsulation extended community is sent.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

vxlan-instance *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | VXLAN instance |
| Context | configure service vpls string bgp-evpn vxlan number vxlan-instance reference |
| Tree | vxlan-instance |
| Reference | configure service vpls string vxlan instance number |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-mh-site [[site-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the bgp-mh-site list instance |
| Context | configure service vpls string bgp-mh-site string |
| Tree | bgp-mh-site |
| Introduced | 16.0.R1 |
| Platforms | All |

[site-name] *string*

| | |
|---------------|---|
| Synopsis | Name for the specific site |
| Context | configure service vpls string bgp-mh-site string |
| Tree | bgp-mh-site |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

activation-timer *number*

| | |
|----------|---|
| Synopsis | Time that the local sites are in standby status, waiting for BGP updates |
| Context | configure service vpls string bgp-mh-site string activation-timer number |

| | |
|------------|----------------------------------|
| Tree | activation-timer |
| Range | 0 to 100 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the VPLS BGP multi-homing site |
| Context | configure service vpls <i>string</i> bgp-mh-site <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

boot-timer *number*

| | |
|------------|---|
| Synopsis | Wait time after reboot to run the DF election algorithm |
| Context | configure service vpls <i>string</i> bgp-mh-site <i>string</i> boot-timer <i>number</i> |
| Tree | boot-timer |
| Range | 0 to 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

failed-threshold (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Threshold for the site to be declared down |
| Context | configure service vpls <i>string</i> bgp-mh-site <i>string</i> failed-threshold (<i>number</i> <i>keyword</i>) |
| Tree | failed-threshold |
| Range | 1 to 1000 |
| Default | all |
| Options | all |
| Introduced | 16.0.R1 |

Platforms All

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Site ID
 Context **configure service vpls string bgp-mh-site string id number**
 Tree [id](#)
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

mesh-sdp-binds

Synopsis Specify if a mesh-sdp-binding is associated with this site
 Context **configure service vpls string bgp-mh-site string mesh-sdp-binds**
 Tree [mesh-sdp-binds](#)
 Notes The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.
 Introduced 16.0.R1
 Platforms All

min-down-timer number

Synopsis Minimum downtime for BGP multi-homing site after transition from up to down
 Context **configure service vpls string bgp-mh-site string min-down-timer number**
 Tree [min-down-timer](#)
 Range 0 to 100
 Units seconds
 Introduced 16.0.R1
 Platforms All

monitor-oper-group *reference*

| | |
|------------|--|
| Synopsis | Operational group to monitor |
| Context | configure service vpls string bgp-mh-site string monitor-oper-group reference |
| Tree | monitor-oper-group |
| Reference | configure service oper-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

sap *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | SAP to be associated with this site |
| Context | configure service vpls string bgp-mh-site string sap string |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp . |
| Introduced | 16.0.R1 |
| Platforms | All |

shg-name *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | SHG name to be associated with the site |
| Context | configure service vpls string bgp-mh-site string shg-name string |
| Tree | shg-name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: mesh-sdp-binds , sap , shg-name , or spoke-sdp . |
| Introduced | 16.0.R1 |

Platforms All

spoke-sdp *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis SDP to be associated with this site

Context **configure** [service vpls string](#) [bgp-mh-site string](#) [spoke-sdp string](#)

Tree [spoke-sdp](#)

String Length 3 to 16

Notes The following elements are part of a choice: **mesh-sdp-binds**, **sap**, **shg-name**, or **spoke-sdp**.

Introduced 16.0.R1

Platforms All

bgp-vpls

Synopsis Enable the **bgp-vpls** context

Context **configure** [service vpls string](#) [bgp-vpls](#)

Tree [bgp-vpls](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the BGP-VPLS instance

Context **configure** [service vpls string](#) [bgp-vpls](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

maximum-ve-id *number*

| | |
|------------|--|
| Synopsis | Maximum vpls-edge id for BGP-VPLS |
| Context | configure service vpls <i>string</i> bgp-vpls maximum-ve-id <i>number</i> |
| Tree | maximum-ve-id |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

ve

| | |
|------------|---|
| Synopsis | Enter the ve context |
| Context | configure service vpls <i>string</i> bgp-vpls ve |
| Tree | ve |
| Introduced | 16.0.R1 |
| Platforms | All |

id *number*

| | |
|------------|--|
| Synopsis | VPLS edge ID |
| Context | configure service vpls <i>string</i> bgp-vpls ve id <i>number</i> |
| Tree | id |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

name *string*

| | |
|---------------|--|
| Synopsis | VPLS Edge instance name |
| Context | configure service vpls <i>string</i> bgp-vpls ve name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

capture-sap [sap-id] *string*

| | |
|------------|--|
| Synopsis | Enter the capture-sap list instance |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> |
| Tree | capture-sap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[sap-id] *string*

| | |
|---------------|--|
| Synopsis | SAP identifier |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> |
| Tree | capture-sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SAP |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-dot1q-msaps *boolean*

| | |
|------------|--|
| Synopsis | Enable support for triggering managed SAP creation |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> allow-dot1q-msaps <i>boolean</i> |
| Tree | allow-dot1q-msaps |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bandwidth *number*

| | |
|------------|--|
| Synopsis | SAP bandwidth |
| Context | configure service vpls string capture-sap string bandwidth number |
| Tree | bandwidth |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpu-protection

| | |
|------------|--|
| Synopsis | Enter the cpu-protection context |
| Context | configure service vpls string capture-sap string cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service vpls string capture-sap string cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

policy-id *reference*

| | |
|------------|--|
| Synopsis | CPM protection policy |
| Context | configure service vpls string capture-sap string cpu-protection policy-id reference |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy number |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls string capture-sap string description string |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp

| | |
|------------|--|
| Synopsis | Enter the dhcp context |
| Context | configure service vpls string capture-sap string dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy |
| Context | configure service vpls string capture-sap string dhcp python-policy reference |
| Tree | python-policy |
| Reference | configure python python-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|--|
| Synopsis | Local user database |
| Context | configure service vpls string capture-sap string dhcp user-db reference |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp6

| | |
|------------|---|
| Synopsis | Enter the dhcp6 context |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> dhcp6 python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|--|
| Synopsis | Local user database |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> dhcp6 user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dist-cpu-protection *reference*

| | |
|------------|--|
| Synopsis | Distributed CPU protection policy for SAP |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> dist-cpu-protection <i>reference</i> |
| Tree | dist-cpu-protection |
| Reference | configure system security dist-cpu-protection policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-lockout-policy *reference*

| | |
|------------|--|
| Synopsis | Host lockout policy |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> host-lockout-policy <i>reference</i> |
| Tree | host-lockout-policy |
| Reference | configure subscriber-mgmt host-lockout-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac *reference*

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> ingress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session

| | |
|------------|--|
| Synopsis | Enter the ipoe-session context |
| Context | configure service vpls string capture-sap string ipoe-session |
| Tree | ipoe-session |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of IPoE session management |
| Context | configure service vpls string capture-sap string ipoe-session admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls string capture-sap string ipoe-session description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-----------|--|
| Synopsis | IPoE Session policy to be used for new sessions |
| Context | configure service vpls string capture-sap string ipoe-session ipoe-session-policy reference |
| Tree | ipoe-session-policy |
| Reference | configure subscriber-mgmt ipoe-session-policy string |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local user database that is used to (pre-)authenticate new sessions
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [ipoe-session](#) [user-db](#) *reference*
 Tree [user-db](#)
 Reference **configure** [subscriber-mgmt local-user-db](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

Synopsis Enter the **msap-defaults** context
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [msap-defaults](#)
 Tree [msap-defaults](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface *string*

Synopsis Group interface
 Context **configure** [service vpls](#) *string* [capture-sap](#) *string* [msap-defaults](#) [group-interface](#) *string*
 Tree [group-interface](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis MSAP policy

| | |
|------------|--|
| Context | configure service vpls string capture-sap string msap-defaults policy reference |
| Tree | policy |
| Reference | configure subscriber-mgmt msap-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-name *string*

| | |
|---------------|---|
| Synopsis | Administrative service name |
| Context | configure service vpls string capture-sap string msap-defaults service-name string |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nasreq-auth-policy *reference*

| | |
|------------|--|
| Synopsis | Diameter NASREQ application policy to use for authentication |
| Context | configure service vpls string capture-sap string nasreq-auth-policy reference |
| Tree | nasreq-auth-policy |
| Reference | configure subscriber-mgmt diameter-nasreq-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pfcp

| | |
|------------|--|
| Synopsis | Enter the pfcp context |
| Context | configure service vpls string capture-sap string pfcp |
| Tree | pfcp |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

association *reference*

| | |
|----------|---|
| Synopsis | Association used for PFCP messages on the capture SAP |
|----------|---|

| | |
|-------------|--|
| Context | configure service vpls string capture-sap string pfcf association reference |
| Tree | association |
| Description | This command links the capture SAP to a PFCF association. This enables CUPS for the capture SAP and any trigger packets are forwarded to the BNG CUPS CPF. |
| Reference | configure subscriber-mgmt pfcf association string |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

I2-access-id-alias string

| | |
|---------------|---|
| Synopsis | String used as Layer 2 access ID for the capture SAP |
| Context | configure service vpls string capture-sap string pfcf I2-access-id-alias string |
| Tree | I2-access-id-alias |
| Description | This command defines a Layer 2 access ID alias for the capture SAP. It replaces the default underlying port-based or LAG-based Layer 2 access ID. Different capture SAPs on the same underlying port or LAG can have different Layer 2 access ID aliases. |
| String Length | 1 to 32 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up-resiliency

| | |
|------------|--|
| Synopsis | Enter the up-resiliency context |
| Context | configure service vpls string capture-sap string pfcf up-resiliency |
| Tree | up-resiliency |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

monitor-oper-group [oper-group] reference

| | |
|-------------|---|
| Synopsis | Enter the monitor-oper-group list instance |
| Context | configure service vpls string capture-sap string pfcf up-resiliency monitor-oper-group reference |
| Tree | monitor-oper-group |
| Description | Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. |

The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).

Note:

The following is only applicable for the **configure service vpls capture-sap** context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.

| | |
|----------------|---|
| Max. Instances | 4 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[oper-group] *reference*

| | |
|------------|--|
| Synopsis | Operational group name |
| Context | configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference |
| Tree | monitor-oper-group |
| Reference | configure service oper-group string |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

health-drop *number*

| | |
|-------------|---|
| Synopsis | Number subtracted from the health value per failure |
| Context | configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group reference health-drop number |
| Tree | health-drop |
| Description | This command defines how the failure of an operational group member affects the health value. The base health value is 255; the value decreases with the defined number per member failure to a minimum of 0. |
| Range | 1 to 255 |
| Default | 1 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe

| | |
|------------|--|
| Synopsis | Enter the pppoe context |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> pppoe |
| Tree | pppoe |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy reference

| | |
|------------|--|
| Synopsis | PPP policy |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> pppoe policy <i>reference</i> |
| Tree | policy |
| Reference | configure subscriber-mgmt ppp-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy reference

| | |
|------------|---|
| Synopsis | Python policy |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> pppoe python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db reference

| | |
|------------|---|
| Synopsis | Local user database |
| Context | configure service vpls <i>string</i> capture-sap <i>string</i> pppoe user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-auth-policy *reference*

| | |
|------------|--|
| Synopsis | RADIUS authentication policy |
| Context | configure service vpls string capture-sap string radius-auth-policy reference |
| Tree | radius-auth-policy |
| Reference | configure subscriber-mgmt radius-authentication-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicit

| | |
|------------|--|
| Synopsis | Enter the router-solicit context |
| Context | configure service vpls string capture-sap string router-solicit |
| Tree | router-solicit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|--|
| Synopsis | Local user database |
| Context | configure service vpls string capture-sap string router-solicit user-db reference |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-srrp *number*

| | |
|------------|---|
| Synopsis | SRRP instance that this capture SAP tracks |
| Context | configure service vpls string capture-sap string track-srrp number |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

trigger-packet

| | |
|------------|--|
| Synopsis | Enter the trigger-packet context |
| Context | configure service vpls string capture-sap string trigger-packet |
| Tree | trigger-packet |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp *boolean*

| | |
|------------|--|
| Synopsis | ARP packet |
| Context | configure service vpls string capture-sap string trigger-packet arp boolean |
| Tree | arp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

data *boolean*

| | |
|------------|---|
| Synopsis | Data packet |
| Context | configure service vpls string capture-sap string trigger-packet data boolean |
| Tree | data |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|------------|---|
| Synopsis | DHCP packet |
| Context | configure service vpls string capture-sap string trigger-packet dhcp boolean |
| Tree | dhcp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp6 boolean

| | |
|------------|--|
| Synopsis | DHCP6 packet |
| Context | configure service vpls string capture-sap string trigger-packet dhcp6 boolean |
| Tree | dhcp6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe boolean

| | |
|------------|--|
| Synopsis | PPPoE packet |
| Context | configure service vpls string capture-sap string trigger-packet pppoe boolean |
| Tree | pppoe |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rtr-solicit boolean

| | |
|------------|--|
| Synopsis | Router-solicit packet |
| Context | configure service vpls string capture-sap string trigger-packet rtr-solicit boolean |
| Tree | rtr-solicit |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

customer reference**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-----------|---|
| Synopsis | Service customer ID |
| Context | configure service vpls string customer reference |
| Tree | customer |
| Reference | configure service customer string |

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

endpoint [[name](#)] *string*

| | |
|-------------------|---|
| Synopsis | Enter the endpoint list instance |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> |
| Tree | endpoint |
| Max.
Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | Service endpoint name |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> |
| Tree | endpoint |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

block-on-mesh-failure *boolean*

| | |
|------------|--|
| Synopsis | Enable blocking after the endpoints are in a down state |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> block-on-mesh-failure <i>boolean</i> |
| Tree | block-on-mesh-failure |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|------------|---|
| Synopsis | Populate automatically MAC protect list with MAC addresses learned on SDP with this endpoint |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> auto-learn-mac-protect <i>boolean</i> |
| Tree | auto-learn-mac-protect |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-pinning *boolean*

| | |
|------------|--|
| Synopsis | Activate MAC address pinning on this endpoint |
| Context | configure service vpls <i>string endpoint string fdb mac-pinning boolean</i> |
| Tree | mac-pinning |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-mac-addresses *number*

| | |
|-------------|--|
| Synopsis | Maximum number of MAC address entries in the FDB |
| Context | configure service vpls <i>string endpoint string fdb maximum-mac-addresses number</i> |
| Tree | maximum-mac-addresses |
| Description | <p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this endpoint.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared. Packets with unknown source MAC addresses are still forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p> <p>However, if the configure service vpls fdb discard-unknown command is set to true, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.</p> <p>When unconfigured, the endpoint uses the global MAC learning limitations.</p> |
| Range | 1 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|---|
| Synopsis | Action when a relearn request for a protected MAC is received on the SDP |
| Context | configure service vpls <i>string endpoint string fdb protected-src-mac-violation-action keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sdp-bind-oper-down, alarm-only, discard |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-standby-signaling *boolean*

| | |
|------------|---|
| Synopsis | Ignore standby-bit received from TLDP peers when performing internal tasks |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> ignore-standby-signaling <i>boolean</i> |
| Tree | ignore-standby-signaling |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-endpoint [[mc-ep-id](#)] *number*

| | |
|----------------|---|
| Synopsis | Enter the mc-endpoint list instance |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> mc-endpoint <i>number</i> |
| Tree | mc-endpoint |
| Max. Instances | 1 |
| Introduced | 22.10.R1 |
| Platforms | All |

[mc-ep-id] *number*

| | |
|-------------|---|
| Synopsis | MC-EP ID |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> mc-endpoint <i>number</i> |
| Tree | mc-endpoint |
| Description | This command configures the identifier associated with the MC-EP. The ID must be the same on both MC-EP peers. |
| Range | 1 to 4294967295 |
| Notes | This element is part of a list key. |
| Introduced | 22.10.R1 |
| Platforms | All |

mc-ep-peer

| | |
|----------|--|
| Synopsis | Enter the mc-ep-peer context |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> mc-endpoint <i>number</i> mc-ep-peer |

| | |
|------------|----------------------------|
| Tree | mc-ep-peer |
| Introduced | 22.10.R1 |
| Platforms | All |

name *string*

| | |
|---------------|--|
| Synopsis | Name of the MC-EP peer |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> mc-endpoint <i>number</i> mc-ep-peer <i>name string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: name or peer-address . |
| Introduced | 22.10.R1 |
| Platforms | All |

peer-address *reference*

| | |
|------------|---|
| Synopsis | IP address of the MC-EP peer |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> mc-endpoint <i>number</i> mc-ep-peer peer-address <i>reference</i> |
| Tree | peer-address |
| Reference | configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Notes | The following elements are part of a choice: name or peer-address . |
| Introduced | 22.10.R1 |
| Platforms | All |

revert-time (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time to wait before reverting back to the primary spoke-sdp defined on this service endpoint |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> revert-time (<i>number</i> <i>keyword</i>) |
| Tree | revert-time |
| Range | 1 to 600 |
| Default | immediate |
| Units | seconds |

| | |
|------------|------------------|
| Options | never, immediate |
| Introduced | 16.0.R1 |
| Platforms | All |

suppress-standby-signaling *boolean*

| | |
|------------|---|
| Synopsis | Do not send pseudowire standby bit to TLDP peer when specified spoke SDP is selected as standby |
| Context | configure service vpls <i>string</i> endpoint <i>string</i> suppress-standby-signaling <i>boolean</i> |
| Tree | suppress-standby-signaling |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure service vpls <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* **mep-id** *number*

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|----------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |

| | |
|------------|---|
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> association <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|--|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|--|
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|----------|---|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |

| | |
|------------|--|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm boolean

| | |
|------------|--|
| Synopsis | Generate CCM messages |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean |
| Tree | ccm |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority number

| | |
|------------|--|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size number

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |

| | |
|------------|--|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|---------------|--|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number cfm-vlan-tag string |
| Tree | cfm-vlan-tag |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|---|
| Synopsis | Enable the eth-test context |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|--|
| Synopsis | Enter the test-pattern context |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service vpls <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|----------|---------------------------------------|
| Synopsis | Test pattern for Ethernet Test frames |
|----------|---------------------------------------|

| | |
|-------------|---|
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|---|
| Synopsis | Enter the grace context |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window number

| | |
|----------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number |
| Tree | max-rx-defect-window |

| | |
|------------|--|
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed priority number |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed boolean

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed rx-eth-ed boolean |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed boolean

| | |
|------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed tx-eth-ed boolean |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|-------------|--|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean |
| Tree | tx-eth-vsm-grace |
| Description | When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). |

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

| | |
|------------|--|
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number low-priority-defect keyword |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|-------------|--|
| Synopsis | MAC address of the MEP |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number mac-address string |
| Tree | mac-address |
| Description | This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|----------|---|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service vpls string eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number one-way-delay-threshold number |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |

| | |
|------------|--|
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

etree *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use VPLS service as an E-Tree VPLS |
| Context | configure <i>service vpls string etree boolean</i> |
| Tree | <i>etree</i> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure <i>service vpls string fdb</i> |
| Tree | <i>fdb</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

discard-unknown *boolean*

| | |
|------------|---|
| Synopsis | Discard packets with unknown destination MAC addresses |
| Context | configure <i>service vpls string fdb discard-unknown boolean</i> |
| Tree | <i>discard-unknown</i> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-learning

| | |
|------------|---|
| Synopsis | Enter the mac-learning context |
| Context | configure service vpls string fdb mac-learning |
| Tree | mac-learning |
| Introduced | 16.0.R1 |
| Platforms | All |

aging *boolean*

| | |
|------------|---|
| Synopsis | Enable aging of MAC addresses |
| Context | configure service vpls string fdb mac-learning aging boolean |
| Tree | aging |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

learning *boolean*

| | |
|------------|--|
| Synopsis | Enable learning of new MAC addresses |
| Context | configure service vpls string fdb mac-learning learning boolean |
| Tree | learning |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

local-age-time *number*

| | |
|------------|---|
| Synopsis | Aging time for locally learned MAC addresses |
| Context | configure service vpls string fdb mac-learning local-age-time number |
| Tree | local-age-time |
| Range | 60 to 86400 |
| Default | 300 |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-age-time *number*

| | |
|------------|--|
| Synopsis | Aging time for locally learned MAC addresses |
| Context | configure service vpls string fdb mac-learning remote-age-time number |
| Tree | remote-age-time |
| Range | 60 to 86400 |
| Default | 900 |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-move

| | |
|------------|---|
| Synopsis | Enter the mac-move context |
| Context | configure service vpls string fdb mac-move |
| Tree | mac-move |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MAC move |
| Context | configure service vpls string fdb mac-move admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down-time *number*

| | |
|----------|---|
| Synopsis | Wait time before re-enabling disabled SAP |
| Context | configure service vpls string fdb mac-move hold-down-time number |
| Tree | hold-down-time |
| Range | 0 to 600 |
| Default | 10 |

| | |
|------------|---------|
| Units | seconds |
| Introduced | 19.7.R1 |
| Platforms | All |

move-frequency *number*

| | |
|------------|---|
| Synopsis | Maximum rate MACs can be re-learned in the VPLS service |
| Context | configure service vpls <i>string</i> fdb mac-move move-frequency <i>number</i> |
| Tree | move-frequency |
| Range | 1 to 10 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

primary-cumulative-factor *number*

| | |
|------------|--|
| Synopsis | Factor for MAC-relearn periods for MAC-relearn rate |
| Context | configure service vpls <i>string</i> fdb mac-move primary-cumulative-factor <i>number</i> |
| Tree | primary-cumulative-factor |
| Range | 3 to 10 |
| Default | 3 |
| Introduced | 19.7.R1 |
| Platforms | All |

retry-count (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Number of retries for re-enabling the SAP or SDP |
| Context | configure service vpls <i>string</i> fdb mac-move retry-count (<i>number</i> <i>keyword</i>) |
| Tree | retry-count |
| Range | 1 to 255 |
| Default | 3 |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

sap [[sap-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the sap list instance |
| Context | configure service vpls string fdb mac-move sap reference |
| Tree | sap |
| Introduced | 19.7.R1 |
| Platforms | All |

[sap-id] *reference*

| | |
|------------|---|
| Synopsis | SAP identifier |
| Context | configure service vpls string fdb mac-move sap reference |
| Tree | sap |
| Reference | configure service vpls string sap string |
| Notes | This element is part of a list key. |
| Introduced | 19.7.R1 |
| Platforms | All |

level *keyword*

| | |
|------------|---|
| Synopsis | Primary or secondary port level |
| Context | configure service vpls string fdb mac-move sap reference level keyword |
| Tree | level |
| Options | primary, secondary |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | All |

secondary-cumulative-factor *number*

| | |
|----------|--|
| Synopsis | Number of periods to measure mac-relearn rate |
| Context | configure service vpls string fdb mac-move secondary-cumulative-factor number |
| Tree | secondary-cumulative-factor |
| Range | 2 to 9 |
| Default | 2 |

Introduced 19.7.R1
 Platforms All

spoke-sdp [[sdp-bind-id](#)] *reference*

Synopsis Enter the **spoke-sdp** list instance
 Context **configure** [service](#) [vpls](#) *string* [fdb](#) [mac-move](#) [spoke-sdp](#) *reference*
 Tree [spoke-sdp](#)
 Introduced 19.7.R1
 Platforms All

[sdp-bind-id] *reference*

Synopsis SDP binding ID
 Context **configure** [service](#) [vpls](#) *string* [fdb](#) [mac-move](#) [spoke-sdp](#) *reference*
 Tree [spoke-sdp](#)
 Reference **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string*
 Notes This element is part of a list key.
 Introduced 19.7.R1
 Platforms All

level *keyword*

Synopsis Primary or secondary port level
 Context **configure** [service](#) [vpls](#) *string* [fdb](#) [mac-move](#) [spoke-sdp](#) *reference* [level](#) *keyword*
 Tree [level](#)
 Options primary, secondary
 Notes This element is mandatory.
 Introduced 19.7.R1
 Platforms All

mac-subnet-length *number*

Synopsis Number of bits performing MAC learning or MAC switching
 Context **configure** [service](#) [vpls](#) *string* [fdb](#) [mac-subnet-length](#) *number*

| | |
|------------|-----------------------------------|
| Tree | mac-subnet-length |
| Range | 24 to 48 |
| Default | 48 |
| Introduced | 16.0.R1 |
| Platforms | All |

selective-learning *boolean*

| | |
|------------|---|
| Synopsis | Allocate FDB entries on selectively learned line cards |
| Context | configure service vpls string fdb selective-learning boolean |
| Tree | selective-learning |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

static-mac

| | |
|------------|---|
| Synopsis | Enter the static-mac context |
| Context | configure service vpls string fdb static-mac |
| Tree | static-mac |
| Introduced | 16.0.R1 |
| Platforms | All |

mac [[mac-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the mac list instance |
| Context | configure service vpls string fdb static-mac mac string |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

[mac-address] *string*

| | |
|----------|--|
| Synopsis | Static MAC address to SAP/SDP-binding or black-hole |
| Context | configure service vpls string fdb static-mac mac string |

| | |
|------------|-------------------------------------|
| Tree | mac |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

blackhole



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Create a static FDB entry for the MAC address to black-hole traffic |
| Context | configure service vpls string fdb static-mac mac string blackhole |
| Tree | blackhole |
| Notes | The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp . |
| Introduced | 16.0.R1 |
| Platforms | All |

endpoint *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Endpoint associated with this MAC |
| Context | configure service vpls string fdb static-mac mac string endpoint reference |
| Tree | endpoint |
| Reference | configure service vpls string endpoint string |
| Notes | The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp . |
| Introduced | 16.0.R1 |
| Platforms | All |

mesh-sdp *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Mesh SDP bind associated with this MAC |
| Context | configure service vpls string fdb static-mac mac string mesh-sdp reference |
| Tree | mesh-sdp |
| Reference | configure service vpls string mesh-sdp string |
| Notes | The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp . |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Entity to be monitored to decide whether this entry can be installed in the FDB |
| Context | configure service vpls string fdb static-mac mac string monitor keyword |
| Tree | monitor |
| Default | none |
| Options | none, forward-status |
| Introduced | 16.0.R1 |
| Platforms | All |

sap *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | SAP associated with this MAC |
| Context | configure service vpls string fdb static-mac mac string sap reference |
| Tree | sap |

| | |
|------------|--|
| Reference | configure service vpls string sap string |
| Notes | The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp . |
| Introduced | 16.0.R1 |
| Platforms | All |

spoke-sdp *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Spoke SDP bind associated with this MAC |
| Context | configure service vpls string fdb static-mac mac string spoke-sdp reference |
| Tree | spoke-sdp |
| Reference | configure service vpls string spoke-sdp string |
| Notes | The following elements are part of a mandatory choice: blackhole , endpoint , mesh-sdp , sap , or spoke-sdp . |
| Introduced | 16.0.R1 |
| Platforms | All |

table

| | |
|------------|--|
| Synopsis | Enter the table context |
| Context | configure service vpls string fdb table |
| Tree | table |
| Introduced | 16.0.R1 |
| Platforms | All |

high-wmark *number*

| | |
|----------|--|
| Synopsis | High watermark for the FDB table |
| Context | configure service vpls string fdb table high-wmark number |
| Tree | high-wmark |
| Range | 0 to 100 |
| Default | 95 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

low-wmark *number*

| | |
|------------|--|
| Synopsis | Low watermark for the FDB table |
| Context | configure service vpls <i>string</i> fdb table low-wmark <i>number</i> |
| Tree | low-wmark |
| Range | 0 to 100 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | All |

size *number*

| | |
|------------|---|
| Synopsis | Maximum MAC entries in the FDB |
| Context | configure service vpls <i>string</i> fdb table size <i>number</i> |
| Tree | size |
| Range | 1 to 511999 |
| Default | 250 |
| Introduced | 16.0.R1 |
| Platforms | All |

gsmp

| | |
|------------|---|
| Synopsis | Enter the gsmp context |
| Context | configure service vpls <i>string</i> gsmp |
| Tree | gsmp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of GSMP |
| Context | configure service vpls <i>string</i> gsmp admin-state <i>keyword</i> |

| | |
|------------|-----------------------------|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the group list instance |
| Context | configure service vpls string gsmp group string |
| Tree | group |
| Max. Instances | 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | GSMP group name |
| Context | configure service vpls string gsmp group string |
| Tree | group |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the GSMP group |
| Context | configure service vpls string gsmp group string admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

ancp

| | |
|------------|---|
| Synopsis | Enter the ancp context |
| Context | configure service vpls string gsmp group string ancp |
| Tree | ancp |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-topology-discovery *boolean*

| | |
|------------|---|
| Synopsis | Enable the ANCP dynamic topology discovery capability |
| Context | configure service vpls string gsmp group string ancp dynamic-topology-discovery <i>boolean</i> |
| Tree | dynamic-topology-discovery |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

oam *boolean*

| | |
|------------|--|
| Synopsis | Enable GSMP ANCP OAM capability at startup of GSMP connection |
| Context | configure service vpls string gsmp group string ancp oam <i>boolean</i> |
| Tree | oam |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls string gsmp group string description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-multiplier *number*

| | |
|------------|---|
| Synopsis | Hold-multiplier for the GSMP connections in this group |
| Context | configure service vpls <i>string</i> gsmp group <i>string</i> hold-multiplier <i>number</i> |
| Tree | hold-multiplier |
| Range | 1 to 100 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

idle-filter *boolean*

| | |
|------------|--|
| Synopsis | Filter ANCP messages from IDLE DSL lines |
| Context | configure service vpls <i>string</i> gsmp group <i>string</i> idle-filter <i>boolean</i> |
| Tree | idle-filter |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

keepalive *number*

| | |
|------------|---|
| Synopsis | Keepalive value for the GSMP connections in this group |
| Context | configure service vpls <i>string</i> gsmp group <i>string</i> keepalive <i>number</i> |
| Tree | keepalive |
| Range | 1 to 25 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor [*remote-address*] *string*

| | |
|----------|--|
| Synopsis | Enter the neighbor list instance |
| Context | configure service vpls <i>string</i> gsmp group <i>string</i> neighbor <i>string</i> |
| Tree | neighbor |

Introduced 16.0.R1
Platforms All

[remote-address] *string*

Synopsis GSMP neighbor remote IP address
Context **configure service vpls string gsmp group string neighbor string**
Tree **neighbor**
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the GSMP neighbor
Context **configure service vpls string gsmp group string neighbor string admin-state keyword**
Tree **admin-state**
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure service vpls string gsmp group string neighbor string description string**
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms All

local-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Restrict connections to this local address only within the service running ANCP |
| Context | configure <i>service vpls string</i> <i>gsmg group string</i> <i>neighbor string</i> local-address <i>string</i> |
| Tree | local-address |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-marking

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the priority-marking context |
| Context | configure <i>service vpls string</i> <i>gsmg group string</i> <i>neighbor string</i> priority-marking |
| Tree | priority-marking |
| Introduced | 16.0.R1 |
| Platforms | All |

dscp *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | DSCP that is used while remarking the in profile packets |
| Context | configure <i>service vpls string</i> <i>gsmg group string</i> <i>neighbor string</i> priority-marking dscp <i>keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Notes | The following elements are part of a choice: dscp or prec . |

Introduced 16.0.R1
 Platforms All

prec *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Precedence priority marking
 Context **configure** [service vpls](#) *string* [gsmg group](#) *string* [neighbor](#) *string* [priority-marking prec](#) *number*
 Tree [prec](#)
 Range 0 to 7
 Notes The following elements are part of a choice: **dscp** or **prec**.
 Introduced 16.0.R1
 Platforms All

persistence *boolean*

Synopsis Store DSL line information when the GSMP connection terminates
 Context **configure** [service vpls](#) *string* [gsmg group](#) *string* [persistence](#) *boolean*
 Tree [persistence](#)
 Default false
 Introduced 16.0.R1
 Platforms All

igmp-host-tracking

Synopsis Enter the **igmp-host-tracking** context
 Context **configure** [service vpls](#) *string* [igmp-host-tracking](#)
 Tree [igmp-host-tracking](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IGMP host tracking |
| Context | configure service vpls <i>string</i> igmp-host-tracking admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

expiry-time *number*

| | |
|------------|--|
| Synopsis | Time that the system continues to track inactive hosts |
| Context | configure service vpls <i>string</i> igmp-host-tracking expiry-time <i>number</i> |
| Tree | expiry-time |
| Range | 1 to 65535 |
| Default | 260 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

igmp-snooping

| | |
|------------|---|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls <i>string</i> igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of snooping |
| Context | configure service vpls <i>string</i> igmp-snooping admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

evpn-proxy

| | |
|------------|--|
| Synopsis | Enter the evpn-proxy context |
| Context | configure service vpls <i>string</i> igmp-snooping evpn-proxy |
| Tree | evpn-proxy |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of EVPN proxy |
| Context | configure service vpls <i>string</i> igmp-snooping evpn-proxy admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

mvr

| | |
|------------|---|
| Synopsis | Enter the mvr context |
| Context | configure service vpls <i>string</i> igmp-snooping mvr |
| Tree | mvr |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of MVR |
| Context | configure service vpls <i>string</i> igmp-snooping mvr admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|-----------------|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> igmp-snooping mvr description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

group-policy *string*

| | |
|---------------|--|
| Synopsis | Policy that applies MVR |
| Context | configure service vpls <i>string</i> igmp-snooping mvr group-policy <i>string</i> |
| Tree | group-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vpls <i>string</i> igmp-snooping query-interval <i>number</i> |
| Tree | query-interval |
| Range | 1 to 65535 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-source-address (*keyword* | *ipv4-address*)

| | |
|------------|--|
| Synopsis | Source address for IGMP queries |
| Context | configure service vpls string igmp-snooping query-source-address (<i>keyword</i> <i>ipv4-address</i>) |
| Tree | query-source-address |
| Default | system |
| Options | system |
| Introduced | 16.0.R1 |
| Platforms | All |

report-source-address *string*

| | |
|------------|--|
| Synopsis | Source IP address used when generating IGMP reports |
| Context | configure service vpls string igmp-snooping report-source-address <i>string</i> |
| Tree | report-source-address |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|------------|---|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vpls string igmp-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 1 to 255 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-l2vpn-mtu-mismatch *boolean*

| | |
|-------------|--|
| Synopsis | Ignore the L2 VPN MTU mismatch with local service MTU |
| Context | configure service vpls string ignore-l2vpn-mtu-mismatch <i>boolean</i> |
| Tree | ignore-l2vpn-mtu-mismatch |
| Description | When configured to true , the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local |

service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPLS service regardless of any MTU mismatch.

When configured to **false**, an MTU mismatch prevents the system from bringing up a BGP-VPLS service.

| | |
|------------|---------|
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vpls string interface string |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|---------------|---|
| Synopsis | IP interface name |
| Context | configure service vpls string interface string |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service vpls string interface string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure <i>service vpls string interface string description string</i> |
| Tree | <i>description</i> |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time

| | |
|------------|--|
| Synopsis | Enter the hold-time context |
| Context | configure <i>service vpls string interface string hold-time</i> |
| Tree | <i>hold-time</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure <i>service vpls string interface string hold-time ipv4</i> |
| Tree | <i>ipv4</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure <i>service vpls string interface string hold-time ipv4 down</i> |
| Tree | <i>down</i> |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | All |

init-only *boolean*

| | |
|-------------|--|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 down init-only <i>boolean</i> |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Down hold time for the IP interface |
| Context | configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 down seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|----------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service vpls <i>string</i> interface <i>string</i> hold-time ipv4 up seconds <i>number</i> |

| | |
|------------|-------------------------|
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vpls string interface string ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor-discovery

| | |
|------------|---|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service vpls string interface string ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor [[ipv4-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the static-neighbor list instance |
| Context | configure service vpls string interface string ipv4 neighbor-discovery static-neighbor string |
| Tree | static-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[ipv4-address\]](#) *string*

| | |
|----------|--|
| Synopsis | IPv4 address that corresponds to the physical address |
| Context | configure service vpls string interface string ipv4 neighbor-discovery static-neighbor string |

| | |
|------------|-------------------------------------|
| Tree | static-neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|------------|---|
| Synopsis | MAC address for the static neighbor |
| Context | configure service vpls <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|---|
| Synopsis | ARP timeout value to determine how long an ARP entry remains in the ARP cache |
| Context | configure service vpls <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i> |
| Tree | timeout |
| Range | 0 to 65535 |
| Default | 14400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

primary

| | |
|------------|--|
| Synopsis | Enable the primary context |
| Context | configure service vpls <i>string</i> interface <i>string</i> ipv4 primary |
| Tree | primary |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|------------|---|
| Synopsis | IP address of the interface |
| Context | configure service vpls string interface string ipv4 primary address string |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv4 address prefix length |
| Context | configure service vpls string interface string ipv4 primary prefix-length number |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|------------|--|
| Synopsis | MAC address for the interface |
| Context | configure service vpls string interface string mac string |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

isid-policy

| | |
|------------|--|
| Synopsis | Enter the isid-policy context |
| Context | configure service vpls string isid-policy |
| Tree | isid-policy |
| Introduced | 19.10.R1 |
| Platforms | All |

entry [[range-entry-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure service vpls <i>string</i> isid-policy entry <i>number</i> |
| Tree | entry |
| Introduced | 19.10.R1 |
| Platforms | All |

[range-entry-id] *number*

| | |
|------------|---|
| Synopsis | ISID policy entry ID |
| Context | configure service vpls <i>string</i> isid-policy entry <i>number</i> |
| Tree | entry |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

advertise-local *boolean*

| | |
|------------|--|
| Synopsis | Advertise locally-defined I-VPLS ISIDs or static ISIDs |
| Context | configure service vpls <i>string</i> isid-policy entry <i>number</i> advertise-local <i>boolean</i> |
| Tree | advertise-local |
| Default | true |
| Introduced | 19.10.R1 |
| Platforms | All |

range

| | |
|------------|---|
| Synopsis | Enter the range context |
| Context | configure service vpls <i>string</i> isid-policy entry <i>number</i> range |
| Tree | range |
| Introduced | 19.10.R1 |
| Platforms | All |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the ISID range |
| Context | configure service vpls string isid-policy entry number range end number |
| Tree | end |
| Range | 1 to 16777215 |
| Introduced | 19.10.R1 |
| Platforms | All |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the ISID range |
| Context | configure service vpls string isid-policy entry number range start number |
| Tree | start |
| Range | 1 to 16777215 |
| Introduced | 19.10.R1 |
| Platforms | All |

use-def-mcast boolean

| | |
|------------|---|
| Synopsis | Use default multicast tree to propagate ISIS range |
| Context | configure service vpls string isid-policy entry number use-def-mcast boolean |
| Tree | use-def-mcast |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

load-balancing

| | |
|------------|---|
| Synopsis | Enter the load-balancing context |
| Context | configure service vpls string load-balancing |
| Tree | load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

lbl-eth-or-ip-l4-teid *boolean*

| | |
|-------------|--|
| Synopsis | Enable hashing of MPLS ethernet and IP packets on SAPs |
| Context | configure service vpls <i>string</i> load-balancing lbl-eth-or-ip-l4-teid <i>boolean</i> |
| Tree | lbl-eth-or-ip-l4-teid |
| Description | When configured to true , this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later. |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

per-service-hashing *boolean*

| | |
|------------|---|
| Synopsis | Enable per-service hashing for Ethernet services |
| Context | configure service vpls <i>string</i> load-balancing per-service-hashing <i>boolean</i> |
| Tree | per-service-hashing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

spi-load-balancing *boolean*

| | |
|------------|--|
| Synopsis | Allow use of SPI (Security Parameter Index) in hashing for ESP/AH encrypted IPv4/IPv6 traffic |
| Context | configure service vpls <i>string</i> load-balancing spi-load-balancing <i>boolean</i> |
| Tree | spi-load-balancing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

teid-load-balancing *boolean*

| | |
|----------|---|
| Synopsis | Include TEID in hashing algorithm for GTP-U/C encapsulated traffic |
| Context | configure service vpls <i>string</i> load-balancing teid-load-balancing <i>boolean</i> |
| Tree | teid-load-balancing |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

m-vpls *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Specify whether this is a management VPLS |
| Context | configure service vpls <i>string</i> m-vpls <i>boolean</i> |
| Tree | m-vpls |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-flush

| | |
|------------|---|
| Synopsis | Enter the mac-flush context |
| Context | configure service vpls <i>string</i> mac-flush |
| Tree | mac-flush |
| Introduced | 16.0.R1 |
| Platforms | All |

tldp

| | |
|------------|--|
| Synopsis | Enter the tldp context |
| Context | configure service vpls <i>string</i> mac-flush tldp |
| Tree | tldp |
| Introduced | 16.0.R1 |
| Platforms | All |

propagate *boolean*

| | |
|----------|--|
| Synopsis | Propagate MAC flush messages received from the T-LDP |
|----------|--|

| | |
|------------|---|
| Context | configure service vpls string mac-flush tldp propagate boolean |
| Tree | propagate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

send-on-failure boolean

| | |
|------------|---|
| Synopsis | Send MAC withdraw message on SAP/Spoke-SDP failure |
| Context | configure service vpls string mac-flush tldp send-on-failure boolean |
| Tree | send-on-failure |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-protect

| | |
|------------|--|
| Synopsis | Enter the mac-protect context |
| Context | configure service vpls string mac-protect |
| Tree | mac-protect |
| Introduced | 19.10.R1 |
| Platforms | All |

mac [mac-address] string

| | |
|------------|---|
| Synopsis | Add a list entry for mac |
| Context | configure service vpls string mac-protect mac string |
| Tree | mac |
| Introduced | 19.10.R1 |
| Platforms | All |

[mac-address] string

| | |
|----------|---|
| Synopsis | Protected MAC address |
| Context | configure service vpls string mac-protect mac string |

| | |
|------------|-------------------------------------|
| Tree | mac |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

mcast-ipv6-snooping-scope *keyword*

| | |
|------------|---|
| Synopsis | IPv6 multicast snooping scope |
| Context | configure service vpls <i>string</i> mcast-ipv6-snooping-scope <i>keyword</i> |
| Tree | mcast-ipv6-snooping-scope |
| Default | mac-based |
| Options | sg-based, mac-based |
| Introduced | 16.0.R1 |
| Platforms | All |

mcr-default-gtw

| | |
|------------|--|
| Synopsis | Enter the mcr-default-gtw context |
| Context | configure service vpls <i>string</i> mcr-default-gtw |
| Tree | mcr-default-gtw |
| Introduced | 16.0.R1 |
| Platforms | All |

ip *string*

| | |
|------------|--|
| Synopsis | Multi-chassis ring default gateway IP address |
| Context | configure service vpls <i>string</i> mcr-default-gtw ip <i>string</i> |
| Tree | ip |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|----------|---|
| Synopsis | Multi-chassis ring default gateway MAC address |
| Context | configure service vpls <i>string</i> mcr-default-gtw mac <i>string</i> |

| | |
|------------|---------------------|
| Tree | mac |
| Default | 00:00:00:00:00:00 |
| Introduced | 16.0.R1 |
| Platforms | All |

mesh-sdp [[sdp-bind-id](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the mesh-sdp list instance |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> |
| Tree | mesh-sdp |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-bind-id] *string*

| | |
|---------------|---|
| Synopsis | SDP binding ID |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> |
| Tree | mesh-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Policy to collect accounting statistics |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the SDP binding to the service |
|----------|--|

| | |
|------------|---|
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> bfd |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | All |

encap *keyword*

| | |
|------------|--|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> bfd bfd-liveness encap <i>keyword</i> |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-template *reference*

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> bfd bfd-template <i>reference</i> |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template <i>string</i> |
| Introduced | 21.2.R1 |
| Platforms | All |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Allow agent to collect accounting statistics |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Use the control word as preferred |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

cpu-protection

| | |
|------------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [cpu-protection](#) [eth-cfm-monitoring](#)

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [cpu-protection](#) [eth-cfm-monitoring](#) [aggregate](#)

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [cpu-protection](#) [eth-cfm-monitoring](#) [car](#)

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis Monitor MAC for CPU protection

Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [cpu-protection](#) [mac-monitoring](#)

Tree [mac-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
 Context **configure** [service vpls string](#) [mesh-sdp string](#) [cpu-protection policy-id reference](#)
 Tree [policy-id](#)
 Reference **configure** [system security cpu-protection policy number](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** [service vpls string](#) [mesh-sdp string](#) [description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

dhcp

Synopsis Enter the **dhcp** context
 Context **configure** [service vpls string](#) [mesh-sdp string](#) [dhcp](#)
 Tree [dhcp](#)
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [service vpls string](#) [mesh-sdp string](#) [dhcp description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1

Platforms All

snoop *boolean*

Synopsis Allow DHCP snooping of DHCP messages on the SAP or SDP
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [dhcp snoop](#) *boolean*
 Tree [snoop](#)
 Default false
 Introduced 16.0.R1
 Platforms All

egress

Synopsis Enter the **egress** context
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [egress](#)
 Tree [egress](#)
 Introduced 16.0.R1
 Platforms All

filter

Synopsis Enter the **filter** context
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [egress filter](#)
 Tree [filter](#)
 Introduced 16.0.R1
 Platforms All

ip *reference*

Synopsis IPv4 filter policy name
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [egress filter ip](#) *reference*
 Tree [ip](#)
 Reference **configure** [filter ip-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service vpls string mesh-sdp string egress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter string |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|--|
| Synopsis | MAC filter policy name |
| Context | configure service vpls string mesh-sdp string egress filter mac reference |
| Tree | mac |
| Reference | configure filter mac-filter string |
| Introduced | 16.0.R1 |
| Platforms | All |

mfib-allowed-mda-destinations

| | |
|------------|---|
| Synopsis | Enter the mfib-allowed-mda-destinations context |
| Context | configure service vpls string mesh-sdp string egress mfib-allowed-mda-destinations |
| Tree | mfib-allowed-mda-destinations |
| Introduced | 16.0.R4 |
| Platforms | All |

mda [mda-id] string

| | |
|------------|--|
| Synopsis | Add a list entry for mda |
| Context | configure service vpls string mesh-sdp string egress mfib-allowed-mda-destinations mda string |
| Tree | mda |
| Introduced | 16.0.R4 |
| Platforms | All |

[mda-id] string

| | |
|------------|--|
| Synopsis | MFIB allowed MDA destination |
| Context | configure service vpls string mesh-sdp string egress mfib-allowed-mda-destinations mda string |
| Tree | mda |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vpls string mesh-sdp string egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|---|
| Synopsis | Enter the network context |
| Context | configure service vpls string mesh-sdp string egress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name reference

| | |
|------------|---|
| Synopsis | Network policy ID |
| Context | configure service vpls string mesh-sdp string egress qos network policy-name reference |
| Tree | policy-name |
| Reference | configure qos network string |
| Introduced | 16.0.R1 |
| Platforms | All |

port-redirect-group

| | |
|------------|---|
| Synopsis | Enter the port-redirect-group context |
| Context | configure service vpls string mesh-sdp string egress qos network port-redirect-group |
| Tree | port-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the egress port queue group |
| Context | configure service vpls string mesh-sdp string egress qos network port-redirect-group group-name reference |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Queue-group instance ID |
| Context | configure service vpls string mesh-sdp string egress qos network port-redirect-group instance number |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service vpls string mesh-sdp string egress vc-label number |
| Tree | vc-label |

| | |
|------------|---------------|
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label

| | |
|------------|--|
| Synopsis | Enable the use of entropy labels for spoke SDPs |
| Context | configure service vpls string mesh-sdp string entropy-label |
| Tree | entropy-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure service vpls string mesh-sdp string eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm collect-imm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-imm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm collect-imm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-imm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

| | |
|------------|---|
| Synopsis | Enter the mep list instance |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> association <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|---|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the MEP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais

| | |
|----------|-------------------------------|
| Synopsis | Enable the ais context |
|----------|-------------------------------|

| | |
|------------|--|
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais |
| Tree | ais |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

client-meg-level *number*

| | |
|----------------|---|
| Synopsis | Client MEG level for AIS message generation |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais client-meg-level <i>number</i> |
| Tree | client-meg-level |
| Range | 1 to 7 |
| Max. Instances | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interface-support *boolean*

| | |
|------------|---|
| Synopsis | Enable generation of AIS PDUs based on endpoint state |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interface-support <i>boolean</i> |
| Tree | interface-support |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|----------|---|
| Synopsis | Transmission interval for AIS messages |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais interval <i>number</i> |
| Tree | interval |
| Range | 1 60 |
| Default | 1 |
| Units | seconds |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | all-def |
| Options | all-def, mac-rem-err-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|--|
| Synopsis | Priority of the AIS messages generated by the node |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) **fng-alarm-time** *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) **fng-reset-time** *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis Generate CCM messages

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **ccm** *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

| | |
|------------|---|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|---------------|---|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> cfm-vlan-tag <i>string</i> |
| Tree | cfm-vlan-tag |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|------------|--|
| Synopsis | Enable the csf context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf |
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *decimal-number*

| | |
|------------|---|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

direction *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|-------------------------|
| Synopsis | Direction the MEP faces |
|----------|-------------------------|

| | |
|------------|--|
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword |
| Tree | direction |
| Default | down |
| Options | down, up |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|---|
| Synopsis | Enable the eth-test context |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|----------|--|
| Synopsis | Enter the test-pattern context |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern |

| | |
|-------------|--|
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|-------------|---|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|----------|---|
| Synopsis | Fault propagation for the MEP |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|--|
| Synopsis | Enter the grace context |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|------------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number |
| Tree | max-rx-defect-window |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed boolean

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed boolean

| | |
|------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|----------|--|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace |

| | |
|-------------|--|
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|-------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default | true |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** **service** **vpls** *string* **mesh-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **lbm-svc-act-responder** *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** **service** **vpls** *string* **mesh-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Default mac-rem-err-xcon

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis MAC address of the MEP

Context **configure** **service** **vpls** *string* **mesh-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **mac-address** *string*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

| | |
|------------|--|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | MEP provisioned using MA primary VLAN ID |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> primary-vlan <i>boolean</i> |
| Tree | primary-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mip primary-vlan (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Enter the mip list instance |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) |
| Tree | mip |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan (*number* | *keyword*)

| | |
|----------|--------------------------------------|
| Synopsis | VLAN ID to which the MIP is attached |
|----------|--------------------------------------|

| | |
|-------------|---|
| Context | configure service vpls string mesh-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>) |
| Tree | mip |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan. |
| Range | 1 to 4094 |
| Options | none |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag string

| | |
|---------------|--|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls string mesh-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>) cfm-vlan-tag string |
| Tree | cfm-vlan-tag |
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address string

| | |
|------------|---|
| Synopsis | MAC address of the MIP |
| Context | configure service vpls string mesh-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>) mac-address string |
| Tree | mac-address |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-ctag-levels *number*

| | |
|----------------|---|
| Synopsis | Squelch levels using additional VLAN C-Tag space |
| Context | configure service vpls string mesh-sdp string eth-cfm squelch-ingress-ctag-levels number |
| Tree | squelch-ingress-ctag-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|----------------|--|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
| Context | configure service vpls string mesh-sdp string eth-cfm squelch-ingress-levels number |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vmep-filter *boolean*

| | |
|------------|---|
| Synopsis | Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> eth-cfm vmep-filter <i>boolean</i> |
| Tree | vmep-filter |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

etree-leaf *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable etree leaf access-circuit status |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> etree-leaf <i>boolean</i> |
| Tree | etree-leaf |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

etree-root-leaf-tag *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Status for E-tree root leaf tag |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> etree-root-leaf-tag <i>boolean</i> |
| Tree | etree-root-leaf-tag |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|------------|--|
| Synopsis | Enable automatic population of the MAC protect list |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb auto-learn-mac-protect <i>boolean</i> |
| Tree | auto-learn-mac-protect |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

auto-learn-mac-protect-exclude-list *reference*

| | |
|-------------|--|
| Synopsis | Referenced MAC protect exclusion list name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb auto-learn-mac-protect-exclude-list <i>reference</i> |
| Tree | auto-learn-mac-protect-exclude-list |
| Description | This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object. |
| Reference | configure service mac-list <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

mac-pinning *boolean*

| | |
|----------|---|
| Synopsis | MAC address pinning in active status |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb mac-pinning <i>boolean</i> |

| | |
|------------|-----------------------------|
| Tree | mac-pinning |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|---|
| Synopsis | Action to take whenever a relearn request for a protected MAC is received |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> fdb protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sdp-bind-oper-down, alarm-only, discard |
| Introduced | 16.0.R4 |
| Platforms | All |

force-vc-forwarding *keyword*

| | |
|------------|--|
| Synopsis | VC forwarding action |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 16.0.R1 |
| Platforms | All |

hash-label

| | |
|------------|--|
| Synopsis | Enable the hash-label context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> hash-label |
| Tree | hash-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

signal-capability

| | |
|------------|---|
| Synopsis | Enable the signaling of the hash label between PE nodes |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> hash-label signal-capability |
| Tree | signal-capability |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|--|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-leave *boolean*

| | |
|------------|--|
| Synopsis | Allow IGMP fast leave processing |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping fast-leave <i>boolean</i> |
| Tree | fast-leave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|------------|---|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-group-sources *number*

| | |
|------------|---|
| Synopsis | Maximum group source combinations |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-groups *number*

| | |
|------------|--|
| Synopsis | Maximum groups allowed |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-sources *number*

| | |
|------------|---|
| Synopsis | Maximum sources that are allowed per group |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | All |

mcac

| | |
|------------|--|
| Synopsis | Enter the mcac context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth

| | |
|------------|---|
| Synopsis | Enter the bandwidth context |
| Context | configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | All |

mandatory (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth mandatory (<i>number</i> <i>keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

total (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-policy *reference*

| | |
|----------|--|
| Synopsis | Name of multicast CAC interface policy |
|----------|--|

| | |
|------------|--|
| Context | configure service vpls string mesh-sdp string igmp-snooping mcac interface-policy reference |
| Tree | interface-policy |
| Reference | configure mcac interface-policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vpls string mesh-sdp string igmp-snooping mcac policy reference |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference | configure mcac policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port boolean

| | |
|------------|---|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls string mesh-sdp string igmp-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages

Context **configure** **service vpls** *string* **mesh-sdp** *string* **igmp-snooping** **query-interval** *number*

Tree [query-interval](#)

Range 2 to 1024

Default 125

Units seconds

Introduced 16.0.R1

Platforms All

query-last-member-interval *number*

Synopsis Time between group-specific query messages

Context **configure** **service vpls** *string* **mesh-sdp** *string* **igmp-snooping** **query-last-member-interval** *number*

Tree [query-last-member-interval](#)

Range 1 to 50

Default 10

Units deciseconds

Introduced 16.0.R1

Platforms All

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages

Context **configure** **service vpls** *string* **mesh-sdp** *string* **igmp-snooping** **query-response-interval** *number*

Tree [query-response-interval](#)

Range 1 to 1023

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

robust-count *number*

Synopsis Number of retries after expected message loss
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) **robust-count** *number*
 Tree [robust-count](#)
 Range 2 to 7
 Default 2
 Introduced 16.0.R1
 Platforms All

router-alert-check *boolean*

Synopsis Enable IP router alert check option
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) **router-alert-check** *boolean*
 Tree [router-alert-check](#)
 Default true
 Introduced 16.0.R1
 Platforms All

send-queries *boolean*

Synopsis Generate IGMP general queries
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) **send-queries** *boolean*
 Tree [send-queries](#)
 Default false
 Introduced 16.0.R1
 Platforms All

static

Synopsis Enter the **static** context
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) **static**
 Tree [static](#)

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

group [*group-address*] *string*

| | |
|------------|---|
| Synopsis | Enter the group list instance |
| Context | configure <i>service vpls string mesh-sdp string igmp-snooping static group string</i> |
| Tree | <i>group</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-address] *string*

| | |
|-------------|---|
| Synopsis | Group address of static IGMP multicast channel |
| Context | configure <i>service vpls string mesh-sdp string igmp-snooping static group string</i> |
| Tree | <i>group</i> |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [*source-address*] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for source |
| Context | configure <i>service vpls string mesh-sdp string igmp-snooping static group string source string</i> |
| Tree | <i>source</i> |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|----------|---|
| Synopsis | Source IP address of multicast channel sending data |
|----------|---|

| | |
|------------|---|
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|--|
| Synopsis | any source address (*,G) |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping static group <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

version *keyword*

| | |
|------------|---|
| Synopsis | IGMP protocol version |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> igmp-snooping version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress filter mac reference |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|---|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network fp-redirect-group
group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance number

| | |
|------------|---|
| Synopsis | Instance of the forwarding-plane ingress Queue Group for this SDP binding |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name reference

| | |
|------------|---|
| Synopsis | Network policy ID |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-label number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Ingress MPLS VC label to send packets to the far end |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> ingress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 1 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|----------|---|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping |

Tree [mld-snooping](#)
 Introduced 16.0.R1
 Platforms All

fast-leave *boolean*

Synopsis Allow IGMP fast leave processing
 Context **configure** [service vpls string mesh-sdp string mld-snooping fast-leave boolean](#)
 Tree [fast-leave](#)
 Default false
 Introduced 16.0.R1
 Platforms All

import-policy *reference*

Synopsis Import policy that filters IGMP packets
 Context **configure** [service vpls string mesh-sdp string mld-snooping import-policy reference](#)
 Tree [import-policy](#)
 Reference **configure** [policy-options policy-statement string](#)
 Introduced 16.0.R1
 Platforms All

maximum-number-groups *number*

Synopsis Maximum groups allowed
 Context **configure** [service vpls string mesh-sdp string mld-snooping maximum-number-groups number](#)
 Tree [maximum-number-groups](#)
 Range 1 to 16000
 Introduced 16.0.R1
 Platforms All

mrouter-port *boolean*

Synopsis Operate port as a multicast router port

| | |
|------------|---|
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping mrouter-port <i>boolean</i> |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|------------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|----------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |

| | |
|------------|---------|
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|------------|---|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 2 to 7 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable IP router alert check option |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

send-queries *boolean*

| | |
|------------|--|
| Synopsis | Generate IGMP general queries |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping send-queries <i>boolean</i> |
| Tree | send-queries |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

static

| | |
|------------|---|
| Synopsis | Enter the static context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-address](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the group list instance |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[[group-address](#)] *string*

| | |
|------------|---|
| Synopsis | Group address of multicast channel |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for source |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|---|
| Synopsis | Source IP address |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|--|
| Synopsis | any source address (*,G) |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping static group <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

version *keyword*

| | |
|------------|--|
| Synopsis | Version of MLD running on the SAP or SDP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mld-snooping version <i>keyword</i> |
| Tree | version |
| Default | 2 |
| Options | 1, 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

mrp

| | |
|------------|--|
| Synopsis | Enter the mrp context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp |
| Tree | mrp |
| Introduced | 20.10.R1 |
| Platforms | All |

join-time *number*

| | |
|------------|--|
| Synopsis | Maximum rate for attribute join messages sent on SDP |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp join-time <i>number</i> |
| Tree | join-time |
| Range | 1 to 10 |
| Default | 2 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

leave-all-time *number*

| | |
|------------|---|
| Synopsis | Frequency of LeaveAll PDUs by LeaveAll state machine |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp leave-all-time <i>number</i> |
| Tree | leave-all-time |
| Range | 60 to 300 |
| Default | 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

leave-time *number*

| | |
|------------|---|
| Synopsis | Time in LV state before transition to MT state |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp leave-time <i>number</i> |
| Tree | leave-time |
| Range | 30 to 60 |
| Default | 30 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

periodic-time *number*

| | |
|------------|--|
| Synopsis | Frequency of periodic events generated by state machine |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp periodic-time <i>number</i> |
| Tree | periodic-time |
| Range | 10 to 100 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

periodic-timer *boolean*

| | |
|------------|--|
| Synopsis | Enable the Periodic Transmission Timer |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp periodic-timer <i>boolean</i> |
| Tree | periodic-timer |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

policy *reference*

| | |
|------------|--|
| Synopsis | MRP policy to control Group B-MAC attributes |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> mrp policy <i>reference</i> |
| Tree | policy |
| Reference | configure service mrp policy <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

pbb

| | |
|------------|--|
| Synopsis | Enter the pbb context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> pbb |
| Tree | pbb |
| Introduced | 20.10.R1 |
| Platforms | All |

fault-propagation

| | |
|------------|--|
| Synopsis | Enter the fault-propagation context |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> pbb fault-propagation |
| Tree | fault-propagation |
| Introduced | 20.10.R1 |
| Platforms | All |

backbone-mac-address [[address](#)] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for backbone-mac-address |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> pbb fault-propagation backbone-mac-address <i>string</i> |
| Tree | backbone-mac-address |
| Introduced | 20.10.R1 |
| Platforms | All |

[[address](#)] *string*

| | |
|------------|---|
| Synopsis | Backbone MAC address |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> pbb fault-propagation backbone-mac-address <i>string</i> |
| Tree | backbone-mac-address |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

backbone-mac-name [[name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for backbone-mac-name |
| Context | configure service vpls <i>string</i> mesh-sdp <i>string</i> pbb fault-propagation backbone-mac-name <i>reference</i> |
| Tree | backbone-mac-name |
| Introduced | 20.10.R1 |
| Platforms | All |

[name] *reference*

| | |
|------------|--|
| Synopsis | Backbone MAC address name |
| Context | configure service vpls string mesh-sdp string pbb fault-propagation backbone-mac-name reference |
| Tree | backbone-mac-name |
| Reference | configure service pbb mac string |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

vc-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported |
| Context | configure service vpls string mesh-sdp string vc-type keyword |
| Tree | vc-type |
| Default | ether |
| Options | ether, vlan |
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-vc-tag *number*

| | |
|------------|---|
| Synopsis | SDP bind VC tag |
| Context | configure service vpls string mesh-sdp string vlan-vc-tag number |
| Tree | vlan-vc-tag |
| Range | 0 to 4094 |
| Introduced | 16.0.R1 |
| Platforms | All |

mfib

| | |
|------------|---|
| Synopsis | Enter the mfib context |
| Context | configure service vpls string mfib |
| Tree | mfib |
| Introduced | 16.0.R1 |
| Platforms | All |

table

| | |
|------------|---|
| Synopsis | Enter the table context |
| Context | configure service vpls string mfib table |
| Tree | table |
| Introduced | 16.0.R1 |
| Platforms | All |

high-wmark *number*

| | |
|------------|---|
| Synopsis | High watermark for the MFIB table |
| Context | configure service vpls string mfib table high-wmark number |
| Tree | high-wmark |
| Range | 0 to 100 |
| Default | 95 |
| Introduced | 16.0.R1 |
| Platforms | All |

low-wmark *number*

| | |
|------------|--|
| Synopsis | Low watermark for the MFIB table |
| Context | configure service vpls string mfib table low-wmark number |
| Tree | low-wmark |
| Range | 0 to 100 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | All |

size number

| | |
|------------|---|
| Synopsis | Maximum SG entries in the MFIB |
| Context | configure service vpls string mfib table size number |
| Tree | size |
| Range | 1 to 40959 |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|------------|---|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls string mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of snooping |
| Context | configure service vpls string mld-snooping admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn-proxy

| | |
|------------|--|
| Synopsis | Enter the evpn-proxy context |
| Context | configure service vpls string mld-snooping evpn-proxy |
| Tree | evpn-proxy |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of EVPN proxy |
| Context | configure service vpls <i>string</i> mld-snooping evpn-proxy admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

mvr

| | |
|------------|---|
| Synopsis | Enter the mvr context |
| Context | configure service vpls <i>string</i> mld-snooping mvr |
| Tree | mvr |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MVR |
| Context | configure service vpls <i>string</i> mld-snooping mvr admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> mld-snooping mvr description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms All

group-policy *string*

Synopsis Policy that applies MVR
 Context **configure** [service](#) [vpls](#) *string* [mld-snooping](#) [mvr](#) [group-policy](#) *string*
 Tree [group-policy](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages
 Context **configure** [service](#) [vpls](#) *string* [mld-snooping](#) [query-interval](#) *number*
 Tree [query-interval](#)
 Range 1 to 65535
 Default 125
 Units seconds
 Introduced 16.0.R1
 Platforms All

query-source-address (*keyword* | *ipv6-address*)

Synopsis Source IP address used in MLD queries
 Context **configure** [service](#) [vpls](#) *string* [mld-snooping](#) [query-source-address](#) (*keyword* | *ipv6-address*)
 Tree [query-source-address](#)
 Default system
 Options system
 Introduced 16.0.R1
 Platforms All

report-source-address *string*

Synopsis Source IP address used when generating MLD reports

| | |
|------------|---|
| Context | configure service vpls <i>string</i> mld-snooping report-source-address <i>string</i> |
| Tree | report-source-address |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|------------|--|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vpls <i>string</i> mld-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 1 to 255 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

mrp

| | |
|------------|--|
| Synopsis | Enter the mrp context |
| Context | configure service vpls <i>string</i> mrp |
| Tree | mrp |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MRP |
| Context | configure service vpls <i>string</i> mrp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

mmp

| | |
|------------|---|
| Synopsis | Enter the mmp context |
| Context | configure service vpls <i>string</i> mrp mmp |
| Tree | mmp |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MMRP |
| Context | configure service vpls <i>string</i> mrp mmp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

attribute-table

| | |
|------------|--|
| Synopsis | Enter the attribute-table context |
| Context | configure service vpls <i>string</i> mrp mmp attribute-table |
| Tree | attribute-table |
| Introduced | 20.10.R1 |
| Platforms | All |

high-wmark *number*

| | |
|------------|--|
| Synopsis | High watermark for the MMRP attribute table |
| Context | configure service vpls <i>string</i> mrp mmp attribute-table high-wmark <i>number</i> |
| Tree | high-wmark |
| Range | 0 to 100 |
| Default | 95 |
| Introduced | 20.10.R1 |
| Platforms | All |

low-wmark *number*

| | |
|------------|--|
| Synopsis | Low watermark for the MMRP attribute table |
| Context | configure service vpls <i>string</i> mrp mmrp attribute-table low-wmark <i>number</i> |
| Tree | low-wmark |
| Range | 0 to 100 |
| Default | 90 |
| Introduced | 20.10.R1 |
| Platforms | All |

size *number*

| | |
|------------|---|
| Synopsis | Maximum number of attributes accepted by B-VPLS |
| Context | configure service vpls <i>string</i> mrp mmrp attribute-table size <i>number</i> |
| Tree | size |
| Range | 1 to 8192 |
| Default | 2048 |
| Introduced | 20.10.R1 |
| Platforms | All |

end-station-only *boolean*

| | |
|------------|--|
| Synopsis | Prevent generation or processing of MMRP messages |
| Context | configure service vpls <i>string</i> mrp mmrp end-station-only <i>boolean</i> |
| Tree | end-station-only |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

flood-time *number*

| | |
|------------|---|
| Synopsis | Time when traffic is flooded after status change |
| Context | configure service vpls <i>string</i> mrp mmrp flood-time <i>number</i> |
| Tree | flood-time |
| Range | 3 to 600 |
| Introduced | 20.10.R1 |

Platforms All

multicast-info-policy *reference*

Synopsis Multicast information policy
 Context **configure** [service vpls string multicast-info-policy reference](#)
 Tree [multicast-info-policy](#)
 Reference **configure** [multicast-management multicast-info-policy string](#)
 Introduced 16.0.R1
 Platforms All

pbb

Synopsis Enter the **pbb** context
 Context **configure** [service vpls string pbb](#)
 Tree [pbb](#)
 Introduced 16.0.R1
 Platforms All

backbone-vpls [[backbone-vpls-service-name](#)] *reference*

Synopsis Enter the **backbone-vpls** list instance
 Context **configure** [service vpls string pbb backbone-vpls reference](#)
 Tree [backbone-vpls](#)
 Max. 1
 Instances
 Introduced 16.0.R1
 Platforms All

[backbone-vpls-service-name] *reference*

Synopsis Service name
 Context **configure** [service vpls string pbb backbone-vpls reference](#)
 Tree [backbone-vpls](#)
 Reference **configure** [service vpls string](#)

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure service vpls <i>string</i> pbb backbone-vpls <i>reference</i> fdb |
| Tree | fdb |
| Introduced | 20.2.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|--|
| Synopsis | Action taken upon a relearn request for protected MAC |
| Context | configure service vpls <i>string</i> pbb backbone-vpls <i>reference</i> fdb protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | discard |
| Introduced | 20.5.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|---|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls <i>string</i> pbb backbone-vpls <i>reference</i> igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-destination [[mac-reference](#)] *reference*

| | |
|----------|---|
| Synopsis | Add a list entry for mrouter-destination |
| Context | configure service vpls <i>string</i> pbb backbone-vpls <i>reference</i> igmp-snooping mrouter-destination <i>reference</i> |
| Tree | mrouter-destination |

Introduced 16.0.R1
 Platforms All

[**mac-reference**] *reference*

Synopsis Mac name reference
 Context **configure service vpls string pbb backbone-vpls reference igmp-snooping mrouter-destination reference**
 Tree **mrouter-destination**
 Reference **configure service pbb mac string**
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

isid *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Backbone VPLS ISID
 Context **configure service vpls string pbb backbone-vpls reference isid number**
 Tree **isid**
 Range 0 to 16777215
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

mesh-sdp [**sdp-bind-id**] *reference*

Synopsis Enter the **mesh-sdp** list instance
 Context **configure service vpls string pbb backbone-vpls reference mesh-sdp reference**
 Tree **mesh-sdp**
 Introduced 16.0.R1
 Platforms All

[sdp-bind-id] reference

| | |
|------------|---|
| Synopsis | Backbone VPLS SDP Binding ID |
| Context | configure service vpls string pbb backbone-vpls reference mesh-sdp reference |
| Tree | mesh-sdp |
| Reference | configure service vpls string mesh-sdp string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|---|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port boolean

| | |
|------------|--|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|------------|--|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R1 |

Platforms All

mrouter-port *boolean*

Synopsis Operate port as a multicast router port

Context **configure** [service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping mrouter-port boolean](#)

Tree [mrouter-port](#)

Default false

Introduced 16.0.R1

Platforms All

mld-snooping

Synopsis Enter the **mld-snooping** context

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping](#)

Tree [mld-snooping](#)

Introduced 16.0.R1

Platforms All

mrouter-destination [[mac-reference](#)] *reference*

Synopsis Add a list entry for **mrouter-destination**

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference](#)

Tree [mrouter-destination](#)

Introduced 16.0.R1

Platforms All

[[mac-reference](#)] *reference*

Synopsis Mac name reference

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference](#)

Tree [mrouter-destination](#)

Reference **configure** [service pbb mac string](#)

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

sap [[sap-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the sap list instance |
| Context | configure service vpls string pbb backbone-vpls reference sap reference |
| Tree | sap |
| Introduced | 16.0.R1 |
| Platforms | All |

[sap-id] *reference*

| | |
|------------|--|
| Synopsis | Backbone VPLS SAP |
| Context | configure service vpls string pbb backbone-vpls reference sap reference |
| Tree | sap |
| Reference | configure service vpls string sap string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|--|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls string pbb backbone-vpls reference sap reference igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|----------|---|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls string pbb backbone-vpls reference sap reference igmp-snooping mrouter-port boolean |

| | |
|------------|------------------------------|
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|------------|---|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls string pbb backbone-vpls reference sap reference mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|--|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls string pbb backbone-vpls reference sap reference mld-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

spoke-sdp [[sdp-bind-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service vpls string pbb backbone-vpls reference spoke-sdp reference |
| Tree | spoke-sdp |
| Introduced | 16.0.R1 |
| Platforms | All |

[[sdp-bind-id](#)] *reference*

| | |
|----------|--|
| Synopsis | Backbone VPLS SDP Binding ID |
| Context | configure service vpls string pbb backbone-vpls reference spoke-sdp reference |
| Tree | spoke-sdp |

| | |
|------------|---|
| Reference | configure service vpls string spoke-sdp string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|--|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|---|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|------------|---|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls string pbb backbone-vpls reference spoke-sdp reference mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|----------|---|
| Synopsis | Operate port as a multicast router port |
|----------|---|

| | |
|------------|--|
| Context | configure service vpls string pbb backbone-vpls reference spoke-sdp reference mld-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

force-qtag-forwarding boolean

| | |
|------------|--|
| Synopsis | Add an IEEE 802.1q tag after C-MAC addresses PBB header |
| Context | configure service vpls string pbb force-qtag-forwarding boolean |
| Tree | force-qtag-forwarding |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

i-vpls-mac-flush

| | |
|------------|---|
| Synopsis | Enter the i-vpls-mac-flush context |
| Context | configure service vpls string pbb i-vpls-mac-flush |
| Tree | i-vpls-mac-flush |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-evpn

| | |
|------------|--|
| Synopsis | Enter the bgp-evpn context |
| Context | configure service vpls string pbb i-vpls-mac-flush bgp-evpn |
| Tree | bgp-evpn |
| Introduced | 16.0.R1 |
| Platforms | All |

send-to-bvpls boolean

| | |
|----------|--|
| Synopsis | Send b-VPLS EVPN flush |
| Context | configure service vpls string pbb i-vpls-mac-flush bgp-evpn send-to-bvpls boolean |

| | |
|------------|-------------------------------|
| Tree | send-to-bvpls |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tldp

| | |
|------------|--|
| Synopsis | Enter the tldp context |
| Context | configure service vpls string pbb i-vpls-mac-flush tldp |
| Tree | tldp |
| Introduced | 16.0.R1 |
| Platforms | All |

propagate-from-bvpls *boolean*

| | |
|------------|---|
| Synopsis | Propagate MAC flush message from B-VPLS into local I-VPLS |
| Context | configure service vpls string pbb i-vpls-mac-flush tldp propagate-from-bvpls boolean |
| Tree | propagate-from-bvpls |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

send-on-bvpls-failure *boolean*

| | |
|------------|--|
| Synopsis | Send negative flush message (flush-all-from-me) on B-VPLS failure |
| Context | configure service vpls string pbb i-vpls-mac-flush tldp send-on-bvpls-failure boolean |
| Tree | send-on-bvpls-failure |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

send-to-bvpls

| | |
|----------|--|
| Synopsis | Enter the send-to-bvpls context |
| Context | configure service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls |

Tree [send-to-bvpls](#)
 Introduced 16.0.R1
 Platforms All

all-but-mine *boolean*

Synopsis Generate LDP MAC withdraw message to b-VPLS
 Context **configure** [service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-but-mine](#)
boolean
 Tree [all-but-mine](#)
 Default false
 Introduced 16.0.R1
 Platforms All

all-from-me *boolean*

Synopsis Generate LDP MAC withdraw all from me message to b-VPLS
 Context **configure** [service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-from-me](#)
boolean
 Tree [all-from-me](#)
 Default false
 Introduced 16.0.R1
 Platforms All

mac-notification

Synopsis Enter the **mac-notification** context
 Context **configure** [service vpls string pbb mac-notification](#)
 Tree [mac-notification](#)
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of MAC notification messages
 Context **configure** [service vpls string pbb mac-notification admin-state keyword](#)

| | |
|------------|-----------------------------|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

count *number*

| | |
|------------|---|
| Synopsis | MAC notification messages count |
| Context | configure service vpls <i>string</i> pbb mac-notification count <i>number</i> |
| Tree | count |
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|------------|--|
| Synopsis | Interval for MAC notification messages |
| Context | configure service vpls <i>string</i> pbb mac-notification interval <i>number</i> |
| Tree | interval |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

renotify (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Re-notify interval for MAC-notification messages |
| Context | configure service vpls <i>string</i> pbb mac-notification renotify (<i>number</i> <i>keyword</i>) |
| Tree | renotify |
| Range | 240 to 840 |
| Default | none |
| Units | seconds |
| Options | none |
| Introduced | 16.0.R1 |

Platforms All

source-bmac

Synopsis Enter the **source-bmac** context
 Context **configure service vpls string pbb source-bmac**
 Tree [source-bmac](#)
 Introduced 16.0.R1
 Platforms All

address *string*

Synopsis Base source B-MAC address for the B-VPLS
 Context **configure service vpls string pbb source-bmac address string**
 Tree [address](#)
 Introduced 16.0.R1
 Platforms All

use-es-bmac-lsb *boolean*

Synopsis Use LSB from Ethernet-segment backbone MAC
 Context **configure service vpls string pbb source-bmac use-es-bmac-lsb boolean**
 Tree [use-es-bmac-lsb](#)
 Default false
 Introduced 16.0.R1
 Platforms All

use-mclag-bmac-lsb *boolean*

Synopsis Use MC LAG backbone MAC LSB
 Context **configure service vpls string pbb source-bmac use-mclag-bmac-lsb boolean**
 Tree [use-mclag-bmac-lsb](#)
 Default false
 Introduced 16.0.R1
 Platforms All

pbb-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | PBB VPLS type |
| Context | configure service vpls <i>string</i> pbb-type <i>keyword</i> |
| Tree | pbb-type |
| Options | b-vpls, i-vpls |
| Introduced | 16.0.R1 |
| Platforms | All |

pim-snooping

| | |
|------------|---|
| Synopsis | Enable the pim-snooping context |
| Context | configure service vpls <i>string</i> pim-snooping |
| Tree | pim-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

group-policy *string*

| | |
|----------------|---|
| Synopsis | Group policy name |
| Context | configure service vpls <i>string</i> pim-snooping group-policy <i>string</i> |
| Tree | group-policy |
| String Length | 1 to 255 |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time *number*

| | |
|----------|--|
| Synopsis | Duration that allows the PIM-snooping switch to snoop all the PIM states in the VPLS |
|----------|--|

| | |
|------------|--|
| Context | configure service vpls string pim-snooping hold-time number |
| Tree | hold-time |
| Range | 0 to 300 |
| Default | 90 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vpls string pim-snooping ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of snooping for multicast traffic |
| Context | configure service vpls string pim-snooping ipv4 admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vpls string pim-snooping ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of snooping for multicast traffic |
| Context | configure service vpls <i>string</i> pim-snooping ipv6 admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

provider-tunnel

| | |
|------------|---|
| Synopsis | Enable the provider-tunnel context |
| Context | configure service vpls <i>string</i> provider-tunnel |
| Tree | provider-tunnel |
| Introduced | 19.7.R1 |
| Platforms | All |

inclusive**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the inclusive context |
| Context | configure service vpls <i>string</i> provider-tunnel inclusive |
| Tree | inclusive |
| Introduced | 19.7.R1 |
| Platforms | All |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Administrative state of P2MP LSP as the I-PMSI |
| Context | configure service vpls <i>string</i> provider-tunnel inclusive admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |
| Platforms | All |

data-delay-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | I-PMSI data delay timer |
| Context | configure <i>service vpls string provider-tunnel inclusive data-delay-interval number</i> |
| Tree | <i>data-delay-interval</i> |
| Range | 3 to 180 |
| Default | 15 |
| Units | seconds |
| Introduced | 19.7.R1 |
| Platforms | All |

mldp



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable/Disable MLDP |
| Context | configure <i>service vpls string provider-tunnel inclusive mldp</i> |
| Tree | <i>mldp</i> |
| Notes | The following elements are part of a choice: mldp or rsvp . |
| Introduced | 19.7.R1 |
| Platforms | All |

owner *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Configure provider-tunnel owner |
| Context | configure <i>service vpls string provider-tunnel inclusive owner keyword</i> |
| Tree | <i>owner</i> |
| Options | bgp-ad, bgp-vpls, bgp-evpn-mpls |
| Introduced | 19.7.R1 |
| Platforms | All |

root-and-leaf *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Configure whether the provider tunnel acts as a leaf or both a root and leaf |
| Context | configure <i>service vpls string provider-tunnel inclusive root-and-leaf boolean</i> |
| Tree | <i>root-and-leaf</i> |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

rsvp**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the rsvp context |
| Context | configure <i>service vpls string provider-tunnel inclusive rsvp</i> |
| Tree | <i>rsvp</i> |
| Notes | The following elements are part of a choice: mldp or rsvp . |
| Introduced | 19.7.R1 |
| Platforms | All |

Isp-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Configure LSP template name |
| Context | configure service vpls string provider-tunnel inclusive rsvp lsp-template reference |
| Tree | lsp-template |
| Reference | configure router string mpls lsp-template string |
| Introduced | 19.7.R1 |
| Platforms | All |

selective

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the selective context |
| Context | configure service vpls string provider-tunnel selective |
| Tree | selective |
| Introduced | 23.3.R1 |
| Platforms | All |

admin-state *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of the selective provider tunnel |
| Context | configure service vpls string provider-tunnel selective admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 23.3.R1 |

Platforms All

data-delay-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis S-PMSI data delay timer

Context **configure** [service vpls](#) [string](#) [provider-tunnel](#) [selective data-delay-interval](#) *number*

Tree [data-delay-interval](#)

Description This command configures the S-PMSI data delay timer.

The data delay interval determines the time the router takes to switch over the traffic from the Ingress Replication binds to the wildcard S-PMSI or from the wildcard S-PMSI to the S-PMSI, after the S-PMSI is created. This time should account for the time it takes for BGP to propagate the S-PMSI A-D route to the downstream PEs and the time it takes the downstream PEs to join the tree all the way up to the root.

Range 3 to 180

Default 3

Units seconds

Introduced 23.3.R1

Platforms All

data-threshold



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **data-threshold** context

Context **configure** [service vpls](#) [string](#) [provider-tunnel](#) [selective data-threshold](#)

Tree [data-threshold](#)

Description Commands in this context specify the data rate threshold that triggers the switch from the inclusive provider tunnel to the selective provider tunnel for (C-S, C-G) within the group range.

Optionally, PE thresholds to create or delete ng-MVPN S-PMSI may also be specified. Omitting the PE thresholds preserves the currently set value (or defaults if never set). Multiple statements (one per a unique group) are allowed in the configuration.

This command is not applicable to multistream S-PMSI.

This command for S-PMSI trees can also be used in EVPN services. The command options are used in the same way as in MVPN when applied to EVPN, in particular the rate and PE thresholds.

Introduced 23.3.R1

Platforms All

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **group-prefix** list instance

Context **configure service vpls string provider-tunnel selective data-threshold group-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Tree [group-prefix](#)

Introduced 23.3.R1

Platforms All

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Multicast group prefix

Context **configure service vpls string provider-tunnel selective data-threshold group-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Tree [group-prefix](#)

Notes This element is part of a list key.

Introduced 23.3.R1

Platforms All

pe-threshold-add *number*

Synopsis Number of receiver PEs for S-PMSI tunnel creation

Context **configure service vpls string provider-tunnel selective data-threshold group-prefix** (*ipv4-prefix* | *ipv6-prefix*) **pe-threshold-add** *number*

Tree [pe-threshold-add](#)

Description This command specifies the number of Receiver PEs for creating S-PMSI.

A S-PMSI is created when the following apply:

- The number of receiver PEs for a multicast group is non-zero.
- The number of receiver PEs is below the threshold.
- The BW threshold is satisfied.

Range 1 to 65535

| | |
|------------|---------|
| Default | 65535 |
| Introduced | 23.3.R1 |
| Platforms | All |

pe-threshold-delete *number*

| | |
|-------------|---|
| Synopsis | Number of receiver PEs for S-PMSI tunnel deletion |
| Context | configure service vpls <i>string</i> provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-delete <i>number</i> |
| Tree | pe-threshold-delete |
| Description | This command specifies the number of Receiver PEs to delete S-PMSI. When the number of receiver PEs for a multicast group configuration is above the threshold, S-PMSI is deleted and the multicast group is moved to IR or a wildcard S-PMSI. Nokia recommends that the delete threshold be configured to be significantly larger than the add threshold to avoid re-signaling of S-PMSI as the Receiver PE count fluctuates |
| Range | 2 to 65535 |
| Default | 65535 |
| Introduced | 23.3.R1 |
| Platforms | All |

threshold *number*

| | |
|-------------|---|
| Synopsis | Threshold rate for a group prefix |
| Context | configure service vpls <i>string</i> provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold <i>number</i> |
| Tree | threshold |
| Description | This command specifies the threshold rate for a group prefix. If the rate for a (C-S, C-G) within the specified group range exceeds the threshold, traffic for the (C-S, C-G) is switched to the selective provider tunnel. |
| Range | 0 to 4294967294 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 23.3.R1 |
| Platforms | All |

maximum-p2mp-spmsi *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum number of P2MP S-PMSI tunnels |
| Context | configure service vpls string provider-tunnel selective maximum-p2mp-spmsi number |
| Tree | maximum-p2mp-spmsi |
| Description | This command specifies the maximum number of S-PMSI tunnels for the EVPN service. When the limit is reached, no more RSVP P2MP S-PMSI or LDP P2MP S-PMSI are created and traffic over the data threshold value stays on I-PMSI |
| Range | 1 to 4000 |
| Default | 10 |
| Introduced | 23.3.R1 |
| Platforms | All |

mldp *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable MLDP |
| Context | configure service vpls string provider-tunnel selective mldp boolean |
| Tree | mldp |
| Description | When configured to true , this command enables the use of MLDP as a protocol for an LDP P2MP LSP that is used for forwarding Broadcast, Unicast unknown, and Multicast (BUM) packets of a VPLS or B-VPLS instance. This command is also used for forwarding IP multicast packets of an EVPN VPLS or R-VPLS service.

When configured to false , this command disables the use of MLDP as a protocol to set up the P2MP LSP. |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | All |

owner keyword**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Provider-tunnel selective owner |
| Context | configure service vpls string provider-tunnel selective owner keyword |
| Tree | owner |
| Description | This command selects the owner protocol of the S-PMSI tunnel in the service.
The owner must be explicitly set before the provider tunnel can be enabled. |
| Options | bgp-evpn-mpls |
| Introduced | 23.3.R1 |
| Platforms | All |

wildcard-spmsi boolean**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable wildcard S-PMSI support |
| Context | configure service vpls string provider-tunnel selective wildcard-spmsi boolean |
| Tree | wildcard-spmsi |
| Description | When configured to true , the system enables RFC 6625 (C-*, C-*) S-PMSI functionality for EVPN VPLS or R-VPLS services. When enabled, (C-*, C-*) S-PMSI is used instead of I-PMSI for this EVPN VPLS or RVPLS service.

The configure service vprn pim rp auto-rp-discovery command and this command are mutually exclusive.

When configured to false , the system disables the (C-*, C-*) S-PMSI functionality. |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | All |

proxy-arp

| | |
|----------|--|
| Synopsis | Enable the proxy-arp context |
| Context | configure service vpls string proxy-arp |

| | |
|------------|---------------------------|
| Tree | proxy-arp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the proxy |
| Context | configure service vpls string proxy-arp admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

age-time (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Aging timer for proxy entries, where entries are flushed upon timer expiry |
| Context | configure service vpls string proxy-arp age-time (number keyword) |
| Tree | age-time |
| Range | 60 to 86400 |
| Default | never |
| Units | seconds |
| Options | never |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-detect

| | |
|------------|---|
| Synopsis | Enter the duplicate-detect context |
| Context | configure service vpls string proxy-arp duplicate-detect |
| Tree | duplicate-detect |
| Introduced | 16.0.R1 |
| Platforms | All |

anti-spoof-mac *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | MAC address to replace the proxy-ARP/ND offending entry's MAC |
| Context | configure service vpls string proxy-arp duplicate-detect anti-spoof-mac string |
| Tree | anti-spoof-mac |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down-time (*number | keyword*)

| | |
|------------|---|
| Synopsis | Hold down time for a duplicate entry |
| Context | configure service vpls string proxy-arp duplicate-detect hold-down-time (number keyword) |
| Tree | hold-down-time |
| Range | 2 to 60 |
| Default | 9 |
| Units | minutes |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

num-moves *number*

| | |
|------------|--|
| Synopsis | Number of moves required to declare a duplicate entry |
| Context | configure service vpls string proxy-arp duplicate-detect num-moves number |
| Tree | num-moves |
| Range | 3 to 10 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

static-blackhole *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Consider anti-spoof MAC as black-hole static MAC in FDB |
| Context | configure service vpls string proxy-arp duplicate-detect static-blackhole <i>boolean</i> |
| Tree | static-blackhole |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

window *number*

| | |
|------------|--|
| Synopsis | Time to monitor the MAC address in the anti-spoofing mechanism |
| Context | configure service vpls string proxy-arp duplicate-detect window <i>number</i> |
| Tree | window |
| Range | 1 to 15 |
| Default | 3 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-arp

| | |
|------------|--|
| Synopsis | Enter the dynamic-arp context |
| Context | configure service vpls string proxy-arp dynamic-arp |
| Tree | dynamic-arp |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address [[ipv4-address](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the ip-address list instance |
| Context | configure service vpls string proxy-arp dynamic-arp ip-address <i>string</i> |
| Tree | ip-address |

Introduced 16.0.R1
 Platforms All

[ipv4-address] *string*

Synopsis Proxy ARP IPv4 address
 Context **configure** [service](#) [vpls](#) *string* [proxy-arp](#) [dynamic-arp](#) [ip-address](#) *string*
 Tree [ip-address](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

mac-list *reference*

Synopsis MAC list for the dynamic entry
 Context **configure** [service](#) [vpls](#) *string* [proxy-arp](#) [dynamic-arp](#) [ip-address](#) *string* [mac-list](#) *reference*
 Tree [mac-list](#)
 Reference **configure** [service](#) [proxy-arp-nd](#) [mac-list](#) *list* *string*
 Introduced 16.0.R1
 Platforms All

resolve-retry-time *number*

Synopsis Frequency at which the resolve messages are sent
 Context **configure** [service](#) [vpls](#) *string* [proxy-arp](#) [dynamic-arp](#) [ip-address](#) *string* [resolve-retry-time](#) *number*
 Tree [resolve-retry-time](#)
 Range 1 to 60
 Default 5
 Units minutes
 Introduced 16.0.R1
 Platforms All

dynamic-populate *boolean*

| | |
|------------|--|
| Synopsis | Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings |
| Context | configure service vpls <i>string</i> proxy-arp dynamic-populate <i>boolean</i> |
| Tree | dynamic-populate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn

| | |
|------------|---|
| Synopsis | Enter the evpn context |
| Context | configure service vpls <i>string</i> proxy-arp evpn |
| Tree | evpn |
| Introduced | 16.0.R1 |
| Platforms | All |

flood

| | |
|------------|--|
| Synopsis | Enter the flood context |
| Context | configure service vpls <i>string</i> proxy-arp evpn flood |
| Tree | flood |
| Introduced | 16.0.R1 |
| Platforms | All |

gratuitous-arp *boolean*

| | |
|------------|---|
| Synopsis | Flood GARP-requests/GARP-replies to the EVPN |
| Context | configure service vpls <i>string</i> proxy-arp evpn flood gratuitous-arp <i>boolean</i> |
| Tree | gratuitous-arp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

unknown-arp-req *boolean*

| | |
|------------|--|
| Synopsis | Flood ARP-requests (with source squelching) if there is no active proxy-ARP entry for requested IP |
| Context | configure service vpls string proxy-arp evpn flood unknown-arp-req <i>boolean</i> |
| Tree | unknown-arp-req |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

route-tag *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module |
| Context | configure service vpls string proxy-arp evpn route-tag <i>number</i> |
| Tree | route-tag |
| Range | 0 1 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

process-arp-probes *boolean*

| | |
|------------|--|
| Synopsis | Enable replies to DAD ARP probes |
| Context | configure service vpls string proxy-arp process-arp-probes <i>boolean</i> |
| Tree | process-arp-probes |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | All |

send-refresh (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time at which to send a refresh message |
|----------|---|

| | |
|------------|--|
| Context | configure service vpls string proxy-arp send-refresh (<i>number</i> <i>keyword</i>) |
| Tree | send-refresh |
| Range | 120 to 86400 |
| Default | never |
| Options | never |
| Introduced | 16.0.R1 |
| Platforms | All |

static-arp

| | |
|------------|---|
| Synopsis | Enter the static-arp context |
| Context | configure service vpls string proxy-arp static-arp |
| Tree | static-arp |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address [[ipv4-address](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the ip-address list instance |
| Context | configure service vpls string proxy-arp static-arp ip-address string |
| Tree | ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|---|
| Synopsis | Proxy ARP IPv4 address |
| Context | configure service vpls string proxy-arp static-arp ip-address string |
| Tree | ip-address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac string

| | |
|------------|--|
| Synopsis | Proxy ARP MAC address for static entry |
| Context | configure service vpls string proxy-arp static-arp ip-address string mac string |
| Tree | mac |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

table-size number

| | |
|------------|---|
| Synopsis | Maximum number of learned and static entries allowed in the proxy table of this service |
| Context | configure service vpls string proxy-arp table-size number |
| Tree | table-size |
| Range | 1 to 16383 |
| Default | 250 |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-nd

| | |
|------------|---|
| Synopsis | Enable the proxy-nd context |
| Context | configure service vpls string proxy-nd |
| Tree | proxy-nd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the proxy |
| Context | configure service vpls string proxy-nd admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

age-time (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Aging timer for proxy entries, where entries are flushed upon timer expiry |
| Context | configure service vpls string proxy-nd age-time (<i>number</i> <i>keyword</i>) |
| Tree | age-time |
| Range | 60 to 86400 |
| Default | never |
| Units | seconds |
| Options | never |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-detect

| | |
|------------|--|
| Synopsis | Enter the duplicate-detect context |
| Context | configure service vpls string proxy-nd duplicate-detect |
| Tree | duplicate-detect |
| Introduced | 16.0.R1 |
| Platforms | All |

anti-spoof-mac *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | MAC address to replace the proxy-ARP/ND offending entry's MAC |
| Context | configure service vpls string proxy-nd duplicate-detect anti-spoof-mac string |
| Tree | anti-spoof-mac |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down-time (*number* | *keyword*)

| | |
|----------|--------------------------------------|
| Synopsis | Hold down time for a duplicate entry |
|----------|--------------------------------------|

| | |
|------------|--|
| Context | configure service vpls string proxy-nd duplicate-detect hold-down-time (<i>number</i> <i>keyword</i>) |
| Tree | hold-down-time |
| Range | 2 to 60 |
| Default | 9 |
| Units | minutes |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

num-moves *number*

| | |
|------------|--|
| Synopsis | Number of moves required to declare a duplicate entry |
| Context | configure service vpls string proxy-nd duplicate-detect num-moves <i>number</i> |
| Tree | num-moves |
| Range | 3 to 10 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

static-blackhole *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Consider anti-spoof MAC as black-hole static MAC in FDB |
| Context | configure service vpls string proxy-nd duplicate-detect static-blackhole <i>boolean</i> |
| Tree | static-blackhole |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

window *number*

| | |
|----------|--|
| Synopsis | Time to monitor the MAC address in the anti-spoofing mechanism |
|----------|--|

| | |
|------------|--|
| Context | configure service vpls string proxy-nd duplicate-detect window number |
| Tree | window |
| Range | 1 to 15 |
| Default | 3 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-neighbor

| | |
|------------|--|
| Synopsis | Enter the dynamic-neighbor context |
| Context | configure service vpls string proxy-nd dynamic-neighbor |
| Tree | dynamic-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address [[ipv6-address](#)] string

| | |
|------------|--|
| Synopsis | Enter the ip-address list instance |
| Context | configure service vpls string proxy-nd dynamic-neighbor ip-address string |
| Tree | ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[ipv6-address\]](#) string

| | |
|------------|--|
| Synopsis | Proxy ND IPv6 address |
| Context | configure service vpls string proxy-nd dynamic-neighbor ip-address string |
| Tree | ip-address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-list *reference*

| | |
|------------|---|
| Synopsis | MAC list for the dynamic entry |
| Context | configure service vpls <i>string</i> proxy-nd dynamic-neighbor ip-address <i>string</i> mac-list <i>reference</i> |
| Tree | mac-list |
| Reference | configure service proxy-arp-nd mac-list <i>list</i> <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

resolve-retry-time *number*

| | |
|------------|--|
| Synopsis | Frequency at which the resolve messages are sent |
| Context | configure service vpls <i>string</i> proxy-nd dynamic-neighbor ip-address <i>string</i> resolve-retry-time <i>number</i> |
| Tree | resolve-retry-time |
| Range | 1 to 60 |
| Default | 5 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-populate *boolean*

| | |
|------------|---|
| Synopsis | Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings |
| Context | configure service vpls <i>string</i> proxy-nd dynamic-populate <i>boolean</i> |
| Tree | dynamic-populate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn

| | |
|----------|--|
| Synopsis | Enter the evpn context |
| Context | configure service vpls <i>string</i> proxy-nd evpn |
| Tree | evpn |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-neighbor-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Advertisement type of static or dynamic entries in EVPN |
| Context | configure service vpls <i>string</i> proxy-nd evpn advertise-neighbor-type <i>keyword</i> |
| Tree | advertise-neighbor-type |
| Description | <p>This command enables the advertisement of static or dynamic entries that are learned as host, router, or host and router (only one option is possible in a specified service). It also determines the R flag (host or router) when sending Neighbor Advertisement (NA) messages for existing EVPN entries in the proxy-ND table.</p> <p>The router-host command option is only possible when the ARP/ND extended community is advertised along with the MAC/IP routes. It determines that both host and router (dynamic and static) entries are advertised in MAC/IP routes, with an indication whether the entry is host or router in the R flag. These EVPN entries are installed as host or router entries depending on the R flag of the route, and NA messages for them are sent with the proper host or router indication.</p> |
| Default | router |
| Options | router, host, router-host |
| Introduced | 16.0.R1 |
| Platforms | All |

flood

| | |
|------------|--|
| Synopsis | Enter the flood context |
| Context | configure service vpls <i>string</i> proxy-nd evpn flood |
| Tree | flood |
| Introduced | 16.0.R1 |
| Platforms | All |

unknown-neighbor-advertise-host *boolean*

| | |
|----------|--|
| Synopsis | Flood host unsolicited Neighbor Advertisement (NA) replies to EVPN |
|----------|--|

| | |
|------------|--|
| Context | configure service vpls string proxy-nd evpn flood unknown-neighbor-advertise-host
<i>boolean</i> |
| Tree | unknown-neighbor-advertise-host |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

unknown-neighbor-advertise-router *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Flood router unsolicited Neighbor Advertisement (NA) replies to EVPN |
| Context | configure service vpls string proxy-nd evpn flood unknown-neighbor-advertise-router
<i>boolean</i> |
| Tree | unknown-neighbor-advertise-router |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

unknown-neighbor-solicitation *boolean*

| | |
|------------|--|
| Synopsis | Flood unsolicited Neighbor Solicitation messages (with source squelching) into EVPN network |
| Context | configure service vpls string proxy-nd evpn flood unknown-neighbor-solicitation
<i>boolean</i> |
| Tree | unknown-neighbor-solicitation |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

route-tag *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module |
| Context | configure service vpls <i>string</i> proxy-nd evpn route-tag <i>number</i> |
| Tree | route-tag |
| Range | 0 1 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

process-dad-neighbor-solicitations *boolean*

| | |
|------------|--|
| Synopsis | Enable replies to DAD neighbor solicitations |
| Context | configure service vpls <i>string</i> proxy-nd process-dad-neighbor-solicitations <i>boolean</i> |
| Tree | process-dad-neighbor-solicitations |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | All |

send-refresh (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Time at which to send a refresh message |
| Context | configure service vpls <i>string</i> proxy-nd send-refresh (<i>number</i> <i>keyword</i>) |
| Tree | send-refresh |
| Range | 120 to 86400 |
| Default | never |
| Options | never |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor

| | |
|------------|--|
| Synopsis | Enter the static-neighbor context |
| Context | configure service vpls <i>string</i> proxy-nd static-neighbor |
| Tree | static-neighbor |
| Introduced | 16.0.R1 |

Platforms All

ip-address [[ipv6-address](#)] *string*

Synopsis Enter the **ip-address** list instance

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string*

Tree [ip-address](#)

Introduced 16.0.R1

Platforms All

[ipv6-address] *string*

Synopsis Proxy ND IPv6 address

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string*

Tree [ip-address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

mac *string*

Synopsis Proxy ARP MAC address for static entry

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string* **mac** *string*

Tree [mac](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis Entry type

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string* **type** *keyword*

Tree [type](#)

Default router

Options host, router

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

table-size *number*

| | |
|------------|--|
| Synopsis | Maximum number of learned and static entries allowed in the proxy table of this service |
| Context | configure service vpls <i>string</i> proxy-nd table-size <i>number</i> |
| Tree | table-size |
| Range | 1 to 16383 |
| Default | 250 |
| Introduced | 16.0.R1 |
| Platforms | All |

routed-vpls

| | |
|------------|---|
| Synopsis | Enable the routed-vpls context |
| Context | configure service vpls <i>string</i> routed-vpls |
| Tree | routed-vpls |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn-mpls-ecmp *boolean*

| | |
|------------|--|
| Synopsis | Enable ECMP behavior on R-VPLS services |
| Context | configure service vpls <i>string</i> routed-vpls evpn-mpls-ecmp <i>boolean</i> |
| Tree | evpn-mpls-ecmp |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

multicast

| | |
|----------|--|
| Synopsis | Enter the multicast context |
| Context | configure service vpls <i>string</i> routed-vpls multicast |
| Tree | multicast |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

evpn-gateway

| | |
|------------|---|
| Synopsis | Enable the evpn-gateway context |
| Context | configure service vpls string routed-vpls multicast evpn-gateway |
| Tree | evpn-gateway |
| Introduced | 21.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the multicast EVPN gateway |
| Context | configure service vpls string routed-vpls multicast evpn-gateway admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | All |

advertise *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Type of the multicast EVPN gateway |
| Context | configure service vpls string routed-vpls multicast evpn-gateway advertise <i>keyword</i> |
| Tree | advertise |
| Description | This command configures EVPN OISM to advertise the type of OISM gateway function in the Inclusive Multicast Ethernet Tag routes. |
| Default | mvpn-pim |
| Options | mvpn-pim, mvpn-only, pim-only |
| Introduced | 21.10.R1 |
| Platforms | All |

dr-activation-timer *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | DR activation timer for the EVPN gateway |
| Context | configure service vpls <i>string</i> routed-vpls multicast evpn-gateway dr-activation-timer <i>number</i> |
| Tree | dr-activation-timer |
| Description | This command configures the the designated router (DR) activation timer for the EVPN gateway.

After the DR activation timer expires, each provider edge router (PE) runs the MEG or PEG DR election. The timer allows the PE to collect Inclusive Multicast Ethernet Tag routes from other MEG or PEG gateways and avoids running the DR election multiple times. |
| Range | 0 to 100 |
| Default | 3 |
| Units | seconds |
| Introduced | 21.10.R1 |
| Platforms | All |

non-dr-attract-traffic *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Multicast traffic attraction option on non-DR router GW |
| Context | configure service vpls <i>string</i> routed-vpls multicast evpn-gateway non-dr-attract-traffic <i>keyword</i> |
| Tree | non-dr-attract-traffic |
| Default | from-pim-mvpn |
| Options | none, from-evpn, from-pim-mvpn, from-evpn-pim-mvpn |
| Introduced | 21.10.R1 |
| Platforms | All |

ip-multicast-ecmp *boolean*

| | |
|------------|--|
| Synopsis | ECMP behaviour for multicast traffic on bgp-evpn mpls and vxlan |
| Context | configure service vpls <i>string</i> routed-vpls multicast ip-multicast-ecmp <i>boolean</i> |
| Tree | ip-multicast-ecmp |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

forward-to-ip-interface *boolean*

| | |
|------------|---|
| Synopsis | Forward IPv4 multicast from RVPLS to L3 interface |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv4 forward-to-ip-interface <i>boolean</i> |
| Tree | forward-to-ip-interface |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|--|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv4 igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|--|
| Synopsis | Operate VPLS L3 interface as a multicast router port |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv4 igmp-snooping mrouter-port <i>boolean</i> |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

forward-to-ip-interface *boolean*

| | |
|------------|---|
| Synopsis | Forward IPv6 multicast from RVPLS to L3 interface |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv6 forward-to-ip-interface <i>boolean</i> |
| Tree | forward-to-ip-interface |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|------------|---|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv6 mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|--|
| Synopsis | Operate VPLS L3 interface as a multicast router port |
| Context | configure service vpls <i>string</i> routed-vpls multicast ipv6 mld-snooping mrouter-port <i>boolean</i> |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vxlan-ipv4-tep-ecmp *boolean*

| | |
|------------|---|
| Synopsis | Use ECMP on VXLAN IPv4 destinations for R-VPLS services |
| Context | configure service vpls <i>string</i> routed-vpls vxlan-ipv4-tep-ecmp <i>boolean</i> |
| Tree | vxlan-ipv4-tep-ecmp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap [[sap-id](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the sap list instance |
| Context | configure service vpls <i>string</i> sap <i>string</i> |
| Tree | sap |
| Introduced | 16.0.R1 |
| Platforms | All |

[sap-id] *string*

| | |
|---------------|--|
| Synopsis | SAP identifier |
| Context | configure service vpls <i>string</i> sap <i>string</i> |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-policy *reference*

| | |
|------------|--|
| Synopsis | Accounting policy |
| Context | configure service vpls <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SAP |
| Context | configure service vpls <i>string</i> sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

anti-spoof *keyword*

| | |
|------------|---|
| Synopsis | Type of anti-spoof filtering |
| Context | configure service vpls <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Options | source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name |
| Context | configure service vpls <i>string</i> sap <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 16.0.R2 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

arp-host

Synopsis Enter the **arp-host** context

Context **configure service vpls string sap string arp-host**

Tree [arp-host](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of ARP hosts

Context **configure service vpls string sap string arp-host admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis Maximum number of ARP triggered hosts

Context **configure service vpls string sap string arp-host host-limit number**

Tree [host-limit](#)

Range 1 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-auth-interval *number*

Synopsis Minimum authentication interval

Context **configure service vpls string sap string arp-host min-auth-interval number**

Tree [min-auth-interval](#)

Range 1 to 6000

Default 15

| | |
|------------|---|
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp-reply-agent *keyword*

| | |
|------------|--|
| Synopsis | Enable arp-reply-agent function |
| Context | configure service vpls <i>string</i> sap <i>string</i> arp-reply-agent <i>keyword</i> |
| Tree | arp-reply-agent |
| Options | true, with-subscr-ident |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth *number*

| | |
|------------|---|
| Synopsis | SAP bandwidth |
| Context | configure service vpls <i>string</i> sap <i>string</i> bandwidth <i>number</i> |
| Tree | bandwidth |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-vpls-mh-veid *number*

| | |
|-------------|---|
| Synopsis | BGP-VPLS multi-homing VE-ID |
| Context | configure service vpls <i>string</i> sap <i>string</i> bgp-vpls-mh-veid <i>number</i> |
| Tree | bgp-vpls-mh-veid |
| Description | <p>This command specifies a VE ID that is configured on SAPs that are part of an EVPN single-active Ethernet Segment. The configuration of this command allows the advertisement of L2VPN routes that indicate the state of multi-homed SAPs to the remote BGP-VPLS PEs, which can trigger a MAC flush operation on the service to avoid traffic from being blackholed when a failure occurs in the active PE.</p> <p>When unconfigured from the SAP, L2VPN routes are withdrawn, which causes MAC flush processing on the remote BGP-VPLS.</p> |
| Range | 1 to 65535 |
| Introduced | 20.5.R1 |

Platforms All

bpdu-translation *keyword*

Synopsis Bpdu translation on this SAP
Context **configure** [service vpls string sap string bpdu-translation keyword](#)
Tree [bpdu-translation](#)
Options auto, pvst, stp, pvst-rw, auto-rw
Introduced 16.0.R1
Platforms All

calling-station-id *string*

Synopsis Calling station ID
Context **configure** [service vpls string sap string calling-station-id string](#)
Tree [calling-station-id](#)
String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cflowd *boolean*

Synopsis Enable Cflowd collection and analysis on this SAP
Context **configure** [service vpls string sap string cflowd boolean](#)
Tree [cflowd](#)
Default false
Introduced 16.0.R1
Platforms All

collect-stats *boolean*

Synopsis Collect accounting statistics
Context **configure** [service vpls string sap string collect-stats boolean](#)
Tree [collect-stats](#)
Default false

Introduced 16.0.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) **cpu-protection**
Tree [cpu-protection](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [cpu-protection](#) **eth-cfm-monitoring**
Tree [eth-cfm-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [cpu-protection](#) [eth-cfm-monitoring](#) **aggregate**
Tree [aggregate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate
Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [cpu-protection](#) [eth-cfm-monitoring](#) **car**
Tree [car](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service vpls <i>string</i> sap <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy-id *reference*

| | |
|------------|---|
| Synopsis | CPM protection policy |
| Context | configure service vpls <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i> |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> sap <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 16.0.R1 |
| Platforms | All |

dhcp

| | |
|------------|--|
| Synopsis | Enter the dhcp context |
| Context | configure service vpls <i>string</i> sap <i>string</i> dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCP |
| Context | configure service vpls <i>string</i> sap <i>string</i> dhcp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls <i>string</i> sap <i>string</i> dhcp description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

lease-populate

| | |
|------------|--|
| Synopsis | Enter the lease-populate context |
| Context | configure service vpls <i>string</i> sap <i>string</i> dhcp lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

max-leases *number*

| | |
|------------|---|
| Synopsis | Maximum number of DHCPv4 leases |
| Context | configure service vpls <i>string</i> sap <i>string</i> dhcp lease-populate max-leases <i>number</i> |
| Tree | max-leases |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | All |

option-82

| | |
|-------------|---|
| Synopsis | Enter the option-82 context |
| Context | configure service vpls string sap string dhcp option-82 |
| Tree | option-82 |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |
| Platforms | All |

action *keyword*

| | |
|------------|---|
| Synopsis | Action to take with received DHCP Option 82 |
| Context | configure service vpls string sap string dhcp option-82 action keyword |
| Tree | action |
| Default | keep |
| Options | replace, drop, keep |
| Introduced | 16.0.R1 |
| Platforms | All |

circuit-id

| | |
|------------|---|
| Synopsis | Enter the circuit-id context |
| Context | configure service vpls string sap string dhcp option-82 circuit-id |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-tuple

| | |
|----------|--|
| Synopsis | Use the ASCII-encoded tuple for the circuit ID |
| Context | configure service vpls string sap string dhcp option-82 circuit-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple . |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

hex-string *string*

| | |
|---------------|--|
| Synopsis | User-defined hexadecimal value of the option |
| Context | configure service vpls string sap string dhcp option-82 circuit-id hex-string string |
| Tree | hex-string |
| String Length | 1 to 66 |
| Notes | The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

none

| | |
|------------|--|
| Synopsis | Do not include the circuit ID |
| Context | configure service vpls string sap string dhcp option-82 circuit-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-ascii-tuple

| | |
|-------------|---|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple |
| Context | configure service vpls string sap string dhcp option-82 circuit-id vlan-ascii-tuple |
| Tree | vlan-ascii-tuple |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes | The following elements are part of a choice: ascii-tuple , hex-string , none , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |

Platforms All

remote-id

Synopsis Enter the **remote-id** context

Context **configure service vpls string sap string dhcp option-82 remote-id**

Tree [remote-id](#)

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms All

ascii-string *string*

Synopsis User-defined ASCII string for the remote ID

Context **configure service vpls string sap string dhcp option-82 remote-id ascii-string string**

Tree [ascii-string](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

hex-string *string*

Synopsis Option as a hexadecimal string

Context **configure service vpls string sap string dhcp option-82 remote-id hex-string string**

Tree [hex-string](#)

String Length 1 to 66

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

mac

Synopsis Use the MAC address for the remote ID

| | |
|------------|--|
| Context | configure service vpls string sap string dhcp option-82 remote-id mac |
| Tree | mac |
| Notes | The following elements are part of a choice: ascii-string , hex-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | All |

none

| | |
|------------|--|
| Synopsis | Do not include the remote ID |
| Context | configure service vpls string sap string dhcp option-82 remote-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-string , hex-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | All |

vendor-specific-option

| | |
|-------------|---|
| Synopsis | Enter the vendor-specific-option context |
| Context | configure service vpls string sap string dhcp option-82 vendor-specific-option |
| Tree | vendor-specific-option |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced | 16.0.R1 |
| Platforms | All |

client-mac-address *boolean*

| | |
|------------|---|
| Synopsis | Send the MAC address in the VSO |
| Context | configure service vpls string sap string dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i> |
| Tree | client-mac-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id *boolean*

| | |
|------------|---|
| Synopsis | Send SAP ID in the sub-option of the DHCP relay packet |
| Context | configure service vpls string sap string dhcp option-82 vendor-specific-option sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

service-id *boolean*

| | |
|------------|---|
| Synopsis | Send the service ID in the Vendor Specific Option |
| Context | configure service vpls string sap string dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

string *string*

| | |
|---------------|--|
| Synopsis | User-defined ASCII string for the VSO |
| Context | configure service vpls string sap string dhcp option-82 vendor-specific-option string <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

system-id *boolean*

| | |
|----------|--|
| Synopsis | Send the system ID in the VSO |
| Context | configure service vpls string sap string dhcp option-82 vendor-specific-option system-id <i>boolean</i> |
| Tree | system-id |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-server

| | |
|------------|---|
| Synopsis | Enter the proxy-server context |
| Context | configure service vpls string sap string dhcp proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the DHCP proxy server |
| Context | configure service vpls string sap string dhcp proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

emulated-server *string*

| | |
|------------|---|
| Synopsis | IP address used as DHCP server address in SAP context |
| Context | configure service vpls string sap string dhcp proxy-server emulated-server <i>string</i> |
| Tree | emulated-server |
| Introduced | 16.0.R1 |
| Platforms | All |

lease-time

| | |
|------------|--|
| Synopsis | Enter the lease-time context |
| Context | configure service vpls string sap string dhcp proxy-server lease-time |
| Tree | lease-time |
| Introduced | 16.0.R1 |

Platforms All

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [service vpls string sap string dhcp proxy-server lease-time radius-override boolean](#)

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms All

value *number*

Synopsis DHCP lease time

Context **configure** [service vpls string sap string dhcp proxy-server lease-time value number](#)

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 16.0.R1

Platforms All

snoop *boolean*

Synopsis Enable DHCP snooping on the SAP

Context **configure** [service vpls string sap string dhcp snoop boolean](#)

Tree [snoop](#)

Default false

Introduced 16.0.R1

Platforms All

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service vpls string sap string dist-cpu-protection reference](#)

Tree [dist-cpu-protection](#)

| | |
|------------|---|
| Reference | configure system security dist-cpu-protection policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

agg-rate

| | |
|------------|---|
| Synopsis | Enter the agg-rate context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress agg-rate |
| Tree | agg-rate |
| Notes | The following elements are part of a choice: agg-rate or percent-agg-rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule *keyword*

| | |
|------------|---|
| Synopsis | Adaptation rule to compute the operational PIR value when an aggregate shaper is used |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i> |
| Tree | adaptation-rule |
| Default | closest |
| Options | max, min, closest |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>) |

| | |
|------------|-----------------------------|
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|---|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-frame-based-accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rate *number*

| | |
|------------|--|
| Synopsis | Enforced aggregate rate for all queues |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |

Platforms All

dest-mac-rewrite *string*

Synopsis Destination MAC overwrite for unicast
Context **configure** [service vpls string sap string egress dest-mac-rewrite string](#)
Tree [dest-mac-rewrite](#)
Introduced 16.0.R5
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure** [service vpls string sap string egress filter](#)
Tree [filter](#)
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure** [service vpls string sap string egress filter ip reference](#)
Tree [ip](#)
Reference **configure** [filter ip-filter string](#)
Introduced 16.0.R1
Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
Context **configure** [service vpls string sap string egress filter ipv6 reference](#)
Tree [ipv6](#)
Reference **configure** [filter ipv6-filter string](#)
Introduced 16.0.R1
Platforms All

mac reference

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress filter mac reference |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|---|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|---|
| Synopsis | Enable the overrides context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|--|
| Synopsis | Enter the root context |
| Context | configure service vpls string sap string egress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service vpls string sap string egress qos policer-control-policy overrides root
max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service vpls string sap string egress qos policer-control-policy overrides root
priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service vpls string sap string egress qos policer-control-policy overrides root
priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)
[priority-mbs-thresholds](#) [priority](#) *number*
 Tree [priority](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis Priority level
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)
[priority-mbs-thresholds](#) [priority](#) *number*
 Tree [priority](#)
 Range 1 to 8
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#)
[priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)
 Tree [mbs-contribution](#)
 Range 0 to 16777216
 Units bytes
 Options auto
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

qinq-mark-top-only *boolean*

| | |
|------------|--|
| Synopsis | Mark top Q-tags |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i> |
| Tree | qinq-mark-top-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-egress

| | |
|------------|---|
| Synopsis | Enter the sap-egress context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

hs-secondary-shaper *string*

| | |
|---------------|--|
| Synopsis | HS Secondary Shaper |
| Context | configure service vpls string sap string egress qos sap-egress overrides hs-secondary-shaper string |
| Tree | hs-secondary-shaper |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-group [[group-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the hs-wrr-group list instance |
| Context | configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference |
| Tree | hs-wrr-group |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

[group-id] *reference*

| | |
|------------|--|
| Synopsis | HS WRR group identifier |
| Context | configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference |
| Tree | hs-wrr-group |
| Reference | configure qos sap-egress string hs-wrr-group number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-class-weight *number*

| | |
|----------|---|
| Synopsis | Class weight override of the WRR group |
| Context | configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference hs-class-weight number |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |

Introduced 16.0.R1
 Platforms 7750 SR-7/12/12e

percent-rate *decimal-number*

Synopsis Percent rate override applied to the HS WRR group
 Context **configure** [service vpls string sap string egress qos sap-egress overrides hs-wrr-group](#)
reference percent-rate decimal-number
 Tree [percent-rate](#)
 Range 0.01 to 100.00
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 16.0.R1
 Platforms 7750 SR-7/12/12e

rate (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group
 Context **configure** [service vpls string sap string egress qos sap-egress overrides hs-wrr-group](#)
reference rate (number | keyword)
 Tree [rate](#)
 Range 1 to 2000000000
 Units kilobps
 Options max
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 16.0.R1
 Platforms 7750 SR-7/12/12e

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
 Context **configure** [service vpls string sap string egress qos sap-egress overrides policer](#)
reference
 Tree [policer](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[policer-id] reference

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference |
| Tree | policer |
| Reference | configure qos sap-egress string policer number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cbs (number | keyword)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference cbs (number keyword) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (number | keyword)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference mbs (number keyword) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet size modification for policing information |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference packet-byte-offset number |
| Tree | packet-byte-offset |
| Range | -64 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|------------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir *decimal-number*

| | |
|----------|---|
| Synopsis | PIR percent rate |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference rate cir (number keyword) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service vpls string sap string egress qos sap-egress overrides policer reference rate pir (number keyword) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference |
| Tree | queue |
| Reference | configure qos sap-egress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|----------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule |

| | |
|------------|---------------------------------|
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

pir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference adaptation-rule pir keyword |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

avg-frame-overhead decimal-number

| | |
|------------|---|
| Synopsis | Average packet-to-frame encapsulation overhead |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number |
| Tree | avg-frame-overhead |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

burst-limit (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Explicit shaping burst size for the queue |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-tail

| | |
|------------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail |
| Tree | drop-tail |
| Introduced | 16.0.R1 |
| Platforms | All |

low

| | |
|----------|------------------------------|
| Synopsis | Enter the low context |
|----------|------------------------------|

| | |
|------------|---|
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number | keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

hs-class-weight *number*

| | |
|------------|---|
| Synopsis | Class weight override for the queue |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wred-queue

| | |
|------------|---|
| Synopsis | Enter the hs-wred-queue context |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue |
| Tree | hs-wred-queue |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policy reference

| | |
|------------|--|
| Synopsis | Slope policy applied to the HSQ queue group queue |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference |
| Tree | policy |
| Reference | configure qos slope-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-weight number

| | |
|------------|--|
| Synopsis | Weighted Round Robin (WRR) weight to parent with this queue into the scheduler |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number |
| Tree | hs-wrr-weight |
| Range | 1 to 127 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

mbs (number | keyword)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference mbs (number keyword) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|----------|---|
| Synopsis | Enable the monitor-queue-depth context |
|----------|---|

| | |
|------------|---|
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 20.10.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|-------------|--|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling boolean |
| Tree | fast-polling |
| Description | When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to false , fast queue polling is not enabled. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

violation-threshold *decimal-number*

| | |
|-------------|--|
| Synopsis | Threshold for queue depth before violation is raised |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold decimal-number |
| Tree | violation-threshold |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered. |
| Range | 0.01 to 99.99 |
| Introduced | 20.10.R1 |
| Platforms | All |

parent

| | |
|----------|--|
| Synopsis | Enter the parent context |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference parent |
| Tree | parent |

Introduced 16.0.R1
 Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group
 Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference parent cir-weight number](#)
 Tree [cir-weight](#)
 Range 0 to 100
 Introduced 16.0.R1
 Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group
 Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference parent weight number](#)
 Tree [weight](#)
 Range 0 to 100
 Introduced 16.0.R1
 Platforms All

percent-rate

Synopsis Enter the **percent-rate** context
 Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference percent-rate](#)
 Tree [percent-rate](#)
 Notes The following elements are part of a choice: **percent-rate** or **rate**.
 Introduced 16.0.R1
 Platforms All

cir decimal-number

Synopsis CIR percent rate

| | |
|------------|---|
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

pir decimal-number

| | |
|------------|---|
| Synopsis | PIR percent rate |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (number | keyword)

| | |
|----------|---|
| Synopsis | CIR rate |
| Context | configure service vpls string sap string egress qos sap-egress overrides queue reference rate cir (number keyword) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |

Introduced 16.0.R1
 Platforms All

pir (*number* | *keyword*)

Synopsis PIR rate
 Context **configure** [service vpls string sap string egress qos sap-egress overrides queue reference rate pir](#) (*number* | *keyword*)
 Tree [pir](#)
 Range 1 to 6400000000
 Units kilobps
 Options max
 Introduced 16.0.R1
 Platforms All

policy-name *reference*

Synopsis Policy ID to associate with SAP for mirrored service
 Context **configure** [service vpls string sap string egress qos sap-egress policy-name reference](#)
 Tree [policy-name](#)
 Reference **configure** [qos sap-egress string](#)
 Introduced 16.0.R1
 Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context
 Context **configure** [service vpls string sap string egress qos sap-egress port-redirect-group](#)
 Tree [port-redirect-group](#)
 Introduced 16.0.R1
 Platforms All

group-name *reference*

Synopsis Name of the queue group redirect list policy

| | |
|------------|--|
| Context | configure service vpls string sap string egress qos sap-egress port-redirect-group group-name reference |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

instance number

| | |
|------------|---|
| Synopsis | Instance of port queue group |
| Context | configure service vpls string sap string egress qos sap-egress port-redirect-group instance number |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler-policy

| | |
|------------|---|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service vpls string sap string egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service vpls string sap string egress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [**scheduler-name**] *string*

| | |
|----------|--|
| Synopsis | Enter the scheduler list instance |
|----------|--|

| | |
|------------|--|
| Context | configure service vpls string sap string egress qos scheduler-policy overrides scheduler string |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] string

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service vpls string sap string egress qos scheduler-policy overrides scheduler string |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service vpls string sap string egress qos scheduler-policy overrides scheduler string parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | CIR at which the queue it to operate |
| Context | configure service vpls <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |

| | |
|------------|----------|
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service vpls string sap string egress qos scheduler-policy overrides scheduler string rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service vpls string sap string egress qos scheduler-policy policy-name reference |
| Tree | policy-name |
| Reference | configure qos scheduler-policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|---|
| Synopsis | Enter the eth-cfm context |
| Context | configure service vpls string sap string eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service vpls string sap string eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service vpls string sap string eth-cfm collect-lmm-fc-stats fc keyword |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile keyword

| | |
|----------|--|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service vpls string sap string eth-cfm collect-lmm-fc-stats fc-in-profile keyword |
| Tree | fc-in-profile |

| | |
|----------------|---|
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure <i>service vpls string sap string eth-cfm collect-lmm-stats boolean</i> |
| Tree | collect-lmm-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep *md-admin-name reference ma-admin-name reference mep-id number*

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure <i>service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|----------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure <i>service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i> |
| Tree | mep |

| | |
|------------|--|
| Reference | configure eth-cfm domain string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|---|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string association string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|---|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais

| | |
|------------|--|
| Synopsis | Enable the ais context |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais |
| Tree | ais |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

client-meg-level *number*

| | |
|------------|---|
| Synopsis | Client MEG level for AIS message generation |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number |
| Tree | client-meg-level |
| Range | 1 to 7 |
| Max. | 7 |
| Instances | |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interface-support *boolean*

| | |
|------------|---|
| Synopsis | Enable generation of AIS PDUs based on endpoint state |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean |
| Tree | interface-support |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|----------|--|
| Synopsis | Transmission interval for AIS messages |
|----------|--|

| | |
|------------|---|
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number |
| Tree | interval |
| Range | 1 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect keyword |
| Tree | low-priority-defect |
| Default | all-def |
| Options | all-def, mac-rem-err-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|---|
| Synopsis | Priority of the AIS messages generated by the node |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number |
| Tree | priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|----------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification |

| | |
|-------------|--|
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm *boolean*

| | |
|----------|--|
| Synopsis | Generate CCM messages |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i> |
| Tree | ccm |

| | |
|------------|--|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority *number*

| | |
|------------|--|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|----------|--|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> cfm-vlan-tag <i>string</i> |
| Tree | cfm-vlan-tag |

String Length 1 to 9
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

csf

Synopsis Enable the **csf** context
 Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf**
 Tree **csf**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition
 Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number**
 Tree **multiplier**
 Range 0.0 | 2.0 to 30.0
 Default 3.5
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string**
 Tree **description**
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

direction *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Direction the MEP faces |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> direction <i>keyword</i> |
| Tree | direction |
| Default | down |
| Options | down, up |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|---|
| Synopsis | Enable the eth-test context |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|---|
| Synopsis | Enter the test-pattern context |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv boolean

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern keyword

| | |
|-------------|---|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|------------|---|
| Synopsis | Fault propagation for the MEP |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|--|
| Synopsis | Enter the grace context |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|----------|--|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |

| | |
|------------|--|
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|------------|--|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed boolean

| | |
|-------------|--|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed boolean

| | |
|------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|-------------|--|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). |

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

| | |
|------------|--|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

lbm-svc-act-responder *boolean*

| | |
|------------|--|
| Synopsis | Process service activation streams in ETH-CFM LBM |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> lbm-svc-act-responder <i>boolean</i> |
| Tree | lbm-svc-act-responder |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|-------------|---|
| Synopsis | MAC address of the MEP |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> mac-address <i>string</i> |
| Tree | mac-address |
| Description | This command specifies the MAC address of the MEP.

When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure** [service vpls](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **one-way-delay-threshold** *number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Default 3

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MEP provisioned using MA primary VLAN ID

Context **configure** [service vpls](#) *string* [sap](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **primary-vlan** *boolean*

Tree [primary-vlan](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mip **primary-vlan** (*number* | *keyword*)

Synopsis Enter the **mip** list instance

Context **configure** [service vpls](#) *string* [sap](#) *string* [eth-cfm mip](#) **primary-vlan** (*number* | *keyword*)

Tree [mip](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

primary-vlan (*number* | *keyword*)

| | |
|-------------|---|
| Synopsis | VLAN ID to which the MIP is attached |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) |
| Tree | mip |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan. |
| Range | 1 to 4094 |
| Options | none |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|---------------|--|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>)
cfm-vlan-tag <i>string</i> |
| Tree | cfm-vlan-tag |
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|------------|--|
| Synopsis | MAC address of the MIP |
| Context | configure service vpls <i>string</i> sap <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>)
mac-address <i>string</i> |
| Tree | mac-address |
| Introduced | 21.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch- ingress-ctag-levels *number*

Synopsis Snelch levels using additional VLAN C-Tag space

Context **configure** **service vpls** *string sap string eth-cfm snelch- ingress-ctag-levels number*

Tree [snelch- ingress-ctag-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

Range 0 to 7

Max. 8

Instances

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

snelch- ingress-levels *number*

Synopsis Levels for which ETH-CFM packets are silently discarded

Context **configure** **service vpls** *string sap string eth-cfm snelch- ingress-levels number*

Tree [snelch- ingress-levels](#)

Description This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

Range 0 to 7

Max. 8

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

vmep-filter *boolean*

Synopsis Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
 Context **configure service vpls string sap string eth-cfm vmep-filter boolean**
 Tree [vmep-filter](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-ring *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Ethernet ring operation
 Context **configure service vpls string sap string eth-ring number**
 Tree [eth-ring](#)
 Range 1 to 128
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

etree-leaf *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable etree leaf access-circuit status
 Context **configure service vpls string sap string etree-leaf boolean**
 Tree [etree-leaf](#)
 Default false
 Introduced 16.0.R1
 Platforms All

etree-root-leaf-tag

| | |
|------------|---|
| Synopsis | Enable the etree-root-leaf-tag context |
| Context | configure service vpls string sap string etree-root-leaf-tag |
| Tree | etree-root-leaf-tag |
| Introduced | 16.0.R1 |
| Platforms | All |

leaf number

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Leaf tag value |
| Context | configure service vpls string sap string etree-root-leaf-tag leaf number |
| Tree | leaf |
| Range | 1 to 4094 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure service vpls string sap string fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|----------|--|
| Synopsis | Enable automatic update of MAC protect list |
| Context | configure service vpls string sap string fdb auto-learn-mac-protect boolean |
| Tree | auto-learn-mac-protect |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect-exclude-list *reference*

| | |
|-------------|--|
| Synopsis | Referenced MAC protect exclusion list |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb auto-learn-mac-protect-exclude-list <i>reference</i> |
| Tree | auto-learn-mac-protect-exclude-list |
| Description | This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object. |
| Reference | configure service mac-list <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

discard-unknown-source *boolean*

| | |
|------------|---|
| Synopsis | Discard frames with unknown source |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb discard-unknown-source <i>boolean</i> |
| Tree | discard-unknown-source |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

discard-unprotected-dest-mac *boolean*

| | |
|------------|---|
| Synopsis | Discard packet with unprotected destination MAC address |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb discard-unprotected-dest-mac <i>boolean</i> |
| Tree | discard-unprotected-dest-mac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

limit-mac-move *keyword*

| | |
|------------|--|
| Synopsis | MAC move |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb limit-mac-move <i>keyword</i> |
| Tree | limit-mac-move |
| Default | blockable |
| Options | blockable, non-blockable |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-learning

| | |
|------------|---|
| Synopsis | Enter the mac-learning context |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb mac-learning |
| Tree | mac-learning |
| Introduced | 16.0.R1 |
| Platforms | All |

aging *boolean*

| | |
|------------|---|
| Synopsis | Enable aging of MAC addresses |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb mac-learning aging <i>boolean</i> |
| Tree | aging |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

learning *boolean*

| | |
|------------|--|
| Synopsis | Enable learning of new MAC addresses |
| Context | configure service vpls <i>string</i> sap <i>string</i> fdb mac-learning learning <i>boolean</i> |
| Tree | learning |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-pinning *boolean*

| | |
|------------|--|
| Synopsis | Enable MAC address pinning on this SAP |
| Context | configure service vpls string sap string fdb mac-pinning <i>boolean</i> |
| Tree | mac-pinning |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-mac-addresses *number*

| | |
|-------------|--|
| Synopsis | Maximum number of MAC address entries in the FDB |
| Context | configure service vpls string sap string fdb maximum-mac-addresses <i>number</i> |
| Tree | maximum-mac-addresses |
| Description | <p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this SAP.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> <p>When the configured limit is reached and the configure service pw-template fdb discard-unknown-source command is set to true for this SAP, packets with unknown source MAC addresses are discarded. If discard-unknown-source is set to false, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p> <p>However, if the configure service vpls fdb discard-unknown command is set to true, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.</p> <p>When unconfigured, the SAP uses the global MAC learning limitations.</p> |
| Range | 1 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|----------|---|
| Synopsis | Action to take whenever a relearn request for a protected MAC is received |
| Context | configure service vpls string sap string fdb protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sap-oper-down, alarm-only, discard |

Introduced 16.0.R1
Platforms All

host-admin-state *keyword*

Synopsis Administrative state of the hosts
Context **configure** [service vpls](#) *string* [sap](#) *string* **host-admin-state** *keyword*
Tree [host-admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-lockout-policy *reference*

Synopsis Host lockout policy
Context **configure** [service vpls](#) *string* [sap](#) *string* **host-lockout-policy** *reference*
Tree [host-lockout-policy](#)
Reference **configure** [subscriber-mgmt](#) **host-lockout-policy** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-vpls-mac-flush

Synopsis Enter the **i-vpls-mac-flush** context
Context **configure** [service vpls](#) *string* [sap](#) *string* **i-vpls-mac-flush**
Tree [i-vpls-mac-flush](#)
Introduced 16.0.R1
Platforms All

bgp-evpn

Synopsis Enter the **bgp-evpn** context
Context **configure** [service vpls](#) *string* [sap](#) *string* **i-vpls-mac-flush** **bgp-evpn**
Tree [bgp-evpn](#)

Introduced 16.0.R1
 Platforms All

send-to-bvpls *boolean*

Synopsis Send B-VPLS EVPN flush
 Context **configure** [service vpls string sap string i-vpls-mac-flush bgp-evpn send-to-bvpls boolean](#)
 Tree [send-to-bvpls](#)
 Default true
 Introduced 16.0.R1
 Platforms All

igmp-host-tracking

Synopsis Enter the **igmp-host-tracking** context
 Context **configure** [service vpls string sap string igmp-host-tracking](#)
 Tree [igmp-host-tracking](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis Time that the system continues to track inactive hosts
 Context **configure** [service vpls string sap string igmp-host-tracking expiry-time number](#)
 Tree [expiry-time](#)
 Range 1 to 65535
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis Import policy that filters IGMP packets
 Context **configure** [service vpls string sap string igmp-host-tracking import-policy reference](#)
 Tree [import-policy](#)

| | |
|------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|------------|---|
| Synopsis | Maximum number of multicast groups to be tracked per group |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|--|
| Synopsis | Maximum number of multicast groups to be tracked |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|---|
| Synopsis | Maximum number of multicast sources to be tracked |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable IGMP router alert check option |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-host-tracking router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

igmp-snooping

| | |
|------------|---|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-leave *boolean*

| | |
|------------|---|
| Synopsis | Allow IGMP fast leave processing |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping fast-leave <i>boolean</i> |
| Tree | fast-leave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|------------|--|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-group-sources *number*

| | |
|------------|--|
| Synopsis | Maximum group source combinations |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum groups allowed |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-sources *number*

| | |
|------------|--|
| Synopsis | Maximum sources that are allowed per group |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | All |

mcac

| | |
|------------|---|
| Synopsis | Enter the mcac context |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth

| | |
|------------|--|
| Synopsis | Enter the bandwidth context |
| Context | configure service vpls string sap string igmp-snooping mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | All |

mandatory (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure service vpls string sap string igmp-snooping mcac bandwidth mandatory
(<i>number</i> <i>keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

total (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vpls string sap string igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-policy *reference*

| | |
|----------|--|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vpls string sap string igmp-snooping mcac interface-policy <i>reference</i> |

| | |
|------------|--|
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-constraints

| | |
|------------|--|
| Synopsis | Enter the mc-constraints context |
| Context | configure service vpls <i>string sap string igmp-snooping mcac mc-constraints</i> |
| Tree | mc-constraints |
| Introduced | 16.0.R1 |
| Platforms | All |

level [[level-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the level list instance |
| Context | configure service vpls <i>string sap string igmp-snooping mcac mc-constraints level number</i> |
| Tree | level |
| Introduced | 16.0.R1 |
| Platforms | All |

[[level-id](#)] *number*

| | |
|------------|---|
| Synopsis | Bandwidth level ID for an MCAC constraint |
| Context | configure service vpls <i>string sap string igmp-snooping mcac mc-constraints level number</i> |
| Tree | level |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth *number*

| | |
|----------|------------------------------------|
| Synopsis | Bandwidth available for this level |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service vpls string sap string igmp-snooping mcac mc-constraints level number bandwidth number |
| Tree | bandwidth |
| Range | 0 to 2147483647 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

number-down [[number-lag-port-down](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the number-down list instance |
| Context | configure service vpls string sap string igmp-snooping mcac mc-constraints number-down number |
| Tree | number-down |
| Introduced | 16.0.R1 |
| Platforms | All |

[number-lag-port-down] *number*

| | |
|------------|--|
| Synopsis | Number of ports that are down in this LAG link |
| Context | configure service vpls string sap string igmp-snooping mcac mc-constraints number-down number |
| Tree | number-down |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

level *number*

| | |
|----------|---|
| Synopsis | Level ID to associate with number of down LAG ports |
| Context | configure service vpls string sap string igmp-snooping mcac mc-constraints number-down number level number |
| Tree | level |

| | |
|-------------|---|
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority. |
| Range | 1 to 8 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

use-lag-port-weight *boolean*

| | |
|-------------|---|
| Synopsis | Use LAG port weight in calculating MCAC constraints |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac mc-constraints use-lag-port-weight <i>boolean</i> |
| Tree | use-lag-port-weight |
| Description | When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy *reference*

| | |
|-------------|---|
| Synopsis | Multicast CAC policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping mcac policy <i>reference</i> |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the</p> |

policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

| | |
|------------|-------------------------------------|
| Reference | configure mcac policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|--|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls string sap string igmp-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mvr

| | |
|------------|---|
| Synopsis | Enter the mvr context |
| Context | configure service vpls string sap string igmp-snooping mvr |
| Tree | mvr |
| Introduced | 16.0.R1 |
| Platforms | All |

from-vpls *reference*

| | |
|------------|---|
| Synopsis | MVR VPLS from which the multicast channels are taken |
| Context | configure service vpls string sap string igmp-snooping mvr from-vpls reference |
| Tree | from-vpls |
| Reference | configure service vpls string |
| Introduced | 16.0.R1 |
| Platforms | All |

to-sap *string*

| | |
|----------|----------------------------------|
| Synopsis | Multicast channels copied to SAP |
|----------|----------------------------------|

| | |
|---------------|---|
| Context | configure service vpls string sap string igmp-snooping mvr to-sap string |
| Tree | to-sap |
| String Length | 1 to 45 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vpls string sap string igmp-snooping query-interval number |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|------------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure service vpls string sap string igmp-snooping query-last-member-interval number |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|----------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vpls string sap string igmp-snooping query-response-interval number |
| Tree | query-response-interval |
| Range | 1 to 1023 |

| | |
|------------|---------|
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|------------|---|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 2 to 7 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable IP router alert check option |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

send-queries *boolean*

| | |
|------------|--|
| Synopsis | Generate IGMP general queries |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping send-queries <i>boolean</i> |
| Tree | send-queries |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

static

| | |
|------------|--|
| Synopsis | Enter the static context |
| Context | configure service vpls string sap string igmp-snooping static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-address](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the group list instance |
| Context | configure service vpls string sap string igmp-snooping static group string |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-address] *string*

| | |
|-------------|---|
| Synopsis | Group address of static IGMP multicast channel |
| Context | configure service vpls string sap string igmp-snooping static group string |
| Tree | group |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for source |
| Context | configure service vpls string sap string igmp-snooping static group string source string |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|---|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|--|
| Synopsis | any source address (*,G) |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping static group <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP protocol version |
| Context | configure service vpls <i>string</i> sap <i>string</i> igmp-snooping version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

match-qinq-dot1p *keyword*

| | |
|------------|---|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i> |
| Tree | match-qinq-dot1p |
| Options | top, bottom |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|---|
| Synopsis | Enter the root context |
| Context | configure service vpls string sap string ingress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service vpls string sap string ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

priority [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*
 Tree [priority](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis Priority level
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*
 Tree [priority](#)
 Range 1 to 8
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)
 Tree [mbs-contribution](#)
 Range 0 to 16777216
 Units bytes
 Options auto
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policer control policy name |
| Context | configure service vpls string sap string ingress qos policer-control-policy policy-name reference |
| Tree | policy-name |
| Reference | configure qos policer-control-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

sap-ingress

| | |
|------------|---|
| Synopsis | Enter the sap-ingress context |
| Context | configure service vpls string sap string ingress qos sap-ingress |
| Tree | sap-ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|---|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service vpls string sap string ingress qos sap-ingress fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Queue group template name created on forwarding plane |
| Context | configure service vpls string sap string ingress qos sap-ingress fp-redirect-group group-name reference |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group string |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|---|
| Synopsis | Queue group instance |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress fp-redirect-group
instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-criteria

| | |
|------------|---|
| Synopsis | Enter the ip-criteria context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria |
| Tree | ip-criteria |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

activate-entry-tag *number*

| | |
|------------|---|
| Synopsis | Tag ID activated for IPv4 criteria |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides ip-criteria
activate-entry-tag <i>number</i> |
| Tree | activate-entry-tag |
| Range | 1 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv6-criteria

| | |
|------------|---|
| Synopsis | Enter the ipv6-criteria context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria |
| Tree | ipv6-criteria |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

activate-entry-tag number

| | |
|------------|---|
| Synopsis | Tag ID activated for IPv6 criteria |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number |
| Tree | activate-entry-tag |
| Range | 1 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

policer [policer-id] reference

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides policer reference |
| Tree | policer |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] reference

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides policer reference |
| Tree | policer |
| Reference | configure qos sap-ingress string policer number |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure service vpls string sap string ingress qos sap-ingress overrides policer**
reference cbs (number | keyword)

Tree [cbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs (*number* | *keyword*)

Synopsis MBS

Context **configure service vpls string sap string ingress qos sap-ingress overrides policer**
reference mbs (number | keyword)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

packet-byte-offset *number*

Synopsis Packet size modification for policing information

Context **configure service vpls string sap string ingress qos sap-ingress overrides policer**
reference packet-byte-offset number

Tree [packet-byte-offset](#)

Range -32 to 31

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

percent-rate

| | |
|------------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir decimal-number

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir decimal-number

| | |
|------------|---|
| Synopsis | PIR percent rate |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|----------|--|
| Synopsis | Enter the rate context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides policer reference rate |
| Tree | rate |

| | |
|------------|---|
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service vpls <i>string sap string ingress qos sap-ingress overrides policer reference rate cir</i> (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service vpls <i>string sap string ingress qos sap-ingress overrides policer reference rate pir</i> (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|----------|--|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service vpls <i>string sap string ingress qos sap-ingress overrides policer reference stat-mode keyword</i> |
| Tree | stat-mode |

| | |
|------------|---|
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [\[queue-id\]](#) *reference*

| | |
|------------|--|
| Synopsis | Enter the queue list instance |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

pir keyword

| | |
|------------|---|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

cbs (number | keyword)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference cbs (number keyword) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-tail

| | |
|----------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail |

| | |
|------------|---------------------------|
| Tree | drop-tail |
| Introduced | 16.0.R1 |
| Platforms | All |

low

| | |
|------------|--|
| Synopsis | Enter the low context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|---|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 21.7.R1 |
| Platforms | All |

fast-polling *boolean*

| | |
|------------|---|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference monitor-queue-depth fast-polling <i>boolean</i> |
| Tree | fast-polling |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |

Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#) [parent weight number](#)

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#) [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

cir *decimal-number*

Synopsis CIR percent rate

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#) [percent-rate cir decimal-number](#)

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms All

pir *decimal-number*

Synopsis PIR percent rate

| | |
|------------|---|
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (number | keyword)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate cir (number keyword) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (number | keyword)

| | |
|----------|---|
| Synopsis | PIR rate |
| Context | configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate pir (number keyword) |
| Tree | pir |
| Range | 1 to 6400000000 |

| | |
|------------|---------|
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID |
| Context | configure service vpls string sap string ingress qos sap-ingress policy-name reference |
| Tree | policy-name |
| Reference | configure qos sap-ingress string |
| Introduced | 16.0.R1 |
| Platforms | All |

queuing-type *keyword*

| | |
|------------|--|
| Synopsis | Queuing type |
| Context | configure service vpls string sap string ingress qos sap-ingress queuing-type keyword |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service vpls string sap string ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|----------|--|
| Synopsis | Enter the overrides context |
| Context | configure service vpls string sap string ingress qos scheduler-policy overrides |

| | |
|------------|---------------------------|
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [[scheduler-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the scheduler list instance |
| Context | configure service vpls string sap string ingress qos scheduler-policy overrides scheduler string |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service vpls string sap string ingress qos scheduler-policy overrides scheduler string |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|--|
| Synopsis | Enter the parent context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|------------|--|
| Synopsis | Weight used at the within-CIR port priority level |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR at which the queue it to operate |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qtag-manipulation

| | |
|------------|---|
| Synopsis | Enter the qtag-manipulation context |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qtag-manipulation |
| Tree | qtag-manipulation |
| Introduced | 16.0.R1 |
| Platforms | All |

c-tag (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Inner ingress vlan translation for two service delimiting vlan values |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qtag-manipulation c-tag (<i>number</i> <i>keyword</i>) |
| Tree | c-tag |
| Range | 0 to 4094 |
| Options | tag-* |
| Notes | The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag). |
| Introduced | 22.10.R1 |
| Platforms | All |

push-dot1q-vlan (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | VLAN translation information |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qtag-manipulation push-dot1q-vlan (<i>number</i> <i>keyword</i>) |
| Tree | push-dot1q-vlan |
| Range | 0 to 4094 |
| Options | use-sap-svlan |
| Notes | The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag). |
| Introduced | 16.0.R1 |
| Platforms | All |

s-tag *number*

| | |
|----------|---|
| Synopsis | Outer ingress VLAN translation for two service delimiting VLAN values |
| Context | configure service vpls <i>string</i> sap <i>string</i> ingress qtag-manipulation s-tag <i>number</i> |

| | |
|------------|---|
| Tree | s-tag |
| Range | 0 to 4094 |
| Notes | The following elements are part of a choice: push-dot1q-vlan or (c-tag and s-tag). |
| Introduced | 22.10.R1 |
| Platforms | All |

I2pt

| | |
|------------|--|
| Synopsis | Enter the I2pt context |
| Context | configure service vpls string sap string I2pt |
| Tree | I2pt |
| Introduced | 16.0.R1 |
| Platforms | All |

force-boundary

| | |
|------------|---|
| Synopsis | Enable the force-boundary context |
| Context | configure service vpls string sap string I2pt force-boundary |
| Tree | force-boundary |
| Introduced | 16.0.R1 |
| Platforms | All |

protocols

| | |
|------------|---|
| Synopsis | Enter the protocols context |
| Context | configure service vpls string sap string I2pt force-boundary protocols |
| Tree | protocols |
| Introduced | 16.0.R1 |
| Platforms | All |

cdp boolean

| | |
|----------|---|
| Synopsis | Enable Cisco discovery protocol |
| Context | configure service vpls string sap string I2pt force-boundary protocols cdp boolean |
| Tree | cdp |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ntp boolean

| | |
|------------|---|
| Synopsis | Enable dynamic trunking protocol |
| Context | configure service vpls string sap string l2pt force-boundary protocols ntp boolean |
| Tree | ntp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pagp boolean

| | |
|------------|--|
| Synopsis | Enable port aggregation protocol |
| Context | configure service vpls string sap string l2pt force-boundary protocols pagp boolean |
| Tree | pagp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

stp boolean

| | |
|------------|---|
| Synopsis | Enable all spanning tree protocols |
| Context | configure service vpls string sap string l2pt force-boundary protocols stp boolean |
| Tree | stp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

udld boolean

| | |
|----------|--|
| Synopsis | Enable unidirectional link detection |
| Context | configure service vpls string sap string l2pt force-boundary protocols udld boolean |

| | |
|------------|----------------------|
| Tree | udld |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vtp *boolean*

| | |
|------------|--|
| Synopsis | Enable virtual trunk protocol |
| Context | configure service vpls <i>string</i> sap <i>string</i> l2pt force-boundary protocols vtp <i>boolean</i> |
| Tree | vtp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

termination

| | |
|------------|--|
| Synopsis | Enable the termination context |
| Context | configure service vpls <i>string</i> sap <i>string</i> l2pt termination |
| Tree | termination |
| Introduced | 16.0.R1 |
| Platforms | All |

protocols

| | |
|------------|--|
| Synopsis | Enter the protocols context |
| Context | configure service vpls <i>string</i> sap <i>string</i> l2pt termination protocols |
| Tree | protocols |
| Introduced | 16.0.R1 |
| Platforms | All |

cdp *boolean*

| | |
|----------|---|
| Synopsis | Enable Cisco discovery protocol |
| Context | configure service vpls <i>string</i> sap <i>string</i> l2pt termination protocols cdp <i>boolean</i> |
| Tree | cdp |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ntp boolean

| | |
|------------|--|
| Synopsis | Enable dynamic trunking protocol |
| Context | configure service vpls string sap string l2pt termination protocols ntp boolean |
| Tree | ntp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pagp boolean

| | |
|------------|---|
| Synopsis | Enable port aggregation protocol |
| Context | configure service vpls string sap string l2pt termination protocols pagp boolean |
| Tree | pagp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

stp boolean

| | |
|------------|--|
| Synopsis | Enable all spanning tree protocols |
| Context | configure service vpls string sap string l2pt termination protocols stp boolean |
| Tree | stp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

udld boolean

| | |
|----------|---|
| Synopsis | Enable unidirectional link detection |
| Context | configure service vpls string sap string l2pt termination protocols udld boolean |

| | |
|------------|----------------------|
| Tree | udld |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vtp boolean

| | |
|------------|--|
| Synopsis | Enable virtual trunk protocol |
| Context | configure service vpls string sap string l2tp termination protocols vtp boolean |
| Tree | vtp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

l2tpv3-session

| | |
|------------|--|
| Synopsis | Enable the l2tpv3-session context |
| Context | configure service vpls string sap string l2tpv3-session |
| Tree | l2tpv3-session |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of the session for the service |
| Context | configure service vpls string sap string l2tpv3-session admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

pseudo-wire



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the pseudo-wire context |
| Context | configure service vpls string sap string l2tpv3-session pseudo-wire |
| Tree | pseudo-wire |
| Introduced | 16.0.R4 |
| Platforms | All |

ethernet



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable the Ethernet PW-type for the L2TPv3 session |
| Context | configure service vpls string sap string l2tpv3-session pseudo-wire ethernet |
| Tree | ethernet |
| Notes | The following elements are part of a choice: ethernet or ethernet-vlan-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

ethernet-vlan-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Ethernet-VLAN PW-type ID for the L2TPv3 session |
| Context | configure service vpls string sap string l2tpv3-session pseudo-wire ethernet-vlan-id number |
| Tree | ethernet-vlan-id |
| Range | 0 to 4095 |
| Notes | The following elements are part of a choice: ethernet or ethernet-vlan-id . |
| Introduced | 16.0.R4 |

Platforms All

router



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **router** context

Context **configure service vpls string sap string l2tpv3-session router**

Tree **router**

Introduced 16.0.R4

Platforms All

group *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel group name

Context **configure service vpls string sap string l2tpv3-session router group string**

Tree **group**

String Length 1 to 32

Introduced 16.0.R4

Platforms All

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name used to identify the router instance

Context **configure service vpls string sap string l2tpv3-session router router-instance string**

Tree **router-instance**

String Length 1 to 64

Introduced 16.0.R4

Platforms All

vc-id *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ID for the L2TPv3 session

Context **configure service vpls string sap string l2tpv3-session vc-id number**

Tree [vc-id](#)

Range 1 to 4294967295

Introduced 16.0.R4

Platforms All

lag

Synopsis Enter the **lag** context

Context **configure service vpls string sap string lag**

Tree [lag](#)

Introduced 16.0.R1

Platforms All

link-map-profile *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure service vpls string sap string lag link-map-profile number**

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

per-link-hash

| | |
|------------|---|
| Synopsis | Enter the per-link-hash context |
| Context | configure service vpls string sap string lag per-link-hash |
| Tree | per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | All |

class number

| | |
|------------|--|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
| Context | configure service vpls string sap string lag per-link-hash class number |
| Tree | class |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight number

| | |
|------------|---|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service vpls string sap string lag per-link-hash weight number |
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

managed-vlan-list

| | |
|------------|---|
| Synopsis | Enter the managed-vlan-list context |
| Context | configure service vpls string sap string managed-vlan-list |
| Tree | managed-vlan-list |
| Introduced | 19.10.R1 |
| Platforms | All |

range [*vlan-range*] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for range |
| Context | configure service vpls string sap string managed-vlan-list range string |
| Tree | range |
| Introduced | 19.10.R1 |
| Platforms | All |

[vlan-range] *string*

| | |
|------------|--|
| Synopsis | Range of VLANs associated with the M-VPLS SAP |
| Context | configure service vpls string sap string managed-vlan-list range string |
| Tree | range |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

mc-ring

| | |
|------------|---|
| Synopsis | Enable the mc-ring context |
| Context | configure service vpls string sap string mc-ring |
| Tree | mc-ring |
| Introduced | 16.0.R1 |
| Platforms | All |

ring-node *string*

| | |
|---------------|--|
| Synopsis | Name for the ring node associated with this SAP |
| Context | configure service vpls string sap string mc-ring ring-node string |
| Tree | ring-node |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

mld-snooping

| | |
|------------|--|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls string sap string mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-leave *boolean*

| | |
|------------|---|
| Synopsis | Allow IGMP fast leave processing |
| Context | configure service vpls string sap string mld-snooping fast-leave boolean |
| Tree | fast-leave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|------------|--|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vpls string sap string mld-snooping import-policy reference |
| Tree | import-policy |
| Reference | configure policy-options policy-statement string |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum groups allowed |
| Context | configure service vpls string sap string mld-snooping maximum-number-groups number |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|--|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls <i>string sap string mld-snooping mrouter-port boolean</i> |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mvr

| | |
|------------|---|
| Synopsis | Enter the mvr context |
| Context | configure service vpls <i>string sap string mld-snooping mvr</i> |
| Tree | mvr |
| Introduced | 16.0.R1 |
| Platforms | All |

from-vpls *reference*

| | |
|------------|---|
| Synopsis | MVR VPLS from which the multicast channels are taken |
| Context | configure service vpls <i>string sap string mld-snooping mvr from-vpls reference</i> |
| Tree | from-vpls |
| Reference | configure service vpls <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

to-sap *string*

| | |
|---------------|---|
| Synopsis | SAP to which the multicast channels are copied |
| Context | configure service vpls <i>string sap string mld-snooping mvr to-sap string</i> |
| Tree | to-sap |
| String Length | 1 to 45 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vpls string sap string mld-snooping query-interval number |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|------------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure service vpls string sap string mld-snooping query-last-member-interval number |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vpls string sap string mld-snooping query-response-interval number |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|------------|---|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vpls <i>string</i> sap <i>string</i> mld-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 2 to 7 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable IP router alert check option |
| Context | configure service vpls <i>string</i> sap <i>string</i> mld-snooping router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

send-queries *boolean*

| | |
|------------|--|
| Synopsis | Generate IGMP general queries |
| Context | configure service vpls <i>string</i> sap <i>string</i> mld-snooping send-queries <i>boolean</i> |
| Tree | send-queries |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

static

| | |
|------------|---|
| Synopsis | Enter the static context |
| Context | configure service vpls <i>string</i> sap <i>string</i> mld-snooping static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure service vpls string sap string mld-snooping static group string |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-address] *string*

| | |
|------------|--|
| Synopsis | Group address of multicast channel |
| Context | configure service vpls string sap string mld-snooping static group string |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for source |
| Context | configure service vpls string sap string mld-snooping static group string source string |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address |
| Context | configure service vpls string sap string mld-snooping static group string source string |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|---|
| Synopsis | any source address (*,G) |
| Context | configure service vpls string sap string mld-snooping static group string starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

version *keyword*

| | |
|------------|---|
| Synopsis | Version of MLD running on the SAP or SDP |
| Context | configure service vpls string sap string mld-snooping version <i>keyword</i> |
| Tree | version |
| Default | 2 |
| Options | 1, 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*

| | |
|------------|---|
| Synopsis | Monitor operational group |
| Context | configure service vpls string sap string monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

mrp

| | |
|------------|--|
| Synopsis | Enter the mrp context |
| Context | configure service vpls string sap string mrp |
| Tree | mrp |
| Introduced | 20.10.R1 |

Platforms All

join-time *number*

Synopsis Interval between transmit opportunities
 Context **configure** [service vpls string sap string mrp join-time number](#)
 Tree [join-time](#)
 Range 1 to 10
 Default 2
 Introduced 20.10.R1
 Platforms All

leave-all-time *number*

Synopsis Frequency that LeaveAll PDUs are generated
 Context **configure** [service vpls string sap string mrp leave-all-time number](#)
 Tree [leave-all-time](#)
 Range 60 to 300
 Default 100
 Introduced 20.10.R1
 Platforms All

leave-time *number*

Synopsis Time in leave state before transitioning to MT state
 Context **configure** [service vpls string sap string mrp leave-time number](#)
 Tree [leave-time](#)
 Range 30 to 60
 Default 30
 Introduced 20.10.R1
 Platforms All

periodic-time *number*

Synopsis Frequency of periodic events generation

| | |
|------------|--|
| Context | configure service vpls string sap string mrp periodic-time number |
| Tree | periodic-time |
| Range | 10 to 100 |
| Default | 10 |
| Introduced | 20.10.R1 |
| Platforms | All |

periodic-timer *boolean*

| | |
|------------|--|
| Synopsis | Enable the periodic transmission timer |
| Context | configure service vpls string sap string mrp periodic-timer boolean |
| Tree | periodic-timer |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

policy *reference*

| | |
|------------|--|
| Synopsis | MMRP policy name |
| Context | configure service vpls string sap string mrp policy reference |
| Tree | policy |
| Reference | configure service mrp policy string |
| Introduced | 20.10.R1 |
| Platforms | All |

multi-service-site *reference*

| | |
|------------|--|
| Synopsis | Multi service site name |
| Context | configure service vpls string sap string multi-service-site reference |
| Tree | multi-service-site |
| Reference | configure service customer string multi-service-site string |
| Introduced | 16.0.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group |
| Context | configure service vpls <i>string</i> sap <i>string</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

pbb

| | |
|------------|---|
| Synopsis | Enter the pbb context |
| Context | configure service vpls <i>string</i> sap <i>string</i> pbb |
| Tree | pbb |
| Introduced | 20.10.R1 |
| Platforms | All |

fault-propagation

| | |
|------------|---|
| Synopsis | Enter the fault-propagation context |
| Context | configure service vpls <i>string</i> sap <i>string</i> pbb fault-propagation |
| Tree | fault-propagation |
| Introduced | 20.10.R1 |
| Platforms | All |

backbone-mac-address [[address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for backbone-mac-address |
| Context | configure service vpls <i>string</i> sap <i>string</i> pbb fault-propagation backbone-mac-address <i>string</i> |
| Tree | backbone-mac-address |
| Introduced | 20.10.R1 |
| Platforms | All |

[address] *string*

| | |
|------------|---|
| Synopsis | Backbone MAC address |
| Context | configure service vpls string sap string pbb fault-propagation backbone-mac-address string |
| Tree | backbone-mac-address |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

backbone-mac-name [[name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for backbone-mac-name |
| Context | configure service vpls string sap string pbb fault-propagation backbone-mac-name reference |
| Tree | backbone-mac-name |
| Introduced | 20.10.R1 |
| Platforms | All |

[name] *reference*

| | |
|------------|---|
| Synopsis | Backbone MAC address name |
| Context | configure service vpls string sap string pbb fault-propagation backbone-mac-name reference |
| Tree | backbone-mac-name |
| Reference | configure service pbb mac string |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

pim-snooping

| | |
|------------|--|
| Synopsis | Enter the pim-snooping context |
| Context | configure service vpls string sap string pim-snooping |
| Tree | pim-snooping |
| Introduced | 16.0.R1 |

Platforms All

maximum-number-groups *number*

Synopsis Maximum groups for this interface
 Context **configure** [service vpls](#) *string* [sap](#) *string* [pim-snooping](#) **maximum-number-groups** *number*
 Tree [maximum-number-groups](#)
 Range 1 to 16000
 Introduced 16.0.R1
 Platforms All

process-cpm-traffic-on-sap-down *boolean*

Synopsis Process CPM traffic on SAP down event
 Context **configure** [service vpls](#) *string* [sap](#) *string* **process-cpm-traffic-on-sap-down** *boolean*
 Tree [process-cpm-traffic-on-sap-down](#)
 Default false
 Introduced 16.0.R1
 Platforms All

radius-auth-policy *reference*

Synopsis RADIUS authentication policy
 Context **configure** [service vpls](#) *string* [sap](#) *string* **radius-auth-policy** *reference*
 Tree [radius-auth-policy](#)
 Reference **configure** [subscriber-mgmt](#) **radius-authentication-policy** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy-ipv4 *reference*

Synopsis Subscriber host connectivity verification policy for IPv4
 Context **configure** [service vpls](#) *string* [sap](#) *string* **shcv-policy-ipv4** *reference*
 Tree [shcv-policy-ipv4](#)
 Reference **configure** [subscriber-mgmt](#) **shcv-policy** *string*

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

spb

| | |
|------------|---|
| Synopsis | Enable the spb context |
| Context | configure service vpls <i>string</i> sap <i>string</i> spb |
| Tree | spb |
| Introduced | 21.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Admin state |
| Context | configure service vpls <i>string</i> sap <i>string</i> spb admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | All |

level [*id*] *number*

| | |
|------------|--|
| Synopsis | Enter the level list instance |
| Context | configure service vpls <i>string</i> sap <i>string</i> spb level <i>number</i> |
| Tree | level |
| Introduced | 21.10.R1 |
| Platforms | All |

[id] *number*

| | |
|----------|--|
| Synopsis | Level identifier |
| Context | configure service vpls <i>string</i> sap <i>string</i> spb level <i>number</i> |
| Tree | level |
| Range | 1 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | All |

hello-interval *number*

| | |
|------------|--|
| Synopsis | Hello interval |
| Context | configure service vpls <i>string sap string spb level number</i> hello-interval <i>number</i> |
| Tree | hello-interval |
| Range | 1 to 20000 |
| Default | 9 |
| Units | seconds |
| Introduced | 21.10.R1 |
| Platforms | All |

hello-multiplier *number*

| | |
|------------|--|
| Synopsis | Hello multiplier |
| Context | configure service vpls <i>string sap string spb level number</i> hello-multiplier <i>number</i> |
| Tree | hello-multiplier |
| Range | 2 to 100 |
| Default | 3 |
| Introduced | 21.10.R1 |
| Platforms | All |

metric *number*

| | |
|------------|--|
| Synopsis | Metric |
| Context | configure service vpls <i>string sap string spb level number</i> metric <i>number</i> |
| Tree | metric |
| Range | 0 to 16777215 |
| Default | 0 |
| Introduced | 21.10.R1 |
| Platforms | All |

lsp-pacing-interval *number*

| | |
|------------|--|
| Synopsis | Lsp pacing interval |
| Context | configure service vpls <i>string</i> sap <i>string</i> spb lsp-pacing-interval <i>number</i> |
| Tree | lsp-pacing-interval |
| Range | 0 to 65535 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | All |

retransmit-interval *number*

| | |
|------------|--|
| Synopsis | Retransmit interval |
| Context | configure service vpls <i>string</i> sap <i>string</i> spb retransmit-interval <i>number</i> |
| Tree | retransmit-interval |
| Range | 1 to 65535 |
| Default | 5 |
| Units | seconds |
| Introduced | 21.10.R1 |
| Platforms | All |

split-horizon-group *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Split horizon group |
| Context | configure service vpls <i>string</i> sap <i>string</i> split-horizon-group <i>reference</i> |
| Tree | split-horizon-group |
| Reference | configure service vpls <i>string</i> split-horizon-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

static-host

| | |
|------------|---|
| Synopsis | Enter the static-host context |
| Context | configure service vpls string sap string static-host |
| Tree | static-host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4 [ip] string mac string

| | |
|------------|--|
| Synopsis | Enter the ipv4 list instance |
| Context | configure service vpls string sap string static-host ipv4 string mac string |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ip] string

| | |
|------------|--|
| Synopsis | IP address |
| Context | configure service vpls string sap string static-host ipv4 string mac string |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac string

| | |
|------------|--|
| Synopsis | MAC address |
| Context | configure service vpls string sap string static-host ipv4 string mac string |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the static host |
| Context | configure service vpls string sap string static-host ipv4 string mac string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-string *string*

| | |
|---------------|---|
| Synopsis | ANCP string |
| Context | configure service vpls string sap string static-host ipv4 string mac string ancp-string string |
| Tree | ancp-string |
| String Length | 1 to 63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile

| | |
|------------|--|
| Synopsis | Enter the app-profile context |
| Context | configure service vpls string sap string static-host ipv4 string mac string app-profile |
| Tree | app-profile |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

profile *reference*

| | |
|------------|--|
| Synopsis | Application profile used by the static host |
| Context | configure service vpls string sap string static-host ipv4 string mac string app-profile profile reference |
| Tree | profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

Synopsis Intermediate destination ID

Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* **int-dest-id** *string*

Tree [int-dest-id](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv

Synopsis Enter the **shcv** context

Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* **shcv**

Tree [shcv](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis SLA profile name

Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* **sla-profile** *reference*

Tree [sla-profile](#)

Reference **configure** [subscriber-mgmt](#) [sla-profile](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-profile *reference*

Synopsis Sub-profile name

Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* **sub-profile** *reference*

Tree [sub-profile](#)

Reference **configure subscriber-mgmt sub-profile** *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-id

Synopsis Enter the **subscriber-id** context
Context **configure service vpls** *string sap string static-host ipv4 string mac string subscriber-id*
Tree **subscriber-id**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Subscriber identification
Context **configure service vpls** *string sap string static-host ipv4 string mac string subscriber-id string string*
Tree **string**
String Length 1 to 64
Notes The following elements are part of a choice: **string** or **use-sap-id**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis Use the SAP id as subscriber ID
Context **configure service vpls** *string sap string static-host ipv4 string mac string subscriber-id use-sap-id*
Tree **use-sap-id**
Notes The following elements are part of a choice: **string** or **use-sap-id**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-isid

Synopsis Enter the **static-isid** context

| | |
|------------|---|
| Context | configure service vpls string sap string static-isid |
| Tree | static-isid |
| Introduced | 19.10.R1 |
| Platforms | All |

range [range-id] number

| | |
|------------|--|
| Synopsis | Enter the range list instance |
| Context | configure service vpls string sap string static-isid range number |
| Tree | range |
| Introduced | 19.10.R1 |
| Platforms | All |

[range-id] number

| | |
|------------|--|
| Synopsis | Range ID for static ISID |
| Context | configure service vpls string sap string static-isid range number |
| Tree | range |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

end number

| | |
|------------|---|
| Synopsis | Upper bound of the ISID range |
| Context | configure service vpls string sap string static-isid range number end number |
| Tree | end |
| Range | 1 to 16777215 |
| Introduced | 19.10.R1 |
| Platforms | All |

start number

| | |
|----------|-------------------------------|
| Synopsis | Lower bound of the ISID range |
|----------|-------------------------------|

| | |
|------------|---|
| Context | configure service vpls string sap string static-isid range number start number |
| Tree | start |
| Range | 1 to 16777215 |
| Introduced | 19.10.R1 |
| Platforms | All |

stp

| | |
|------------|---|
| Synopsis | Enter the stp context |
| Context | configure service vpls string sap string stp |
| Tree | stp |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of STP |
| Context | configure service vpls string sap string stp admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

auto-edge *boolean*

| | |
|------------|---|
| Synopsis | Enable automatic detection of edge port characteristics |
| Context | configure service vpls string sap string stp auto-edge boolean |
| Tree | auto-edge |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

edge-port *boolean*

| | |
|----------|--------------------------------------|
| Synopsis | Designate SAP or SDP as an edge port |
|----------|--------------------------------------|

| | |
|------------|---|
| Context | configure service vpls string sap string stp edge-port boolean |
| Tree | edge-port |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

link-type *keyword*

| | |
|------------|---|
| Synopsis | Configure STP link-type |
| Context | configure service vpls string sap string stp link-type keyword |
| Tree | link-type |
| Default | pt-pt |
| Options | pt-pt, shared |
| Introduced | 16.0.R4 |
| Platforms | All |

mst-instance [[mst-inst-number](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the mst-instance list instance |
| Context | configure service vpls string sap string stp mst-instance number |
| Tree | mst-instance |
| Introduced | 19.10.R1 |
| Platforms | All |

[\[mst-inst-number\]](#) *number*

| | |
|------------|---|
| Synopsis | Multiple Spanning Tree Instance number |
| Context | configure service vpls string sap string stp mst-instance number |
| Tree | mst-instance |
| Range | 1 to 4094 |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

mst-path-cost *number*

| | |
|------------|---|
| Synopsis | MSTI path cost |
| Context | configure service vpls <i>string</i> sap <i>string</i> stp mst-instance <i>number</i> mst-path-cost <i>number</i> |
| Tree | mst-path-cost |
| Range | 1 to 200000000 |
| Default | 10 |
| Introduced | 19.10.R1 |
| Platforms | All |

mst-port-priority *number*

| | |
|------------|---|
| Synopsis | MSTI port priority |
| Context | configure service vpls <i>string</i> sap <i>string</i> stp mst-instance <i>number</i> mst-port-priority <i>number</i> |
| Tree | mst-port-priority |
| Range | 0 16 32 48 64 80 96 112 128 144 160 176 192 208 224 240 |
| Default | 128 |
| Introduced | 19.10.R1 |
| Platforms | All |

path-cost *number*

| | |
|------------|--|
| Synopsis | Configure path-cost |
| Context | configure service vpls <i>string</i> sap <i>string</i> stp path-cost <i>number</i> |
| Tree | path-cost |
| Range | 1 to 200000000 |
| Default | 10 |
| Introduced | 16.0.R4 |
| Platforms | All |

port-num *number*

| | |
|----------|---|
| Synopsis | Configure virtual port number |
| Context | configure service vpls <i>string</i> sap <i>string</i> stp port-num <i>number</i> |
| Tree | port-num |

| | |
|------------|-----------|
| Range | 1 to 2047 |
| Introduced | 16.0.R4 |
| Platforms | All |

priority *number*

| | |
|------------|--|
| Synopsis | Configure STP priority |
| Context | configure service vpls <i>string</i> sap <i>string</i> stp priority <i>number</i> |
| Tree | priority |
| Range | 0 to 255 |
| Default | 128 |
| Introduced | 16.0.R4 |
| Platforms | All |

root-guard *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable STP root-guard |
| Context | configure service vpls <i>string</i> sap <i>string</i> stp root-guard <i>boolean</i> |
| Tree | root-guard |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

sub-sla-mgmt

| | |
|------------|--|
| Synopsis | Enter the sub-sla-mgmt context |
| Context | configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt |
| Tree | sub-sla-mgmt |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of SAP subscriber management |
| Context | configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt admin-state <i>keyword</i> |

| | |
|------------|---|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|---|
| Synopsis | Enter the defaults context |
| Context | configure service vpls string sap string sub-sla-mgmt defaults |
| Tree | defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Default application profile name for this SAP |
| Context | configure service vpls string sap string sub-sla-mgmt defaults app-profile reference |
| Tree | app-profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id

| | |
|------------|---|
| Synopsis | Enter the int-dest-id context |
| Context | configure service vpls string sap string sub-sla-mgmt defaults int-dest-id |
| Tree | int-dest-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|----------|---|
| Synopsis | Use the configured string |
| Context | configure service vpls string sap string sub-sla-mgmt defaults int-dest-id string string |

| | |
|---------------|--|
| Tree | string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

top-q-tag

| | |
|------------|---|
| Synopsis | Use the top Q-tag of this SAP |
| Context | configure service vpls string sap string sub-sla-mgmt defaults int-dest-id top-q-tag |
| Tree | top-q-tag |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|--|
| Synopsis | Default SLA profile for hosts on this SAP |
| Context | configure service vpls string sap string sub-sla-mgmt defaults sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|--|
| Synopsis | Default subscriber profile used for subscribers on this SAP |
| Context | configure service vpls string sap string sub-sla-mgmt defaults sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|---|
| Synopsis | Enter the subscriber-id context |
| Context | configure service vpls string sap string sub-sla-mgmt defaults subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-id

| | |
|------------|---|
| Synopsis | Use auto-generated subscriber identification string |
| Context | configure service vpls string sap string sub-sla-mgmt defaults subscriber-id auto-id |
| Tree | auto-id |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id

| | |
|------------|--|
| Synopsis | Use SAP ID as default subscriber identification string |
| Context | configure service vpls string sap string sub-sla-mgmt defaults subscriber-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Default subscriber identification string for the SAP |
| Context | configure service vpls string sap string sub-sla-mgmt defaults subscriber-id string string |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-da-hashing *boolean*

| | |
|------------|--|
| Synopsis | Use destination MAC address instead of subscriber ID to select egress LAG link |
| Context | configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt mac-da-hashing <i>boolean</i> |
| Tree | mac-da-hashing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

single-sub-parameters

| | |
|------------|--|
| Synopsis | Enter the single-sub-parameters context |
| Context | configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters |
| Tree | single-sub-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

non-sub-traffic

| | |
|------------|--|
| Synopsis | Enable the non-sub-traffic context |
| Context | configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic |
| Tree | non-sub-traffic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name for all non-subscriber traffic |
| Context | configure service vpls <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|--|
| Synopsis | SLA profile applicable for all non-subscriber traffic |
| Context | configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile reference |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|--|
| Synopsis | Subscriber ID profile applied for all non-subscriber traffic |
| Context | configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile reference |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Subscriber ID applied for all non-subscriber traffic |
| Context | configure service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id string |
| Tree | subscriber-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

profiled-traffic-only *boolean*

| | |
|------------|--|
| Synopsis | Include all traffic in subscriber profile |
| Context | configure service vpls string sap string sub-sla-mgmt single-sub-parameters profiled-traffic-only boolean |
| Tree | profiled-traffic-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-ident-policy *reference*

| | |
|------------|---|
| Synopsis | Subscriber identification policy used on this SAP |
| Context | configure service vpls string sap string sub-sla-mgmt sub-ident-policy reference |
| Tree | sub-ident-policy |
| Reference | configure subscriber-mgmt sub-ident-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-limit (*keyword | number*)

| | |
|------------|--|
| Synopsis | Maximum number of subscribers on this SAP |
| Context | configure service vpls string sap string sub-sla-mgmt subscriber-limit (keyword number) |
| Tree | subscriber-limit |
| Range | 1 to 131071 |
| Default | 1 |
| Options | no-limit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transit-policy

| | |
|----------|--|
| Synopsis | Enable the transit-policy context |
| Context | configure service vpls string sap string transit-policy |
| Tree | transit-policy |

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP transit policy ID
 Context **configure** [service vpls](#) *string* [sap](#) *string* [transit-policy](#) [ip](#) *reference*
 Tree [ip](#)
 Reference **configure** [application-assurance](#) *group* *number* [partition](#) *number* [transit-ip-policy](#) *number*
 Notes The following elements are part of a mandatory choice: **ip** or **prefix**.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP prefix policy ID
 Context **configure** [service vpls](#) *string* [sap](#) *string* [transit-policy](#) [prefix](#) *reference*
 Tree [prefix](#)
 Reference **configure** [application-assurance](#) *group* *number* [partition](#) *number* [transit-prefix-policy](#) *number*
 Notes The following elements are part of a mandatory choice: **ip** or **prefix**.
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

segment-routing-v6 [[instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance
 Context **configure** [service vpls](#) *string* [segment-routing-v6](#) *number*

| | |
|----------------|---|
| Tree | segment-routing-v6 |
| Max. Instances | 1 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[instance] *number*

| | |
|------------|--|
| Synopsis | Segment routing v6 instance |
| Context | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

locator [[locator-name](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the locator list instance |
| Context | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> |
| Tree | locator |
| Max. Instances | 1 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[locator-name] *reference*

| | |
|------------|--|
| Synopsis | SRv6 locator name |
| Context | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> |
| Tree | locator |
| Reference | configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

function

| | |
|------------|---|
| Synopsis | Enter the function context |
| Context | configure service vpls string segment-routing-v6 number locator reference function |
| Tree | function |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

end-dt2m

| | |
|------------|--|
| Synopsis | Enable the end-dt2m context |
| Context | configure service vpls string segment-routing-v6 number locator reference function end-dt2m |
| Tree | end-dt2m |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value *number*

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vpls string segment-routing-v6 number locator reference function end-dt2m value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

end-dt2u

| | |
|----------|--|
| Synopsis | Enable the end-dt2u context |
| Context | configure service vpls string segment-routing-v6 number locator reference function end-dt2u |
| Tree | end-dt2u |

| | |
|------------|---|
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value *number*

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function end-dt2u <i>value</i> <i>number</i> |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

micro-segment-locator [**locator-name**] *reference*

| | |
|----------------|---|
| Synopsis | Enter the micro-segment-locator list instance |
| Context | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> |
| Tree | micro-segment-locator |
| Max. Instances | 1 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[**locator-name**] *reference*

| | |
|-------------|---|
| Synopsis | Micro-segment SRv6 locator name |
| Context | configure service vpls <i>string</i> segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> |
| Tree | micro-segment-locator |
| Description | This command associates a pre-defined micro-segment SRv6 locator (defined in the configure router segment-routing segment-routing-v6 context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN. |

| | |
|------------|--|
| Reference | configure <i>router string</i> segment-routing segment-routing-v6 micro-segment-locator <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

function

| | |
|------------|--|
| Synopsis | Enter the function context |
| Context | configure service vpls string segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function |
| Tree | function |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

udt2m

| | |
|-------------|---|
| Synopsis | Enable the udt2m context |
| Context | configure service vpls string segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt2m |
| Tree | udt2m |
| Description | Commands in this context configure the SRv6 uDT2M behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value *number*

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vpls string segment-routing-v6 <i>number</i> micro-segment-locator <i>reference</i> function udt2m <i>value</i> <i>number</i> |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |

| | |
|------------|---|
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

udt2u

| | |
|-------------|---|
| Synopsis | Enable the udt2u context |
| Context | configure service vpls string segment-routing-v6 number micro-segment-locator reference function udt2u |
| Tree | udt2u |
| Description | Commands in this context configure the SRv6 uDT2U behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vpls string segment-routing-v6 number micro-segment-locator reference function udt2u value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.

When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

service-id number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Service ID |
| Context | configure service vpls string service-id number |
| Tree | service-id |

| | |
|------------|-----------------|
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

service-mtu *number*

| | |
|----------|--|
| Synopsis | MTU size |
| Context | configure <i>service vpls string</i> service-mtu <i>number</i> |
| Tree | service-mtu |

Description This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

| | |
|------------|-----------|
| Range | 1 to 9782 |
| Introduced | 16.0.R1 |
| Platforms | All |

shcv-policy-ipv4 *reference*

| | |
|------------|---|
| Synopsis | Subscriber host connectivity verification policy for IPv4 |
| Context | configure service vpls string shcv-policy-ipv4 reference |
| Tree | shcv-policy-ipv4 |
| Reference | configure subscriber-mgmt shcv-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

spb

| | |
|------------|--|
| Synopsis | Enable the spb context |
| Context | configure service vpls string spb |
| Tree | spb |
| Introduced | 21.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of SPB |
| Context | configure service vpls string spb admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | All |

fid *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | FID identifier |
| Context | configure service vpls string spb fid number |
| Tree | fid |

| | |
|------------|-----------|
| Range | 1 to 4095 |
| Default | 1 |
| Introduced | 21.10.R1 |
| Platforms | All |

isis-instance *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | ISIS instance |
| Context | configure service vpls <i>string</i> spb isis-instance <i>number</i> |
| Tree | isis-instance |
| Range | 1024 to 2047 |
| Default | 1024 |
| Introduced | 21.10.R1 |
| Platforms | All |

level [*id*] *number*

| | |
|------------|--|
| Synopsis | Enter the level list instance |
| Context | configure service vpls <i>string</i> spb level <i>number</i> |
| Tree | level |
| Introduced | 21.10.R1 |
| Platforms | All |

[id] *number*

| | |
|------------|--|
| Synopsis | Level identifier |
| Context | configure service vpls <i>string</i> spb level <i>number</i> |
| Tree | level |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | All |

bridge-priority *number*

| | |
|------------|---|
| Synopsis | SPB Bridge priority |
| Context | configure <i>service vpls string spb level number bridge-priority number</i> |
| Tree | bridge-priority |
| Range | 0 to 15 |
| Default | 8 |
| Introduced | 21.10.R1 |
| Platforms | All |

ect-high-path-fid [*fid*] *number*

| | |
|------------|---|
| Synopsis | Add a list entry for ect-high-path-fid |
| Context | configure <i>service vpls string spb level number ect-high-path-fid number</i> |
| Tree | ect-high-path-fid |
| Introduced | 21.10.R1 |
| Platforms | All |

[fid] *number*

| | |
|------------|---|
| Synopsis | SPB control vpls FID |
| Context | configure <i>service vpls string spb level number ect-high-path-fid number</i> |
| Tree | ect-high-path-fid |
| Range | 1 to 4095 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | All |

forwarding-tree

| | |
|------------|--|
| Synopsis | Enter the forwarding-tree context |
| Context | configure <i>service vpls string spb level number forwarding-tree</i> |
| Tree | forwarding-tree |
| Introduced | 21.10.R1 |
| Platforms | All |

topology *keyword*

| | |
|------------|--|
| Synopsis | Topology |
| Context | configure service vpls <i>string</i> spb <i>level</i> <i>number</i> forwarding-tree topology <i>keyword</i> |
| Tree | topology |
| Default | spf |
| Options | spf, st |
| Introduced | 21.10.R1 |
| Platforms | All |

lsp-lifetime *number*

| | |
|------------|--|
| Synopsis | Time LSP is considered valid by other routers |
| Context | configure service vpls <i>string</i> spb lsp-lifetime <i>number</i> |
| Tree | lsp-lifetime |
| Range | 350 to 65535 |
| Default | 1200 |
| Introduced | 21.10.R1 |
| Platforms | All |

lsp-refresh-interval

| | |
|------------|--|
| Synopsis | Enter the lsp-refresh-interval context |
| Context | configure service vpls <i>string</i> spb lsp-refresh-interval |
| Tree | lsp-refresh-interval |
| Introduced | 21.10.R1 |
| Platforms | All |

half-lifetime *boolean*

| | |
|------------|---|
| Synopsis | Refresh LSP interval at half the LSP lifetime |
| Context | configure service vpls <i>string</i> spb lsp-refresh-interval half-lifetime <i>boolean</i> |
| Tree | half-lifetime |
| Default | true |
| Introduced | 21.10.R1 |

Platforms All

interval *number*

Synopsis Specify the interval at which LSPs are refreshed

Context **configure** [service vpls](#) *string* [spb](#) [lsp-refresh-interval](#) *interval* *number*

Tree [interval](#)

Range 150 to 65535

Default 600

Introduced 21.10.R1

Platforms All

overload

Synopsis Enable the **overload** context

Context **configure** [service vpls](#) *string* [spb](#) [overload](#)

Tree [overload](#)

Introduced 21.10.R1

Platforms All

timeout *number*

Synopsis Time the router operates in overloaded state

Context **configure** [service vpls](#) *string* [spb](#) [overload](#) [timeout](#) *number*

Tree [timeout](#)

Range 0 | 60 to 1800

Default 0

Units seconds

Introduced 21.10.R1

Platforms All

overload-on-boot

Synopsis Enable the **overload-on-boot** context

Context **configure** [service vpls](#) *string* [spb](#) [overload-on-boot](#)

| | |
|------------|----------------------------------|
| Tree | overload-on-boot |
| Introduced | 21.10.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|--|
| Synopsis | Time the router operates in overloaded state |
| Context | configure service vpls string spb overload-on-boot timeout number |
| Tree | timeout |
| Range | 0 60 to 1800 |
| Default | 0 |
| Units | seconds |
| Introduced | 21.10.R1 |
| Platforms | All |

timers

| | |
|------------|---|
| Synopsis | Enter the timers context |
| Context | configure service vpls string spb timers |
| Tree | timers |
| Introduced | 21.10.R1 |
| Platforms | All |

lsp-wait

| | |
|------------|--|
| Synopsis | Enable the lsp-wait context |
| Context | configure service vpls string spb timers lsp-wait |
| Tree | lsp-wait |
| Introduced | 21.10.R1 |
| Platforms | All |

initial-wait *number*

| | |
|----------|--|
| Synopsis | Initial wait |
| Context | configure service vpls string spb timers lsp-wait initial-wait number |

| | |
|------------|------------------------------|
| Tree | initial-wait |
| Range | 10 to 100000 |
| Default | 10 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | All |

max-wait *number*

| | |
|------------|---|
| Synopsis | Max wait time |
| Context | configure service vpls string spb timers lsp-wait max-wait <i>number</i> |
| Tree | max-wait |
| Range | 10 to 120000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | All |

second-wait *number*

| | |
|------------|--|
| Synopsis | Second wait |
| Context | configure service vpls string spb timers lsp-wait second-wait <i>number</i> |
| Tree | second-wait |
| Range | 10 to 100000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | All |

spf-wait

| | |
|------------|--|
| Synopsis | Enable the spf-wait context |
| Context | configure service vpls string spb timers spf-wait |
| Tree | spf-wait |
| Introduced | 21.10.R1 |

Platforms All

initial-wait *number*

Synopsis Initial wait
Context **configure** [service vpls](#) *string* [spb timers spf-wait](#) **initial-wait** *number*
Tree [initial-wait](#)
Range 10 to 100000
Default 1000
Units milliseconds
Introduced 21.10.R1
Platforms All

max-wait *number*

Synopsis Max wait time
Context **configure** [service vpls](#) *string* [spb timers spf-wait](#) **max-wait** *number*
Tree [max-wait](#)
Range 10 to 120000
Default 10000
Units milliseconds
Introduced 21.10.R1
Platforms All

second-wait *number*

Synopsis Second wait
Context **configure** [service vpls](#) *string* [spb timers spf-wait](#) **second-wait** *number*
Tree [second-wait](#)
Range 10 to 100000
Default 1000
Units milliseconds
Introduced 21.10.R1
Platforms All

spbm-control-vpls

| | |
|------------|---|
| Synopsis | Enter the spbm-control-vpls context |
| Context | configure service vpls <i>string</i> spbm-control-vpls |
| Tree | spbm-control-vpls |
| Introduced | 21.10.R1 |
| Platforms | All |

fid *number*

| | |
|------------|--|
| Synopsis | SPB control vpls FID |
| Context | configure service vpls <i>string</i> spbm-control-vpls fid <i>number</i> |
| Tree | fid |
| Range | 1 to 4095 |
| Introduced | 21.10.R1 |
| Platforms | All |

service-name *string*

| | |
|---------------|---|
| Synopsis | SPB control vpls service |
| Context | configure service vpls <i>string</i> spbm-control-vpls service-name <i>string</i> |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 21.10.R1 |
| Platforms | All |

split-horizon-group [[shg-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the split-horizon-group list instance |
| Context | configure service vpls <i>string</i> split-horizon-group <i>string</i> |
| Tree | split-horizon-group |
| Introduced | 16.0.R1 |
| Platforms | All |

[shg-name] string

| | |
|---------------|---|
| Synopsis | SHG name to which the SDP belongs |
| Context | configure service vpls string split-horizon-group string |
| Tree | split-horizon-group |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls string split-horizon-group string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|---|
| Synopsis | Enter the fdb context |
| Context | configure service vpls string split-horizon-group string fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

saps

| | |
|------------|--|
| Synopsis | Enter the saps context |
| Context | configure service vpls string split-horizon-group string fdb saps |
| Tree | saps |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|------------|--|
| Synopsis | Populate automatically MAC protect list with MAC addresses learned on SDP with split horizon group |
| Context | configure service vpls <i>string</i> split-horizon-group <i>string</i> fdb saps auto-learn-mac-protect <i>boolean</i> |
| Tree | auto-learn-mac-protect |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect-exclude-list *reference*

| | |
|-------------|--|
| Synopsis | Referenced MAC protect exclusion list name |
| Context | configure service vpls <i>string</i> split-horizon-group <i>string</i> fdb saps auto-learn-mac-protect-exclude-list <i>reference</i> |
| Tree | auto-learn-mac-protect-exclude-list |
| Description | This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object. |
| Reference | configure service mac-list <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

discard-unprotected-dest-mac *boolean*

| | |
|------------|--|
| Synopsis | Discard packet with unprotected destination MAC address |
| Context | configure service vpls <i>string</i> split-horizon-group <i>string</i> fdb saps discard-unprotected-dest-mac <i>boolean</i> |
| Tree | discard-unprotected-dest-mac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|--|
| Synopsis | Action to take whenever a relearn request for a protected MAC is received |
| Context | configure service vpls <i>string</i> split-horizon-group <i>string</i> fdb saps protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sap-oper-down, alarm-only, discard |
| Introduced | 16.0.R1 |
| Platforms | All |

residential *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Define as a residential split horizon group |
| Context | configure service vpls <i>string</i> split-horizon-group <i>string</i> residential <i>boolean</i> |
| Tree | residential |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

spoke-sdp [**sdp-bind-id**] *string*

| | |
|------------|---|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-bind-id] *string*

| | |
|---------------|---|
| Synopsis | SDP binding ID |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-policy *reference*

| | |
|------------|--|
| Synopsis | Policy to collect accounting statistics |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SDP binding to the service |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

app-profile *reference*

| | |
|------------|--|
| Synopsis | ISA-AA application profile name for this SDP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bfd

| | |
|----------|------------------------------|
| Synopsis | Enter the bfd context |
|----------|------------------------------|

| | |
|------------|---|
| Context | configure service vpls string spoke-sdp string bfd |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vpls string spoke-sdp string bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | All |

encap keyword

| | |
|------------|--|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service vpls string spoke-sdp string bfd bfd-liveness encap keyword |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-template reference

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service vpls string spoke-sdp string bfd bfd-template reference |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template string |
| Introduced | 21.2.R1 |
| Platforms | All |

failure-action *keyword*

| | |
|-------------|---|
| Synopsis | VCCV BFD action taken on the SDP binding |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> bfd failure-action <i>keyword</i> |
| Tree | failure-action |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Default | none |
| Options | none, down |
| Introduced | 21.2.R1 |
| Platforms | All |

wait-for-up-timer *number*

| | |
|-------------|--|
| Synopsis | Time waited for BFD up status |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i> |
| Tree | wait-for-up-timer |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.

This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range | 1 to 60 |
| Units | seconds |
| Introduced | 21.2.R1 |
| Platforms | All |

block-on-mesh-failure *boolean*

| | |
|----------|---|
| Synopsis | Enable blocking after all SDPs are operationally down |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> block-on-mesh-failure <i>boolean</i> |
| Tree | block-on-mesh-failure |
| Default | false |

Introduced 16.0.R1
Platforms All

bpdu-translation *keyword*

Synopsis BPDU format
Context **configure** [service vpls string spoke-sdp string bpdu-translation keyword](#)
Tree [bpdu-translation](#)
Options auto, pvst, stp, pvst-rw, auto-rw
Introduced 16.0.R1
Platforms All

collect-stats *boolean*

Synopsis Allow agent to collect accounting statistics
Context **configure** [service vpls string spoke-sdp string collect-stats boolean](#)
Tree [collect-stats](#)
Default false
Introduced 16.0.R1
Platforms All

control-word *boolean*

Synopsis Use the control word as preferred
Context **configure** [service vpls string spoke-sdp string control-word boolean](#)
Tree [control-word](#)
Default false
Introduced 16.0.R1
Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
Context **configure** [service vpls string spoke-sdp string cpu-protection](#)
Tree [cpu-protection](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context
Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring**
Tree [eth-cfm-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates
Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate**
Tree [aggregate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate
Context **configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring car**
Tree [car](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

mac-monitoring

Synopsis Monitor MAC for CPU protection
Context **configure service vpls string spoke-sdp string cpu-protection mac-monitoring**
Tree [mac-monitoring](#)
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

policy-id *reference*

Synopsis CPM protection policy
 Context **configure** [service vpls string spoke-sdp string](#) [cpu-protection policy-id reference](#)
 Tree [policy-id](#)
 Reference **configure** [system security cpu-protection policy number](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

description *string*

Synopsis Text description
 Context **configure** [service vpls string spoke-sdp string](#) [description string](#)
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

dhcp

Synopsis Enter the **dhcp** context
 Context **configure** [service vpls string spoke-sdp string](#) [dhcp](#)
 Tree [dhcp](#)
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [service vpls string spoke-sdp string](#) [dhcp description string](#)
 Tree [description](#)
 String Length 1 to 80

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

snoop *boolean*

| | |
|------------|---|
| Synopsis | Allow DHCP snooping of DHCP messages on the SAP or SDP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> dhcp snoop <i>boolean</i> |
| Tree | snoop |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip *reference*

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |

Platforms All

ipv6 reference

Synopsis IPv6 filter policy name
 Context **configure** [service vpls string spoke-sdp string egress filter ipv6 reference](#)
 Tree [ipv6](#)
 Reference **configure** [filter ipv6-filter string](#)
 Introduced 16.0.R1
 Platforms All

mac reference

Synopsis MAC filter policy name
 Context **configure** [service vpls string spoke-sdp string egress filter mac reference](#)
 Tree [mac](#)
 Reference **configure** [filter mac-filter string](#)
 Introduced 16.0.R1
 Platforms All

mfib-allowed-mda-destinations

Synopsis Enter the **mfib-allowed-mda-destinations** context
 Context **configure** [service vpls string spoke-sdp string egress mfib-allowed-mda-destinations](#)
 Tree [mfib-allowed-mda-destinations](#)
 Introduced 16.0.R4
 Platforms All

mda [[mda-id](#)] [string](#)

Synopsis Add a list entry for **mda**
 Context **configure** [service vpls string spoke-sdp string egress mfib-allowed-mda-destinations](#)
[mda string](#)
 Tree [mda](#)
 Introduced 16.0.R4

Platforms All

[mda-id] *string*

Synopsis MFIB allowed MDA destination

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [egress mfib-allowed-mda-destinations](#) [mda](#) *string*

Tree [mda](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

qos

Synopsis Enter the **qos** context

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [egress qos](#)

Tree [qos](#)

Introduced 16.0.R1

Platforms All

network

Synopsis Enter the **network** context

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [egress qos network](#)

Tree [network](#)

Introduced 16.0.R1

Platforms All

policy-name *reference*

Synopsis Network policy ID

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos network](#) *string*

Introduced 16.0.R1

Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service vpls string spoke-sdp string egress qos network port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 16.0.R1

Platforms All

group-name *reference*

Synopsis Name of the egress port queue group

Context **configure** [service vpls string spoke-sdp string egress qos network port-redirect-group group-name reference](#)

Tree [group-name](#)

Reference **configure** [qos queue-group-templates egress queue-group string](#)

Introduced 16.0.R1

Platforms All

instance *number*

Synopsis Queue-group instance ID

Context **configure** [service vpls string spoke-sdp string egress qos network port-redirect-group instance number](#)

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress MPLS VC label to send packets to the far end

| | |
|------------|--|
| Context | configure service vpls string spoke-sdp string egress vc-label number |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

endpoint

| | |
|------------|--|
| Synopsis | Enter the endpoint context |
| Context | configure service vpls string spoke-sdp string endpoint |
| Tree | endpoint |
| Introduced | 16.0.R1 |
| Platforms | All |

name *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Name of service endpoint to which SDP bind is attached |
| Context | configure service vpls string spoke-sdp string endpoint name <i>reference</i> |
| Tree | name |
| Reference | configure service vpls string endpoint string |
| Introduced | 16.0.R1 |
| Platforms | All |

precedence (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Precedence of this SDP bind when there are multiple SDP binds attached to one service endpoint |
| Context | configure service vpls string spoke-sdp string endpoint precedence (<i>number</i> <i>keyword</i>) |
| Tree | precedence |
| Range | 1 to 4 |
| Default | 4 |
| Options | primary |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label

| | |
|------------|--|
| Synopsis | Enable the use of entropy labels for spoke SDPs |
| Context | configure service vpls string spoke-sdp string entropy-label |
| Tree | entropy-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|---|
| Synopsis | Enter the eth-cfm context |
| Context | configure service vpls string spoke-sdp string eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service vpls string spoke-sdp string eth-cfm collect-lmm-fc-stats fc-in-profile keyword |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Reference | configure eth-cfm domain <i>string</i> association <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|--|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais

| | |
|----------|-------------------------------|
| Synopsis | Enable the ais context |
|----------|-------------------------------|

| | |
|------------|--|
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais</i> |
| Tree | ais |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

client-meg-level *number*

| | |
|----------------|--|
| Synopsis | Client MEG level for AIS message generation |
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number</i> |
| Tree | client-meg-level |
| Range | 1 to 7 |
| Max. Instances | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interface-support *boolean*

| | |
|------------|--|
| Synopsis | Enable generation of AIS PDUs based on endpoint state |
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean</i> |
| Tree | interface-support |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|----------|--|
| Synopsis | Transmission interval for AIS messages |
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number</i> |
| Tree | interval |
| Range | 1 60 |
| Default | 1 |
| Units | seconds |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | all-def |
| Options | all-def, mac-rem-err-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|---|
| Synopsis | Priority of the AIS messages generated by the node |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-alarm-time *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) **fng-alarm-time** *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fng-reset-time *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification](#) **fng-reset-time** *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm *boolean*

Synopsis Generate CCM messages

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **ccm** *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ccm-ltm-priority *number*

| | |
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| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

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|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

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| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> cfm-vlan-tag <i>string</i> |
| Tree | cfm-vlan-tag |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|------------|--|
| Synopsis | Enable the csf context |
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i> |
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *decimal-number*

| | |
|------------|--|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpls <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

direction *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

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|----------|-------------------------|
| Synopsis | Direction the MEP faces |
|----------|-------------------------|

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|------------|---|
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword |
| Tree | direction |
| Default | down |
| Options | down, up |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|---|
| Synopsis | Enable the eth-test context |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
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| Synopsis | Enter the test-pattern context |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern |

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|-------------|--|
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|-------------|---|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|----------|--|
| Synopsis | Fault propagation for the MEP |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |

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|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|---|
| Synopsis | Enter the grace context |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|--|
| Synopsis | Enter the eth-ed context |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|------------|--|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number |
| Tree | max-rx-defect-window |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|------------|--|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed boolean

| | |
|-------------|--|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed boolean

| | |
|------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

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|----------|---|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace |

| | |
|-------------|--|
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|-------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default | true |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

lbm-svc-act-responder *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **lbm-svc-act-responder** *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

low-priority-defect *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **low-priority-defect** *keyword*

Tree [low-priority-defect](#)

Default mac-rem-err-xcon

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mac-address *string*

Synopsis MAC address of the MEP

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **mac-address** *string*

Tree [mac-address](#)

Description This command specifies the MAC address of the MEP.
When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

one-way-delay-threshold *number*

| | |
|------------|---|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | MEP provisioned using MA primary VLAN ID |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> primary-vlan <i>boolean</i> |
| Tree | primary-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mip primary-vlan (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the mip list instance |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm mip primary-vlan (<i>number</i> <i>keyword</i>) |
| Tree | mip |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-vlan (*number* | *keyword*)

| | |
|----------|--------------------------------------|
| Synopsis | VLAN ID to which the MIP is attached |
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| Context | configure service vpls string spoke-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>) |
| Tree | mip |
| Description | This command provides an option for linking a MIP with a Primary VLAN number or none. When the none option is provided, the MIP does not include the primary vlan. |
| Range | 1 to 4094 |
| Options | none |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cfm-vlan-tag *string*

| | |
|---------------|--|
| Synopsis | VLAN tags to apply to CFM PDUs for egress processing |
| Context | configure service vpls string spoke-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>) cfm-vlan-tag <i>string</i> |
| Tree | cfm-vlan-tag |
| Description | This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration. |
| String Length | 1 to 9 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-address *string*

| | |
|------------|---|
| Synopsis | MAC address of the MIP |
| Context | configure service vpls string spoke-sdp string eth-cfm mip primary-vlan (<i>number keyword</i>) mac-address <i>string</i> |
| Tree | mac-address |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-ctag-levels *number*

| | |
|----------------|---|
| Synopsis | Squelch levels using additional VLAN C-Tag space |
| Context | configure service vpls string spoke-sdp string eth-cfm squelch-ingress-ctag-levels number |
| Tree | squelch-ingress-ctag-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|----------------|--|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
| Context | configure service vpls string spoke-sdp string eth-cfm squelch-ingress-levels number |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vmep-filter *boolean*

| | |
|------------|--|
| Synopsis | Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> eth-cfm vmep-filter <i>boolean</i> |
| Tree | vmep-filter |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

etree-leaf *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

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|------------|--|
| Synopsis | Enable etree leaf access-circuit status |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> etree-leaf <i>boolean</i> |
| Tree | etree-leaf |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

etree-root-leaf-tag *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | E-tree root leaf tag status |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> etree-root-leaf-tag <i>boolean</i> |
| Tree | etree-root-leaf-tag |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fdb

| | |
|------------|--|
| Synopsis | Enter the fdb context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect *boolean*

| | |
|------------|---|
| Synopsis | Populate automatically MAC protect list with source MAC addresses learned on SDP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb auto-learn-mac-protect <i>boolean</i> |
| Tree | auto-learn-mac-protect |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-learn-mac-protect-exclude-list *reference*

| | |
|-------------|--|
| Synopsis | Referenced MAC protect exclusion list name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb auto-learn-mac-protect-exclude-list <i>reference</i> |
| Tree | auto-learn-mac-protect-exclude-list |
| Description | This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object. |
| Reference | configure service mac-list <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

discard-unknown-source *boolean*

| | |
|----------|---|
| Synopsis | Discard packets with unknown destination MAC addresses |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb discard-unknown-source <i>boolean</i> |

| | |
|------------|--|
| Tree | discard-unknown-source |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

limit-mac-move *keyword*

| | |
|------------|--|
| Synopsis | MAC move |
| Context | configure service vpls string spoke-sdp string fdb limit-mac-move keyword |
| Tree | limit-mac-move |
| Default | blockable |
| Options | blockable, non-blockable |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-learning

| | |
|------------|--|
| Synopsis | Enter the mac-learning context |
| Context | configure service vpls string spoke-sdp string fdb mac-learning |
| Tree | mac-learning |
| Introduced | 16.0.R1 |
| Platforms | All |

aging *boolean*

| | |
|------------|--|
| Synopsis | Enable aging of MAC addresses |
| Context | configure service vpls string spoke-sdp string fdb mac-learning aging boolean |
| Tree | aging |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

learning *boolean*

| | |
|----------|--------------------------------------|
| Synopsis | Enable learning of new MAC addresses |
|----------|--------------------------------------|

| | |
|------------|---|
| Context | configure service vpls string spoke-sdp string fdb mac-learning learning boolean |
| Tree | learning |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-pinning boolean

| | |
|------------|---|
| Synopsis | MAC address pinning in active status |
| Context | configure service vpls string spoke-sdp string fdb mac-pinning boolean |
| Tree | mac-pinning |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-mac-addresses number

| | |
|----------|--|
| Synopsis | Maximum number of MAC address entries in the FDB |
| Context | configure service vpls string spoke-sdp string fdb maximum-mac-addresses number |
| Tree | maximum-mac-addresses |

Description This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this spoke SDP.

When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.

When the configured limit is reached and the **configure service spoke-sdp fdb discard-unknown-source** command is set to **true** for this spoke SDP, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the spoke SDP uses the global MAC learning limitations.

| | |
|------------|-------------|
| Range | 1 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | All |

protected-src-mac-violation-action *keyword*

| | |
|------------|--|
| Synopsis | Action when a relearn request for a protected MAC is received on the SDP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> fdb protected-src-mac-violation-action <i>keyword</i> |
| Tree | protected-src-mac-violation-action |
| Options | sdp-bind-oper-down, alarm-only, discard |
| Introduced | 16.0.R1 |
| Platforms | All |

force-vc-forwarding *keyword*

| | |
|------------|---|
| Synopsis | VC forwarding action |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> force-vc-forwarding <i>keyword</i> |
| Tree | force-vc-forwarding |
| Options | vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag |
| Introduced | 16.0.R1 |
| Platforms | All |

hash-label

| | |
|------------|---|
| Synopsis | Enable the hash-label context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> hash-label |
| Tree | hash-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

signal-capability

| | |
|------------|---|
| Synopsis | Enable the signaling of the hash label between PE nodes |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability |
| Tree | signal-capability |
| Introduced | 16.0.R1 |
| Platforms | All |

i-vpls-mac-flush

| | |
|------------|--|
| Synopsis | Enter the i-vpls-mac-flush context |
| Context | configure service vpls string spoke-sdp string i-vpls-mac-flush |
| Tree | i-vpls-mac-flush |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-evpn

| | |
|------------|---|
| Synopsis | Enter the bgp-evpn context |
| Context | configure service vpls string spoke-sdp string i-vpls-mac-flush bgp-evpn |
| Tree | bgp-evpn |
| Introduced | 16.0.R1 |
| Platforms | All |

send-to-bvpls *boolean*

| | |
|------------|---|
| Synopsis | Send B-VPLS EVPN flush |
| Context | configure service vpls string spoke-sdp string i-vpls-mac-flush bgp-evpn send-to-bvpls boolean |
| Tree | send-to-bvpls |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|---|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls string spoke-sdp string igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-leave *boolean*

| | |
|------------|---|
| Synopsis | Allow IGMP fast leave processing |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping fast-leave <i>boolean</i> |
| Tree | fast-leave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|------------|--|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-group-sources *number*

| | |
|------------|--|
| Synopsis | Maximum group source combinations |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum groups allowed |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |

Platforms All

maximum-number-sources *number*

Synopsis Maximum sources that are allowed per group

Context **configure** [service vpls string](#) [spoke-sdp string](#) [igmp-snooping maximum-number-sources number](#)

Tree [maximum-number-sources](#)

Range 1 to 1000

Introduced 16.0.R1

Platforms All

mcac

Synopsis Enter the **mcac** context

Context **configure** [service vpls string](#) [spoke-sdp string](#) [igmp-snooping mcac](#)

Tree [mcac](#)

Introduced 16.0.R1

Platforms All

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure** [service vpls string](#) [spoke-sdp string](#) [igmp-snooping mcac bandwidth](#)

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms All

mandatory (*number | keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [service vpls string](#) [spoke-sdp string](#) [igmp-snooping mcac bandwidth mandatory \(number | keyword\)](#)

Tree [mandatory](#)

Range 0 to 2147483647

Default unlimited

| | |
|------------|-----------|
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

total (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-policy *reference*

| | |
|------------|--|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

policy *reference*

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping mcac policy <i>reference</i> |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> |

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

| | |
|------------|--|
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|---|
| Synopsis | Operate port as a multicast router port |
| Context | configure service vpls <i>string spoke-sdp</i> <i>string igmp-snooping mrouter-port</i> <i>boolean</i> |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vpls <i>string spoke-sdp</i> <i>string igmp-snooping query-interval</i> <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|----------|--|
| Synopsis | Time between group-specific query messages |
|----------|--|

| | |
|------------|---|
| Context | configure service vpls string spoke-sdp string igmp-snooping query-last-member-interval number |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval number

| | |
|------------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vpls string spoke-sdp string igmp-snooping query-response-interval number |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count number

| | |
|------------|---|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vpls string spoke-sdp string igmp-snooping robust-count number |
| Tree | robust-count |
| Range | 2 to 7 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

router-alert-check boolean

| | |
|----------|--|
| Synopsis | Enable IP router alert check option |
| Context | configure service vpls string spoke-sdp string igmp-snooping router-alert-check boolean |

| | |
|------------|------------------------------------|
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

send-queries *boolean*

| | |
|------------|---|
| Synopsis | Generate IGMP general queries |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping send-queries <i>boolean</i> |
| Tree | send-queries |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

static

| | |
|------------|--|
| Synopsis | Enter the static context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-address] *string*

| | |
|----------|--|
| Synopsis | Group address of static IGMP multicast channel |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping static group <i>string</i> |
| Tree | group |

| | |
|-------------|---|
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for source |
| Context | configure service vpls string spoke-sdp string igmp-snooping static group string source string |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure service vpls string spoke-sdp string igmp-snooping static group string source string |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|--|
| Synopsis | any source address (*,G) |
| Context | configure service vpls string spoke-sdp string igmp-snooping static group string starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP protocol version |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> igmp-snooping version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-standby-signaling *boolean*

| | |
|------------|---|
| Synopsis | Ignore standby-bit received from TLDP peers when performing internal tasks |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ignore-standby-signaling <i>boolean</i> |
| Tree | ignore-standby-signaling |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mac reference

| | |
|------------|---|
| Synopsis | MAC filter policy name |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress filter mac <i>reference</i> |
| Tree | mac |
| Reference | configure filter mac-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|---|
| Synopsis | Enter the network context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|---|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|---|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|------------|--|
| Synopsis | Instance of the forwarding-plane ingress Queue Group for this SDP binding |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group instance <i>number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Network policy ID |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name reference |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Ingress MPLS VC label to send packets to the far end |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 1 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

l2pt

| | |
|------------|--|
| Synopsis | Enter the l2pt context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> l2pt |
| Tree | l2pt |
| Introduced | 16.0.R1 |
| Platforms | All |

termination

| | |
|------------|--|
| Synopsis | Enable the termination context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> l2pt termination |
| Tree | termination |
| Introduced | 16.0.R1 |

Platforms All

protocols

Synopsis Enter the **protocols** context
 Context **configure service vpls string spoke-sdp string l2pt termination protocols**
 Tree [protocols](#)
 Introduced 16.0.R1
 Platforms All

cdp boolean

Synopsis Enable Cisco discovery protocol
 Context **configure service vpls string spoke-sdp string l2pt termination protocols cdp boolean**
 Tree [cdp](#)
 Default false
 Introduced 16.0.R1
 Platforms All

dtp boolean

Synopsis Enable dynamic trunking protocol
 Context **configure service vpls string spoke-sdp string l2pt termination protocols dtp boolean**
 Tree [dtp](#)
 Default false
 Introduced 16.0.R1
 Platforms All

pagp boolean

Synopsis Enable port aggregation protocol
 Context **configure service vpls string spoke-sdp string l2pt termination protocols pagp boolean**
 Tree [pagp](#)
 Default false
 Introduced 16.0.R1

Platforms All

stp boolean

Synopsis Enable all spanning tree protocols
 Context **configure service vpls string spoke-sdp string l2pt termination protocols stp boolean**
 Tree **stp**
 Default true
 Introduced 16.0.R1
 Platforms All

udld boolean

Synopsis Enable unidirectional link detection
 Context **configure service vpls string spoke-sdp string l2pt termination protocols udld boolean**
 Tree **udld**
 Default false
 Introduced 16.0.R1
 Platforms All

vtp boolean

Synopsis Enable virtual trunk protocol
 Context **configure service vpls string spoke-sdp string l2pt termination protocols vtp boolean**
 Tree **vtp**
 Default false
 Introduced 16.0.R1
 Platforms All

mld-snooping

Synopsis Enter the **mld-snooping** context
 Context **configure service vpls string spoke-sdp string mld-snooping**
 Tree **mld-snooping**
 Introduced 16.0.R1

Platforms All

fast-leave *boolean*

Synopsis Allow IGMP fast leave processing
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **fast-leave** *boolean*
 Tree [fast-leave](#)
 Default false
 Introduced 16.0.R1
 Platforms All

import-policy *reference*

Synopsis Import policy that filters IGMP packets
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **import-policy** *reference*
 Tree [import-policy](#)
 Reference **configure** [policy-options](#) [policy-statement](#) *string*
 Introduced 16.0.R1
 Platforms All

maximum-number-groups *number*

Synopsis Maximum groups allowed
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **maximum-number-groups** *number*
 Tree [maximum-number-groups](#)
 Range 1 to 16000
 Introduced 16.0.R1
 Platforms All

mrouter-port *boolean*

Synopsis Operate port as a multicast router port
 Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **mrouter-port** *boolean*
 Tree [mrouter-port](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|------------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|----------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mld-snooping query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |
| Units | seconds |

Introduced 16.0.R1
 Platforms All

robust-count *number*

Synopsis Number of retries after expected message loss
 Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **robust-count** *number*
 Tree [robust-count](#)
 Range 2 to 7
 Default 2
 Introduced 16.0.R1
 Platforms All

router-alert-check *boolean*

Synopsis Enable IP router alert check option
 Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **router-alert-check** *boolean*
 Tree [router-alert-check](#)
 Default true
 Introduced 16.0.R1
 Platforms All

send-queries *boolean*

Synopsis Generate IGMP general queries
 Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **send-queries** *boolean*
 Tree [send-queries](#)
 Default false
 Introduced 16.0.R1
 Platforms All

static

Synopsis Enter the **static** context
 Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) **static**

| | |
|------------|------------------------|
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure service vpls string spoke-sdp string mld-snooping static group string |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-address] *string*

| | |
|------------|--|
| Synopsis | Group address of multicast channel |
| Context | configure service vpls string spoke-sdp string mld-snooping static group string |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for source |
| Context | configure service vpls string spoke-sdp string mld-snooping static group string source string |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|----------|---|
| Synopsis | Source IP address |
| Context | configure service vpls string spoke-sdp string mld-snooping static group string source string |

| | |
|------------|-------------------------------------|
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|--|
| Synopsis | any source address (*,G) |
| Context | configure service vpls string spoke-sdp string mld-snooping static group string starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

version *keyword*

| | |
|------------|--|
| Synopsis | Version of MLD running on the SAP or SDP |
| Context | configure service vpls string spoke-sdp string mld-snooping version keyword |
| Tree | version |
| Default | 2 |
| Options | 1, 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*

| | |
|------------|--|
| Synopsis | Operational group identifier that affect the state of this SDP bind |
| Context | configure service vpls string spoke-sdp string monitor-oper-group reference |
| Tree | monitor-oper-group |
| Reference | configure service oper-group string |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

mrp

| | |
|------------|--|
| Synopsis | Enter the mrp context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp |
| Tree | mrp |
| Introduced | 20.10.R1 |
| Platforms | All |

join-time *number*

| | |
|------------|---|
| Synopsis | Maximum rate for attribute join messages sent on SDP |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp join-time <i>number</i> |
| Tree | join-time |
| Range | 1 to 10 |
| Default | 2 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

leave-all-time *number*

| | |
|------------|--|
| Synopsis | Frequency of LeaveAll PDUs by LeaveAll state machine |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp leave-all-time <i>number</i> |
| Tree | leave-all-time |
| Range | 60 to 300 |
| Default | 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

leave-time *number*

| | |
|----------|--|
| Synopsis | Time in LV state before transition to MT state |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> mrp leave-time <i>number</i> |
| Tree | leave-time |
| Range | 30 to 60 |

| | |
|------------|-------------|
| Default | 30 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

periodic-time *number*

| | |
|------------|--|
| Synopsis | Frequency of periodic events generated by state machine |
| Context | configure service vpls string spoke-sdp string mrp periodic-time number |
| Tree | periodic-time |
| Range | 10 to 100 |
| Default | 10 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | All |

periodic-timer *boolean*

| | |
|------------|--|
| Synopsis | Enable the Periodic Transmission Timer |
| Context | configure service vpls string spoke-sdp string mrp periodic-timer boolean |
| Tree | periodic-timer |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

policy *reference*

| | |
|------------|--|
| Synopsis | MRP policy to control Group B-MAC attributes |
| Context | configure service vpls string spoke-sdp string mrp policy reference |
| Tree | policy |
| Reference | configure service mrp policy string |
| Introduced | 20.10.R1 |
| Platforms | All |

oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group identifier |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | The following elements are part of a choice: monitor-oper-group or oper-group . |
| Introduced | 16.0.R1 |
| Platforms | All |

pbb

| | |
|------------|---|
| Synopsis | Enter the pbb context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> pbb |
| Tree | pbb |
| Introduced | 20.10.R1 |
| Platforms | All |

fault-propagation

| | |
|------------|---|
| Synopsis | Enter the fault-propagation context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> pbb fault-propagation |
| Tree | fault-propagation |
| Introduced | 20.10.R1 |
| Platforms | All |

backbone-mac-address [[address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for backbone-mac-address |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> pbb fault-propagation backbone-mac-address <i>string</i> |
| Tree | backbone-mac-address |
| Introduced | 20.10.R1 |
| Platforms | All |

[address] *string*

| | |
|------------|---|
| Synopsis | Backbone MAC address |
| Context | configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-address string |
| Tree | backbone-mac-address |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

backbone-mac-name [[name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for backbone-mac-name |
| Context | configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-name reference |
| Tree | backbone-mac-name |
| Introduced | 20.10.R1 |
| Platforms | All |

[name] *reference*

| | |
|------------|---|
| Synopsis | Backbone MAC address name |
| Context | configure service vpls string spoke-sdp string pbb fault-propagation backbone-mac-name reference |
| Tree | backbone-mac-name |
| Reference | configure service pbb mac string |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

pim-snooping

| | |
|------------|--|
| Synopsis | Enter the pim-snooping context |
| Context | configure service vpls string spoke-sdp string pim-snooping |
| Tree | pim-snooping |
| Introduced | 16.0.R1 |

Platforms All

maximum-number-groups *number*

Synopsis Maximum groups for this interface

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [pim-snooping](#) [maximum-number-groups](#) *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1

Platforms All

pw-status

Synopsis Enter the **pw-status** context

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [pw-status](#)

Tree [pw-status](#)

Introduced 16.0.R1

Platforms All

signaling *boolean*

Synopsis Enable the use of pseudowire status signaling

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [pw-status](#) [signaling](#) *boolean*

Tree [signaling](#)

Default true

Introduced 16.0.R1

Platforms All

spb

Synopsis Enable the **spb** context

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [spb](#)

Tree [spb](#)

Introduced 21.10.R1

Platforms All

admin-state *keyword*

Synopsis Admin state
 Context **configure** [service vpls string spoke-sdp string spb admin-state keyword](#)
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 21.10.R1
 Platforms All

level [*id*] *number*

Synopsis Enter the **level** list instance
 Context **configure** [service vpls string spoke-sdp string spb level number](#)
 Tree [level](#)
 Introduced 21.10.R1
 Platforms All

[id] *number*

Synopsis Level identifier
 Context **configure** [service vpls string spoke-sdp string spb level number](#)
 Tree [level](#)
 Range 1
 Notes This element is part of a list key.
 Introduced 21.10.R1
 Platforms All

hello-interval *number*

Synopsis Hello interval
 Context **configure** [service vpls string spoke-sdp string spb level number hello-interval number](#)
 Tree [hello-interval](#)

| | |
|------------|------------|
| Range | 1 to 20000 |
| Default | 9 |
| Units | seconds |
| Introduced | 21.10.R1 |
| Platforms | All |

hello-multiplier *number*

| | |
|------------|---|
| Synopsis | Hello multiplier |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> spb level <i>number</i> hello-multiplier <i>number</i> |
| Tree | hello-multiplier |
| Range | 2 to 100 |
| Default | 3 |
| Introduced | 21.10.R1 |
| Platforms | All |

metric *number*

| | |
|------------|---|
| Synopsis | Metric |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> spb level <i>number</i> metric <i>number</i> |
| Tree | metric |
| Range | 0 to 16777215 |
| Default | 0 |
| Introduced | 21.10.R1 |
| Platforms | All |

lsp-pacing-interval *number*

| | |
|------------|--|
| Synopsis | Lsp pacing interval |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> spb lsp-pacing-interval <i>number</i> |
| Tree | lsp-pacing-interval |
| Range | 0 to 65535 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |

Platforms All

retransmit-interval *number*

Synopsis Retransmit interval
 Context **configure** *service vpls string spoke-sdp string spb retransmit-interval number*
 Tree [retransmit-interval](#)
 Range 1 to 65535
 Default 5
 Units seconds
 Introduced 21.10.R1
 Platforms All

split-horizon-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the split horizon group where the spoke SDP bind belongs to
 Context **configure** *service vpls string spoke-sdp string split-horizon-group reference*
 Tree [split-horizon-group](#)
 Reference **configure** *service vpls string split-horizon-group string*
 Introduced 16.0.R1
 Platforms All

static-isid

Synopsis Enter the **static-isid** context
 Context **configure** *service vpls string spoke-sdp string static-isid*
 Tree [static-isid](#)
 Introduced 19.10.R1
 Platforms All

range [*range-id*] *number*

| | |
|------------|---|
| Synopsis | Enter the range list instance |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> static-isid range <i>number</i> |
| Tree | range |
| Introduced | 19.10.R1 |
| Platforms | All |

[range-id] *number*

| | |
|------------|---|
| Synopsis | Range ID for static ISID |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> static-isid range <i>number</i> |
| Tree | range |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

end *number*

| | |
|------------|---|
| Synopsis | Upper bound of the ISID range |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> static-isid range <i>number</i> end <i>number</i> |
| Tree | end |
| Range | 1 to 16777215 |
| Introduced | 19.10.R1 |
| Platforms | All |

start *number*

| | |
|------------|---|
| Synopsis | Lower bound of the ISID range |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> static-isid range <i>number</i> start <i>number</i> |
| Tree | start |
| Range | 1 to 16777215 |
| Introduced | 19.10.R1 |
| Platforms | All |

stp

| | |
|------------|---|
| Synopsis | Enter the stp context |
| Context | configure service vpls string spoke-sdp string stp |
| Tree | stp |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of STP |
| Context | configure service vpls string spoke-sdp string stp admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

auto-edge *boolean*

| | |
|------------|---|
| Synopsis | Enable automatic detection of edge port characteristics |
| Context | configure service vpls string spoke-sdp string stp auto-edge boolean |
| Tree | auto-edge |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

edge-port *boolean*

| | |
|------------|---|
| Synopsis | Designate SAP or SDP as an edge port |
| Context | configure service vpls string spoke-sdp string stp edge-port boolean |
| Tree | edge-port |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

link-type *keyword*

| | |
|------------|--|
| Synopsis | Configure STP link-type |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> stp link-type <i>keyword</i> |
| Tree | link-type |
| Default | pt-pt |
| Options | pt-pt, shared |
| Introduced | 16.0.R4 |
| Platforms | All |

path-cost *number*

| | |
|------------|---|
| Synopsis | Configure path-cost |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> stp path-cost <i>number</i> |
| Tree | path-cost |
| Range | 1 to 200000000 |
| Default | 10 |
| Introduced | 16.0.R4 |
| Platforms | All |

port-num *number*

| | |
|------------|--|
| Synopsis | Virtual port number |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> stp port-num <i>number</i> |
| Tree | port-num |
| Range | 1 to 2047 |
| Introduced | 16.0.R4 |
| Platforms | All |

priority *number*

| | |
|----------|--|
| Synopsis | Configure STP priority |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> stp priority <i>number</i> |
| Tree | priority |
| Range | 0 to 255 |

| | |
|------------|---------|
| Default | 128 |
| Introduced | 16.0.R4 |
| Platforms | All |

root-guard *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable STP root-guard |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> stp root-guard <i>boolean</i> |
| Tree | root-guard |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP prefix policy ID |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i> |
| Tree | vc-type |
| Default | ether |
| Options | ether, vlan |
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-vc-tag *number*

| | |
|------------|---|
| Synopsis | SDP bind VC tag |
| Context | configure service vpls <i>string</i> spoke-sdp <i>string</i> vlan-vc-tag <i>number</i> |
| Tree | vlan-vc-tag |
| Range | 0 to 4094 |
| Introduced | 16.0.R1 |
| Platforms | All |

stp

| | |
|------------|---|
| Synopsis | Enter the stp context |
| Context | configure service vpls <i>string</i> stp |
| Tree | stp |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of STP |
| Context | configure service vpls <i>string</i> stp admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

forward-delay *number*

| | |
|------------|---|
| Synopsis | Configure forward-delay |
| Context | configure service vpls <i>string</i> stp forward-delay <i>number</i> |
| Tree | forward-delay |
| Range | 4 to 30 |
| Default | 15 |
| Introduced | 16.0.R4 |
| Platforms | All |

hello-time *number*

| | |
|------------|--|
| Synopsis | Configure hello-time |
| Context | configure service vpls <i>string</i> stp hello-time <i>number</i> |
| Tree | hello-time |
| Range | 1 to 10 |
| Default | 2 |
| Introduced | 16.0.R4 |
| Platforms | All |

hold-count *number*

| | |
|------------|--|
| Synopsis | Configure BPDU transmit hold count |
| Context | configure service vpls <i>string</i> stp hold-count <i>number</i> |
| Tree | hold-count |
| Range | 1 to 20 |
| Default | 6 |
| Introduced | 16.0.R4 |
| Platforms | All |

maximum-age *number*

| | |
|------------|--|
| Synopsis | Configure maximum STP information age |
| Context | configure <i>service vpls string stp maximum-age number</i> |
| Tree | <i>maximum-age</i> |
| Range | 6 to 40 |
| Default | 20 |
| Introduced | 16.0.R4 |
| Platforms | All |

mode *keyword*

| | |
|------------|--|
| Synopsis | Configure protocol version |
| Context | configure <i>service vpls string stp mode keyword</i> |
| Tree | <i>mode</i> |
| Default | rstp |
| Options | rstp, comp-dot1w, dot1w, mstp, pmstp |
| Introduced | 16.0.R4 |
| Platforms | All |

mst-instance [*mst-inst-number*] *number*

| | |
|------------|---|
| Synopsis | Enter the mst-instance list instance |
| Context | configure <i>service vpls string stp mst-instance number</i> |
| Tree | <i>mst-instance</i> |
| Introduced | 19.10.R1 |
| Platforms | All |

[mst-inst-number] *number*

| | |
|----------|---|
| Synopsis | Multiple Spanning Tree Instance number |
| Context | configure <i>service vpls string stp mst-instance number</i> |
| Tree | <i>mst-instance</i> |
| Range | 1 to 4094 |
| Notes | This element is part of a list key. |

Introduced 19.10.R1
 Platforms All

mst-priority *number*

Synopsis Priority of multiple spanning tree instance
 Context **configure** *service vpls string stp mst-instance number mst-priority number*
 Tree [mst-priority](#)
 Range 0 | 4096 | 8192 | 12288 | 16384 | 20480 | 24576 | 28672 | 32768 | 36864 | 40960 | 45056
 | 49152 | 53248 | 57344 | 61440
 Default 32768
 Introduced 19.10.R1
 Platforms All

vlan-range [*range*] *string*

Synopsis Add a list entry for **vlan-range**
 Context **configure** *service vpls string stp mst-instance number vlan-range string*
 Tree [vlan-range](#)
 Introduced 19.10.R1
 Platforms All

[range] *string*

Synopsis Range of VLANs associated with the M-VPLS SAP
 Context **configure** *service vpls string stp mst-instance number vlan-range string*
 Tree [vlan-range](#)
 Notes This element is part of a list key.
 Introduced 19.10.R1
 Platforms All

mst-maximum-hops *number*

Synopsis Maximum number of hops in an MSTP region
 Context **configure** *service vpls string stp mst-maximum-hops number*

| | |
|------------|----------------------------------|
| Tree | mst-maximum-hops |
| Range | 1 to 40 |
| Default | 20 |
| Introduced | 19.10.R1 |
| Platforms | All |

mst-name *string*

| | |
|---------------|--|
| Synopsis | MST region name |
| Context | configure service vpls string stp mst-name string |
| Tree | mst-name |
| String Length | 1 to 32 |
| Introduced | 19.10.R1 |
| Platforms | All |

mst-revision *number*

| | |
|------------|--|
| Synopsis | MST configuration revision |
| Context | configure service vpls string stp mst-revision number |
| Tree | mst-revision |
| Range | 0 to 65535 |
| Introduced | 19.10.R1 |
| Platforms | All |

priority *number*

| | |
|------------|--|
| Synopsis | STP bridge priority |
| Context | configure service vpls string stp priority number |
| Tree | priority |
| Range | 0 to 65535 |
| Default | 32768 |
| Introduced | 16.0.R4 |
| Platforms | All |

temp-flooding *number*

| | |
|------------|--|
| Synopsis | Temporary flooding |
| Context | configure service vpls <i>string</i> temp-flooding <i>number</i> |
| Tree | temp-flooding |
| Range | 3 to 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

vpn-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | VPN identifier for the service |
| Context | configure service vpls <i>string</i> vpn-id <i>number</i> |
| Tree | vpn-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

vxlan

| | |
|------------|--|
| Synopsis | Enter the vxlan context |
| Context | configure service vpls <i>string</i> vxlan |
| Tree | vxlan |
| Introduced | 16.0.R1 |
| Platforms | All |

instance [[vxlan-instance](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the instance list instance |
| Context | configure service vpls <i>string</i> vxlan <i>instance</i> <i>number</i> |
| Tree | instance |
| Introduced | 16.0.R1 |

Platforms All

[vxlan-instance] *number*

Synopsis VXLAN instance
 Context **configure service vpls string vxlan instance number**
 Tree [instance](#)
 Range 1 to 2
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

assisted-replication

Synopsis Enter the **assisted-replication** context
 Context **configure service vpls string vxlan instance number assisted-replication**
 Tree [assisted-replication](#)
 Introduced 16.0.R1
 Platforms All

leaf

Synopsis Enable the **leaf** context
 Context **configure service vpls string vxlan instance number assisted-replication leaf**
 Tree [leaf](#)
 Notes The following elements are part of a choice: **leaf** or **replicator**.
 Introduced 16.0.R1
 Platforms All

acttime *number*

Synopsis Time for the leaf to wait before sending traffic to a new replicator
 Context **configure service vpls string vxlan instance number assisted-replication leaf acttime number**
 Tree [acttime](#)

| | |
|------------|----------|
| Range | 1 to 255 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

replicator

| | |
|------------|---|
| Synopsis | AR role as replicator |
| Context | configure service vpls <i>string vxlan instance number</i> assisted-replication replicator |
| Tree | replicator |
| Notes | The following elements are part of a choice: leaf or replicator . |
| Introduced | 16.0.R1 |
| Platforms | All |

egress-vtep [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Add a list entry for egress-vtep |
| Context | configure service vpls <i>string vxlan instance number</i> egress-vtep (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | egress-vtep |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | VTEP IP address used when originating VXLAN packets |
| Context | configure service vpls <i>string vxlan instance number</i> egress-vtep (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | egress-vtep |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fdb

| | |
|----------|------------------------------|
| Synopsis | Enter the fdb context |
|----------|------------------------------|

| | |
|------------|--|
| Context | configure service vpls string vxlan instance number fdb |
| Tree | fdb |
| Introduced | 16.0.R1 |
| Platforms | All |

discard-unknown-source *boolean*

| | |
|------------|--|
| Synopsis | Discard frames with unknown source |
| Context | configure service vpls string vxlan instance number fdb discard-unknown-source <i>boolean</i> |
| Tree | discard-unknown-source |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-learning

| | |
|------------|---|
| Synopsis | Enter the mac-learning context |
| Context | configure service vpls string vxlan instance number fdb mac-learning |
| Tree | mac-learning |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

aging *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable aging of MAC addresses |
| Context | configure service vpls string vxlan instance number fdb mac-learning aging <i>boolean</i> |
| Tree | aging |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

learning *boolean*

| | |
|----------|---|
| Synopsis | Enable learning of new MAC addresses |
| Context | configure service vpls string vxlan instance number fdb mac-learning learning <i>boolean</i> |

| | |
|------------|--|
| Tree | learning |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

maximum-mac-addresses *number*

| | |
|------------|---|
| Synopsis | Maximum number of MAC entries in the FDB from this vxlan instance |
| Context | configure service vpls string vxlan instance number fdb maximum-mac-addresses number |
| Tree | maximum-mac-addresses |
| Range | 1 to 511999 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

protected-src-mac-violation-action *keyword*

| | |
|------------|---|
| Synopsis | Action when a relearn request for a protected MAC is received |
| Context | configure service vpls string vxlan instance number fdb protected-src-mac-violation-action keyword |
| Tree | protected-src-mac-violation-action |
| Options | discard |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp-snooping

| | |
|------------|--|
| Synopsis | Enter the igmp-snooping context |
| Context | configure service vpls string vxlan instance number igmp-snooping |
| Tree | igmp-snooping |
| Introduced | 16.0.R5 |
| Platforms | All |

mrouter-port *boolean*

| | |
|----------|--|
| Synopsis | Enable VXLAN binds as multicast router ports |
|----------|--|

| | |
|------------|---|
| Context | configure service vpls string vxlan instance number igmp-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R5 |
| Platforms | All |

mld-snooping

| | |
|------------|---|
| Synopsis | Enter the mld-snooping context |
| Context | configure service vpls string vxlan instance number mld-snooping |
| Tree | mld-snooping |
| Introduced | 16.0.R5 |
| Platforms | All |

mrouter-port *boolean*

| | |
|------------|--|
| Synopsis | Enable VXLAN binds as multicast router ports |
| Context | configure service vpls string vxlan instance number mld-snooping mrouter-port boolean |
| Tree | mrouter-port |
| Default | false |
| Introduced | 16.0.R5 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service vpls string vxlan instance number network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|----------|--|
| Synopsis | Enter the ingress context |
| Context | configure service vpls string vxlan instance number network ingress |

| | |
|------------|-------------------------|
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vpls string vxlan instance number network ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service vpls string vxlan instance number network ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|--|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service vpls string vxlan instance number network ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|-----------|--|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service vpls string vxlan instance number network ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group string |

Introduced 16.0.R1
 Platforms All

instance *number*

Synopsis Instance of the forwarding-plane ingress Queue Group for this SDP binding
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [network](#) [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [instance](#) [number](#)
 Tree [instance](#)
 Range 1 to 65535
 Introduced 16.0.R1
 Platforms All

policy-name *reference*

Synopsis Ingress network policy name applied to this SDP binding
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [network](#) [ingress](#) [qos](#) [network](#) [policy-name](#) [reference](#)
 Tree [policy-name](#)
 Reference **configure** [qos](#) [network](#) [string](#)
 Introduced 16.0.R1
 Platforms All

rx-discard-on-ndf *keyword*

Synopsis Received multicast traffic type discarded on NDF
 Context **configure** [service](#) [vpls](#) [string](#) [vxlan](#) [instance](#) [number](#) [rx-discard-on-ndf](#) [keyword](#)
 Tree [rx-discard-on-ndf](#)
 Default bm
 Options bm, bum, none
 Introduced 16.0.R4
 Platforms All

source-vtep-security *boolean*

Synopsis Enable/disable source vtep security

| | |
|------------|---|
| Context | configure service vpls string vxlan instance number source-vtep-security boolean |
| Tree | source-vtep-security |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

vni number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | VNI of the VXLAN |
| Context | configure service vpls string vxlan instance number vni number |
| Tree | vni |
| Range | 1 to 16777215 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

source-vtep (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Vxlan source virtual tunnel endpoint information |
| Context | configure service vpls string vxlan source-vtep (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | source-vtep |
| Introduced | 16.0.R1 |
| Platforms | All |

wlan-gw

| | |
|------------|--|
| Synopsis | Enter the wlan-gw context |
| Context | configure service vpls string wlan-gw |
| Tree | wlan-gw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of WLAN-GW |
| Context | configure service vpls string wlan-gw admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpls string wlan-gw description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | WLAN-GW endpoint within the VPLS service |
| Context | configure service vpls string wlan-gw wlan-gw-group <i>reference</i> |
| Tree | wlan-gw-group |
| Description | <p>This command specifies a WLAN-GW group to be used as an endpoint within the VPLS. This feature is used in conjunction with the configure service vprn subscriber-interface group-interface wlan-gw vlan-range dynamic-service command for a VPRN service and the configure service ies subscriber-interface group-interface wlan-gw vlan-range dynamic-service command for an IES service.</p> <p>See "Dynamic VPLS service" in the <i>7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide</i> for more information about the dynamic VPLS service feature.</p> |
| Reference | configure isa wlan-gw-group <i>number</i> |

Introduced 23.3.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vprn [[service-name](#)] *string*

Synopsis Enter the **vprn** list instance
 Context **configure** [service](#) [vprn](#) *string*
 Tree [vprn](#)
 Introduced 16.0.R1
 Platforms All

[service-name] *string*

Synopsis Administrative service name
 Context **configure** [service](#) [vprn](#) *string*
 Tree [vprn](#)
 String Length 1 to 64
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

aa-interface [[interface-name](#)] *string*

Synopsis Enter the **aa-interface** list instance
 Context **configure** [service](#) [vprn](#) *string* [aa-interface](#) *string*
 Tree [aa-interface](#)
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[interface-name] *string*

Synopsis Interface name
 Context **configure** [service](#) [vprn](#) *string* [aa-interface](#) *string*
 Tree [aa-interface](#)
 String Length 1 to 32

| | |
|------------|--|
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the interface |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-mtu *number*

| | |
|------------|--|
| Synopsis | IP MTU applied to outgoing packets |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn string aa-interface string ipv4 |
| Tree | ipv4 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

primary

| | |
|------------|---|
| Synopsis | Enable the primary context |
| Context | configure service vprn string aa-interface string ipv4 primary |
| Tree | primary |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address *string*

| | |
|------------|--|
| Synopsis | Primary IPv4 address assigned to the interface |
| Context | configure service vprn string aa-interface string ipv4 primary address string |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn string aa-interface string ipv4 primary prefix-length number |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sap [**sap-id**] *string*

| | |
|----------------|--|
| Synopsis | Enter the sap list instance |
| Context | configure service vprn string aa-interface string sap string |
| Tree | sap |
| Max. Instances | 1 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[sap-id] *string*

| | |
|---------------|--|
| Synopsis | SAP ID |
| Context | configure service vprn string aa-interface string sap string |
| Tree | sap |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SAP |
| Context | configure service vprn string aa-interface string sap string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string aa-interface string sap string description string |
| Tree | description |
| String Length | 1 to 160 |

Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
 Context **configure service vprn string aa-interface string sap string egress**
 Tree **egress**
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
 Context **configure service vprn string aa-interface string sap string egress filter**
 Tree **filter**
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
 Context **configure service vprn string aa-interface string sap string egress filter ip reference**
 Tree **ip**
 Reference **configure filter ip-filter string**
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
 Context **configure service vprn string aa-interface string sap string egress qos**
 Tree **qos**
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap-egress

| | |
|------------|--|
| Synopsis | Enter the sap-egress context |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fwd-wholesale

| | |
|------------|--|
| Synopsis | Enter the fwd-wholesale context |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> fwd-wholesale |
| Tree | fwd-wholesale |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pppoe-service *reference*

| | |
|------------|---|
| Synopsis | PPPoE service name |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i> |
| Tree | pppoe-service |
| Reference | configure service epipe <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn string aa-interface string sap string ingress |
| Tree | ingress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn string aa-interface string sap string ingress qos |
| Tree | qos |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sap-ingress

| | |
|------------|---|
| Synopsis | Enter the sap-ingress context |
| Context | configure service vprn string aa-interface string sap string ingress qos sap-ingress |
| Tree | sap-ingress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service vprn string aa-interface string sap string ingress qos sap-ingress overrides |
| Tree | overrides |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|----------|-----------|
| Synopsis | Policy ID |
|----------|-----------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> ingress qos sap-ingress <i>policy-name</i> <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lag

| | |
|------------|---|
| Synopsis | Enter the lag context |
| Context | configure service vprn <i>string</i> aa-interface <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aaa

| | |
|------------|--|
| Synopsis | Enter the aaa context |
| Context | configure service vprn <i>string</i> aaa |
| Tree | aaa |
| Introduced | 16.0.R4 |
| Platforms | All |

remote-servers

| | |
|------------|---|
| Synopsis | Enter the remote-servers context |
| Context | configure service vprn <i>string</i> aaa remote-servers |
| Tree | remote-servers |
| Introduced | 16.0.R4 |
| Platforms | All |

radius

| | |
|----------|--|
| Synopsis | Enable the radius context |
| Context | configure service vprn <i>string</i> aaa remote-servers radius |

| | |
|------------|------------------------|
| Tree | radius |
| Introduced | 16.0.R4 |
| Platforms | All |

access-algorithm *keyword*

| | |
|------------|---|
| Synopsis | Algorithm used to access the set of RADIUS servers |
| Context | configure service vprn <i>string</i> aaa remote-servers radius access-algorithm <i>keyword</i> |
| Tree | access-algorithm |
| Default | direct |
| Options | direct, round-robin |
| Introduced | 16.0.R4 |
| Platforms | All |

accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable RADIUS command accounting |
| Context | configure service vprn <i>string</i> aaa remote-servers radius accounting <i>boolean</i> |
| Tree | accounting |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

accounting-port *number*

| | |
|------------|---|
| Synopsis | Port number on RADIUS server for accounting requests |
| Context | configure service vprn <i>string</i> aaa remote-servers radius accounting-port <i>number</i> |
| Tree | accounting-port |
| Range | 1 to 65535 |
| Default | 1813 |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the authentication server |
| Context | configure service vprn <i>string</i> aaa remote-servers radius admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

authorization *boolean*

| | |
|------------|--|
| Synopsis | Enable RADIUS authorization |
| Context | configure service vprn <i>string</i> aaa remote-servers radius authorization <i>boolean</i> |
| Tree | authorization |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

interactive-authentication *boolean*

| | |
|------------|---|
| Synopsis | Enable RADIUS interactive authentication |
| Context | configure service vprn <i>string</i> aaa remote-servers radius interactive-authentication <i>boolean</i> |
| Tree | interactive-authentication |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

port *number*

| | |
|----------|--|
| Synopsis | UDP port number on which to contact RADIUS server |
| Context | configure service vprn <i>string</i> aaa remote-servers radius port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Default | 1812 |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

server [[index](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the server list instance |
| Context | configure service vprn string aaa remote-servers radius server number |
| Tree | server |
| Max. Instances | 5 |
| Introduced | 16.0.R4 |
| Platforms | All |

[index] *number*

| | |
|------------|--|
| Synopsis | RADIUS server ID |
| Context | configure service vprn string aaa remote-servers radius server number |
| Tree | server |
| Range | 1 to 5 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | IP address of the RADIUS server |
| Context | configure service vprn string aaa remote-servers radius server number address (ipv4-address-no-zone ipv6-address-no-zone) |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

authenticator *keyword*

| | |
|----------|--|
| Synopsis | Authenticator hash algorithm for the RADIUS server |
|----------|--|

| | |
|-------------|--|
| Context | configure service vprn string aaa remote-servers radius server number authenticator keyword |
| Tree | authenticator |
| Description | This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets. |
| Default | md5 |
| Options | md5, sm3 |
| Introduced | 22.10.R1 |
| Platforms | All |

secret string

| | |
|---------------|--|
| Synopsis | Secret key to access the RADIUS server |
| Context | configure service vprn string aaa remote-servers radius server number secret string |
| Tree | secret |
| String Length | 1 to 115 |
| Introduced | 16.0.R4 |
| Platforms | All |

tls-client-profile reference

| | |
|-------------|--|
| Synopsis | TLS client profile for the RADIUS server |
| Context | configure service vprn string aaa remote-servers radius server number tls-client-profile reference |
| Tree | tls-client-profile |
| Description | This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS. |
| Reference | configure system security tls client-tls-profile string |
| Introduced | 21.10.R1 |
| Platforms | All |

server-retry number

| | |
|----------|--|
| Synopsis | Number of attempts to retry contacting RADIUS server |
| Context | configure service vprn string aaa remote-servers radius server-retry number |

| | |
|------------|------------------------------|
| Tree | server-retry |
| Range | 1 to 10 |
| Default | 3 |
| Introduced | 16.0.R4 |
| Platforms | All |

server-timeout *number*

| | |
|------------|--|
| Synopsis | Time to wait for a response from the RADIUS server |
| Context | configure service vprn <i>string</i> aaa remote-servers radius server-timeout <i>number</i> |
| Tree | server-timeout |
| Range | 1 to 90 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | All |

use-default-template *boolean*

| | |
|------------|---|
| Synopsis | Apply the RADIUS default user template to RADIUS user |
| Context | configure service vprn <i>string</i> aaa remote-servers radius use-default-template <i>boolean</i> |
| Tree | use-default-template |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

tacplus

| | |
|------------|--|
| Synopsis | Enable the tacplus context |
| Context | configure service vprn <i>string</i> aaa remote-servers tacplus |
| Tree | tacplus |
| Introduced | 16.0.R4 |
| Platforms | All |

accounting

| | |
|------------|--|
| Synopsis | Enable the accounting context |
| Context | configure service vprn string aaa remote-servers tacplus accounting |
| Tree | accounting |
| Introduced | 16.0.R4 |
| Platforms | All |

record-type *keyword*

| | |
|------------|--|
| Synopsis | Type of accounting record packet sent to TACACS+ server |
| Context | configure service vprn string aaa remote-servers tacplus accounting record-type keyword |
| Tree | record-type |
| Default | stop-only |
| Options | start-stop, stop-only |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the TACACS+ protocol |
| Context | configure service vprn string aaa remote-servers tacplus admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

authorization

| | |
|------------|---|
| Synopsis | Enable the authorization context |
| Context | configure service vprn string aaa remote-servers tacplus authorization |
| Tree | authorization |
| Introduced | 16.0.R4 |
| Platforms | All |

request-format

| | |
|-------------|--|
| Synopsis | Enter the request-format context |
| Context | configure service vprn string aaa remote-servers tacplus authorization request-format |
| Tree | request-format |
| Description | Commands in this context configure access operations that are sent to the TACACS+ server during authorization. |
| Introduced | 21.10.R3 |
| Platforms | All |

access-operation-cmd *keyword*

| | |
|----------------|---|
| Synopsis | Access operations sent in authorization requests |
| Context | configure service vprn string aaa remote-servers tacplus authorization request-format access-operation-cmd keyword |
| Tree | access-operation-cmd |
| Description | This command sends an operation argument in authorization requests.

In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces. |
| Options | delete |
| Max. Instances | 1 |
| Introduced | 21.10.R3 |
| Platforms | All |

use-priv-lvl *boolean*

| | |
|-------------|---|
| Synopsis | Allow privilege level mapping |
| Context | configure service vprn string aaa remote-servers tacplus authorization use-priv-lvl boolean |
| Tree | use-priv-lvl |
| Description | When configured to true , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the priv-lvl-map) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except enable-admin). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except enable-admin). |

When configured to **false**, each command is sent to the TACACS+ server for authorization (this is true regardless of whether the **tacplus use-default-template** setting is enabled).

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

interactive-authentication *boolean*

| | |
|------------|--|
| Synopsis | Allows TACACS+ interactive authentication |
| Context | configure service vprn <i>string</i> aaa remote-servers tacplus interactive-authentication <i>boolean</i> |
| Tree | interactive-authentication |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

priv-lvl-map

| | |
|------------|---|
| Synopsis | Enter the priv-lvl-map context |
| Context | configure service vprn <i>string</i> aaa remote-servers tacplus priv-lvl-map |
| Tree | priv-lvl-map |
| Introduced | 16.0.R4 |
| Platforms | All |

priv-lvl [[level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priv-lvl list instance |
| Context | configure service vprn <i>string</i> aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> |
| Tree | priv-lvl |
| Introduced | 16.0.R4 |
| Platforms | All |

[level] *number*

| | |
|----------|---------------------------------|
| Synopsis | Privilege level for the mapping |
|----------|---------------------------------|

| | |
|------------|--|
| Context | configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number |
| Tree | priv-lvl |
| Range | 0 to 15 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

user-profile-name *reference*

| | |
|------------|--|
| Synopsis | User profile for the mapping |
| Context | configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number user-profile-name reference |
| Tree | user-profile-name |
| Reference | configure system security aaa local-profiles profile string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

server [[index](#)] *number*

| | |
|----------------|---|
| Synopsis | Enter the server list instance |
| Context | configure service vprn string aaa remote-servers tacplus server number |
| Tree | server |
| Max. Instances | 5 |
| Introduced | 16.0.R4 |
| Platforms | All |

[\[index\]](#) *number*

| | |
|----------|---|
| Synopsis | TACACS+ server ID |
| Context | configure service vprn string aaa remote-servers tacplus server number |
| Tree | server |
| Range | 1 to 5 |
| Notes | This element is part of a list key. |

Introduced 16.0.R4
Platforms All

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP address of the TACACS+ server
Context **configure service vprn string aaa remote-servers tacplus server number address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
Tree **address**
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

port number

Synopsis TCP port ID on which to contact TACACS+ server
Context **configure service vprn string aaa remote-servers tacplus server number port number**
Tree **port**
Range 0 | 1 to 65535
Default 49
Introduced 16.0.R4
Platforms All

secret string

Synopsis Secret key to access the TACACS+ server
Context **configure service vprn string aaa remote-servers tacplus server number secret string**
Tree **secret**
String Length 1 to 199
Notes This element is mandatory.
Introduced 16.0.R4
Platforms All

server-timeout *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response from the TACACS+ server |
| Context | configure service vprn <i>string</i> aaa remote-servers tacplus server-timeout <i>number</i> |
| Tree | server-timeout |
| Range | 1 to 90 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | All |

use-default-template *boolean*

| | |
|------------|--|
| Synopsis | Apply TACACS+ default user-template to TACACS+ user |
| Context | configure service vprn <i>string</i> aaa remote-servers tacplus use-default-template <i>boolean</i> |
| Tree | use-default-template |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

aarp-interface [[interface-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the aarp-interface list instance |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> |
| Tree | aarp-interface |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[interface-name] *string*

| | |
|---------------|--|
| Synopsis | Interface name |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> |
| Tree | aarp-interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the interface
 Context **configure service vprn** *string aarp-interface string admin-state keyword*
 Tree **admin-state**
 Default enable
 Options enable, disable
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure service vprn** *string aarp-interface string description string*
 Tree **description**
 String Length 1 to 255
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets
 Context **configure service vprn** *string aarp-interface string ip-mtu number*
 Tree **ip-mtu**
 Range 512 to 9786
 Units bytes
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [**sdp-bind-id**] *string*

Synopsis Enter the **spoke-sdp** list instance
 Context **configure service vprn** *string aarp-interface string spoke-sdp string*

| | |
|----------------|--|
| Tree | spoke-sdp |
| Max. Instances | 1 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[**sdp-bind-id**] *string*

| | |
|---------------|--|
| Synopsis | SDP binding ID |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aarp

| | |
|------------|--|
| Synopsis | Enable the aarp context |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | AARP instance ID |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> aarp <i>id</i> <i>reference</i> |
| Tree | id |
| Reference | configure application-assurance aarp <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Role of the spoke SDP referenced by the AARP

Context **configure** *service vprn string aarp-interface string spoke-sdp string aarp type keyword*

Tree *type*

Options subscriber-side-shunt, network-side-shunt

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of this service SDP binding

Context **configure** *service vprn string aarp-interface string spoke-sdp string admin-state keyword*

Tree *admin-state*

Default enable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** *service vprn string aarp-interface string spoke-sdp string description string*

Tree *description*

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service vpn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service vpn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|---|
| Synopsis | IP filter identifier |
| Context | configure service vpn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Static MPLS VC label to send packets to far-end device |
| Context | configure service vpn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |

| | |
|------------|--|
| Range | 16 to 1048575 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|--|
| Synopsis | IP filter ID |
| Context | configure service vprn <i>string</i> aarp-interface <i>string</i> spoke-sdp <i>string</i> ingress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VC ingress value that indicates a specific connection |
| Context | configure service vprn <i>string aarp-interface string spoke-sdp string ingress vc-label number</i> |
| Tree | vc-label |
| Range | 1 to 1048575 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the service |
| Context | configure service vprn <i>string admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

aggregates

| | |
|------------|--|
| Synopsis | Enter the aggregates context |
| Context | configure service vprn <i>string aggregates</i> |
| Tree | aggregates |
| Introduced | 16.0.R1 |
| Platforms | All |

aggregate [[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Enter the aggregate list instance |
| Context | configure service vprn <i>string aggregates aggregate (ipv4-prefix ipv6-prefix)</i> |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Destination IP address prefix of the aggregate route |
| Context | configure service vprn string aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | aggregate |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aggregator

| | |
|------------|---|
| Synopsis | Enter the aggregator context |
| Context | configure service vprn string aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator |
| Tree | aggregator |
| Introduced | 16.0.R1 |
| Platforms | All |

address string

| | |
|------------|--|
| Synopsis | Aggregator IP address |
| Context | configure service vprn string aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator address string |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

as-number number

| | |
|------------|--|
| Synopsis | Aggregator AS number |
| Context | configure service vprn string aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) aggregator as-number number |
| Tree | as-number |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

as-set *boolean*

| | |
|-------------|---|
| Synopsis | Use AS_SET path segment type for the aggregate route |
| Context | configure service vprn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) as-set <i>boolean</i> |
| Tree | as-set |
| Description | When configured to true , the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.

When configured to false , the AS_PATH attribute contains no AS_SET and will be originated by the ESR. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

blackhole

| | |
|------------|---|
| Synopsis | Enable the blackhole context |
| Context | configure service vprn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole |
| Tree | blackhole |
| Notes | The following elements are part of a choice: blackhole or indirect . |
| Introduced | 16.0.R1 |
| Platforms | All |

generate-icmp *boolean*

| | |
|-------------|--|
| Synopsis | Send ICMP unreachable messages for aggregate routes |
| Context | configure service vprn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) blackhole generate-icmp <i>boolean</i> |
| Tree | generate-icmp |
| Description | When configured to true , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop.

When configured to false , ICMP unreachable messages are not generated. |
| Default | false |
| Introduced | 16.0.R2 |
| Platforms | All |

community string

| | |
|----------------|---|
| Synopsis | Community name that is added to the aggregate route |
| Context | configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) community string |
| Tree | community |
| Description | This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route. |
| String Length | 1 to 72 |
| Max. Instances | 12 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

discard-component-communities boolean

| | |
|------------|---|
| Synopsis | Advertise aggregate with aggregate route community set |
| Context | configure service vprn string aggregates aggregate (ipv4-prefix ipv6-prefix) discard-component-communities boolean |
| Tree | discard-component-communities |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

indirect (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Address of the indirect next hop |
| Context | configure service vprn <i>string aggregates aggregate (ipv4-prefix ipv6-prefix) indirect (ipv4-address-no-zone ipv6-address-no-zone)</i> |
| Tree | indirect |
| Description | This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded. |
| Notes | The following elements are part of a choice: blackhole or indirect . |
| Introduced | 16.0.R1 |
| Platforms | All |

local-preference *number*

| | |
|-------------|--|
| Synopsis | Local preference used when aggregate route is exported |
| Context | configure service vprn <i>string aggregates aggregate (ipv4-prefix ipv6-prefix) local-preference number</i> |
| Tree | local-preference |
| Description | This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes. |
| Range | 0 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy *reference*

| | |
|-------------|---|
| Synopsis | Policy name for the aggregated route |
| Context | configure service vprn <i>string aggregates aggregate (ipv4-prefix ipv6-prefix) policy reference</i> |
| Tree | policy |
| Description | This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub- |

tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.

If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.

| | |
|------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 20.10.R1 |
| Platforms | All |

summary-only *boolean*

| | |
|-------------|--|
| Synopsis | Advertise the aggregate route only |
| Context | configure service vpn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) summary-only <i>boolean</i> |
| Tree | summary-only |
| Description | When configured to true , the router suppresses the advertisement of more specific component routes for the aggregate.

When configured to false , the router advertises both the aggregate route and its contributing routes. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tunnel-group *number*

| | |
|-------------|--|
| Synopsis | Tunnel group from which to associate the MC IPsec state |
| Context | configure service vpn <i>string</i> aggregates aggregate (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) tunnel-group <i>number</i> |
| Tree | tunnel-group |
| Description | This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route. |
| Range | 1 to 64 |
| Introduced | 20.7.R1 |
| Platforms | All |

allow-export-bgp-vpn *boolean*

| | |
|----------|-----------------------------------|
| Synopsis | Include BGP-VPN routes for export |
|----------|-----------------------------------|

| | |
|------------|---|
| Context | configure service vpn <i>string</i> allow-export-bgp-vpn <i>boolean</i> |
| Tree | allow-export-bgp-vpn |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

autonomous-system *number*

| | |
|-------------|--|
| Synopsis | AS number advertised to peers for this router |
| Context | configure service vpn <i>string</i> autonomous-system <i>number</i> |
| Tree | autonomous-system |
| Description | This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated.

If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted. |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp

| | |
|------------|---|
| Synopsis | Enable the bgp context |
| Context | configure service vpn <i>string</i> bgp |
| Tree | bgp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the BGP instance |
| Context | configure service vpn <i>string</i> bgp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

advertise-inactive *boolean*

Synopsis Advertise inactive BGP routes to peers

Context **configure** [service vprn string bgp advertise-inactive boolean](#)

Tree [advertise-inactive](#)

Description When configured to **true**, this command allows any inactive BGP route to be advertised, even though it is not the used route.

When configured to **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Default false

Introduced 16.0.R1

Platforms All

advertise-ipv6-next-hops

Synopsis Enter the **advertise-ipv6-next-hops** context

Context **configure** [service vprn string bgp advertise-ipv6-next-hops](#)

Tree [advertise-ipv6-next-hops](#)

Introduced 19.5.R1

Platforms All

ipv4 *boolean*

Synopsis Enable IPv4 routes to be advertised

Context **configure** [service vprn string bgp advertise-ipv6-next-hops ipv4 boolean](#)

Tree [ipv4](#)

Default false

Introduced 19.5.R1

Platforms All

aggregator-id-zero *boolean*

Synopsis Set router ID in the BGP AGGREGATOR attribute to 0

Context **configure** [service vprn string bgp aggregator-id-zero boolean](#)

| | |
|-------------|--|
| Tree | aggregator-id-zero |
| Description | When configured to true , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.

When configured to false , the AS number and router ID are added to the AGGREGATOR path attribute. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

asn-4-byte *boolean*

| | |
|------------|---|
| Synopsis | Advertise support for 4-byte ASNs |
| Context | configure service vprn string bgp asn-4-byte boolean |
| Tree | asn-4-byte |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|--|
| Synopsis | BGP authentication key for all peers |
| Context | configure service vprn string bgp authentication-key string |
| Tree | authentication-key |
| Description | This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting. |
| String Length | 1 to 370 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|----------|--|
| Synopsis | TCP authentication keychain for the session |
| Context | configure service vprn string bgp authentication-keychain reference |
| Tree | authentication-keychain |

| | |
|-------------|--|
| Description | This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session. |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

backup-path

| | |
|-------------|--|
| Synopsis | Enter the backup-path context |
| Context | configure service vprn <i>string</i> bgp backup-path |
| Tree | backup-path |
| Description | <p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Enable support for unlabeled unicast IPv4 routes |
| Context | configure service vprn <i>string</i> bgp backup-path ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|----------|---|
| Synopsis | Enable support for unlabeled unicast IPv6 routes |
| Context | configure service vprn <i>string</i> bgp backup-path ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |

Introduced 16.0.R1
Platforms All

label-ipv4 *boolean*

Synopsis Enable support for labeled-unicast IPv4 routes
Context **configure** [service vprn](#) *string* [bgp backup-path label-ipv4](#) *boolean*
Tree [label-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

label-ipv6 *boolean*

Synopsis Enable support for labeled unicast IPv6 routes
Context **configure** [service vprn](#) *string* [bgp backup-path label-ipv6](#) *boolean*
Tree [label-ipv6](#)
Default false
Introduced 22.2.R1
Platforms All

best-path-selection

Synopsis Enter the **best-path-selection** context
Context **configure** [service vprn](#) *string* [bgp best-path-selection](#)
Tree [best-path-selection](#)
Introduced 16.0.R1
Platforms All

always-compare-med

Synopsis Enter the **always-compare-med** context
Context **configure** [service vprn](#) *string* [bgp best-path-selection always-compare-med](#)
Tree [always-compare-med](#)

| | |
|-------------|--|
| Description | Commands in this context determine how the BGP decision process is affected by the MED path attribute. |
| Introduced | 16.0.R1 |
| Platforms | All |

med-value *keyword*

| | |
|------------|--|
| Synopsis | Action for a missing MED attribute |
| Context | configure service vprn <i>string</i> bgp best-path-selection always-compare-med med-value <i>keyword</i> |
| Tree | med-value |
| Default | off |
| Options | off, missing-med-zero, missing-med-infinity, on |
| Introduced | 16.0.R1 |
| Platforms | All |

strict-as *boolean*

| | |
|-------------|---|
| Synopsis | Compare MED only for routes from same neighbor AS |
| Context | configure service vprn <i>string</i> bgp best-path-selection always-compare-med strict-as <i>boolean</i> |
| Tree | strict-as |
| Description | When configured to true , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS.

When configured to false , the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

as-path-ignore

| | |
|-------------|--|
| Synopsis | Enter the as-path-ignore context |
| Context | configure service vprn <i>string</i> bgp best-path-selection as-path-ignore |
| Tree | as-path-ignore |
| Description | Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families. |

Introduced 16.0.R1
Platforms All

ipv4 *boolean*

Synopsis Ignore AS path length for unlabeled unicast IPv4 routes
Context **configure** [service vprn](#) *string* [bgp best-path-selection as-path-ignore](#) [ipv4](#) *boolean*
Tree [ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

ipv6 *boolean*

Synopsis Ignore AS path length for unlabeled unicast IPv6 routes
Context **configure** [service vprn](#) *string* [bgp best-path-selection as-path-ignore](#) [ipv6](#) *boolean*
Tree [ipv6](#)
Default false
Introduced 16.0.R1
Platforms All

label-ipv4 *boolean*

Synopsis Ignore AS path length for labeled-unicast IPv4 routes
Context **configure** [service vprn](#) *string* [bgp best-path-selection as-path-ignore](#) [label-ipv4](#) *boolean*
Tree [label-ipv4](#)
Default false
Introduced 16.0.R1
Platforms All

label-ipv6 *boolean*

Synopsis Ignore AS path length for labeled unicast IPv6 routes
Context **configure** [service vprn](#) *string* [bgp best-path-selection as-path-ignore](#) [label-ipv6](#) *boolean*
Tree [label-ipv6](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

compare-origin-validation-state *boolean*

| | |
|------------|--|
| Synopsis | Allow comparison of origin validation states |
| Context | configure service vprn <i>string</i> bgp best-path-selection compare-origin-validation-state <i>boolean</i> |
| Tree | compare-origin-validation-state |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

d-path-length-ignore *boolean*

| | |
|----------|---|
| Synopsis | Enable D-PATH length ignore |
| Context | configure service vprn <i>string</i> bgp best-path-selection d-path-length-ignore <i>boolean</i> |
| Tree | d-path-length-ignore |

Description When configured to **true**, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.

At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.

At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

| | |
|------------|----------|
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

deterministic-med *boolean*

| | |
|-------------|--|
| Synopsis | Group paths based on AS before MED attribute comparison |
| Context | configure service vprn <i>string</i> bgp best-path-selection deterministic-med <i>boolean</i> |
| Tree | deterministic-med |
| Description | <p>When configured to true, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.</p> <p>When configured to false, paths are not grouped and the overall best-path selection can depend on the order of route arrival.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ebgp-ibgp-equal

| | |
|-------------|--|
| Synopsis | Enter the ebgp-ibgp-equal context |
| Context | configure service vprn <i>string</i> bgp best-path-selection ebgp-ibgp-equal |
| Tree | ebgp-ibgp-equal |
| Description | <p>Commands in this context allow BGP to ignore the difference between EBGp and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGp learned route over an IBGP learned route.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Consider EBGp and IBGP IPv4 routes equal |
| Context | configure service vprn <i>string</i> bgp best-path-selection ebgp-ibgp-equal ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

ipv6 *boolean*

Synopsis Consider EBGP and IBGP IPv6 routes equal
 Context **configure** [service](#) [vprn](#) *string* [bgp](#) [best-path-selection](#) [ebgp-ibgp-equal](#) [ipv6](#) *boolean*
 Tree [ipv6](#)
 Default false
 Introduced 16.0.R1
 Platforms All

label-ipv4 *boolean*

Synopsis Consider EBGP and IBGP label-IPv4 routes equal
 Context **configure** [service](#) [vprn](#) *string* [bgp](#) [best-path-selection](#) [ebgp-ibgp-equal](#) [label-ipv4](#) *boolean*
 Tree [label-ipv4](#)
 Default false
 Introduced 16.0.R1
 Platforms All

label-ipv6 *boolean*

Synopsis Consider EBGP and IBGP label-IPv6 routes equal
 Context **configure** [service](#) [vprn](#) *string* [bgp](#) [best-path-selection](#) [ebgp-ibgp-equal](#) [label-ipv6](#) *boolean*
 Tree [label-ipv6](#)
 Default false
 Introduced 22.2.R1
 Platforms All

ignore-nh-metric *boolean*

Synopsis Ignore next-hop distance in best path selection
 Context **configure** [service](#) [vprn](#) *string* [bgp](#) [best-path-selection](#) [ignore-nh-metric](#) *boolean*
 Tree [ignore-nh-metric](#)

| | |
|-------------|--|
| Description | When configured to true , BGP ignores the resolved distance to the BGP next hop in its route selection process.

When configured to false , BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the router context) or IP prefix learned from VPRN BGP peers (in the vprn context). |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-router-id

| | |
|-------------|--|
| Synopsis | Enable the ignore-router-id context |
| Context | configure service vprn string bgp best-path-selection ignore-router-id |
| Tree | ignore-router-id |
| Description | Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.

By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers. |
| Introduced | 16.0.R1 |
| Platforms | All |

origin-invalid-unusable *boolean*

| | |
|------------|---|
| Synopsis | Ignore routes with invalid origin validation state |
| Context | configure service vprn string bgp best-path-selection origin-invalid-unusable <i>boolean</i> |
| Tree | origin-invalid-unusable |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|----------|--|
| Synopsis | Enable BFD |
| Context | configure service vprn string bgp bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |

| | |
|-------------|---|
| Description | When configured to true , BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.
When configured to false , BFD is not enabled globally for all BGP sessions. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

client-reflect *boolean*

| | |
|-------------|---|
| Synopsis | Allow client reflection of routes by route reflector |
| Context | configure service vprn <i>string</i> bgp client-reflect <i>boolean</i> |
| Tree | client-reflect |
| Description | When configured to true , routes received from neighbors considered to be RR clients are reflected to other peers as expected.
When configured to false , routes received from neighbors considered to be RR clients are not reflected to other clients. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

cluster

| | |
|------------|---|
| Synopsis | Enter the cluster context |
| Context | configure service vprn <i>string</i> bgp cluster |
| Tree | cluster |
| Introduced | 16.0.R1 |
| Platforms | All |

cluster-id *string*

| | |
|-------------|--|
| Synopsis | Route reflector cluster ID |
| Context | configure service vprn <i>string</i> bgp cluster cluster-id <i>string</i> |
| Tree | cluster-id |
| Description | The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients. |
| Introduced | 16.0.R1 |

Platforms All

connect-retry *number*

Synopsis BGP connect retry timer value

Context **configure** [service vprn](#) *string* [bgp connect-retry](#) *number*

Tree [connect-retry](#)

Description This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.

Range 1 to 65535

Default 120

Introduced 16.0.R1

Platforms All

convergence

Synopsis Enter the **convergence** context

Context **configure** [service vprn](#) *string* [bgp convergence](#)

Tree [convergence](#)

Introduced 19.7.R1

Platforms All

family [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance

Context **configure** [service vprn](#) *string* [bgp convergence family](#) *keyword*

Tree [family](#)

Introduced 19.7.R1

Platforms All

[[family-type](#)] *keyword*

Synopsis Address family for which convergence selection applies

Context **configure** [service vprn](#) *string* [bgp convergence family](#) *keyword*

Tree [family](#)

| | |
|------------|-------------------------------------|
| Options | ipv4, ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 19.7.R1 |
| Platforms | All |

max-wait-to-advertise *number*

| | |
|------------|---|
| Synopsis | Maximum wait time before advertising routes |
| Context | configure service vprn <i>string</i> bgp convergence family <i>keyword</i> max-wait-to-advertise <i>number</i> |
| Tree | max-wait-to-advertise |
| Range | 0 to 3600 |
| Default | 0 |
| Introduced | 19.7.R1 |
| Platforms | All |

min-wait-to-advertise *number*

| | |
|------------|---|
| Synopsis | Minimum wait time before advertising routes |
| Context | configure service vprn <i>string</i> bgp convergence min-wait-to-advertise <i>number</i> |
| Tree | min-wait-to-advertise |
| Range | 0 to 3600 |
| Default | 0 |
| Introduced | 19.7.R1 |
| Platforms | All |

damp-peer-oscillations

| | |
|-------------|---|
| Synopsis | Enable the damp-peer-oscillations context |
| Context | configure service vprn <i>string</i> bgp damp-peer-oscillations |
| Tree | damp-peer-oscillations |
| Description | Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state. |
| Introduced | 16.0.R1 |

Platforms All

error-interval *number*

Synopsis Time after a reset that the session must be error-free

Context **configure** [service vprn](#) *string* [bgp damp-peer-oscillations error-interval](#) *number*

Tree [error-interval](#)

Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.

Range 0 to 2048

Default 30

Introduced 16.0.R1

Platforms All

idle-hold-time

Synopsis Enter the **idle-hold-time** context

Context **configure** [service vprn](#) *string* [bgp damp-peer-oscillations idle-hold-time](#)

Tree [idle-hold-time](#)

Introduced 16.0.R1

Platforms All

initial-wait *number*

Synopsis Time session remains in idle state after stabilization

Context **configure** [service vprn](#) *string* [bgp damp-peer-oscillations idle-hold-time initial-wait](#) *number*

Tree [initial-wait](#)

Range 0 to 2048

Default 0

Introduced 16.0.R1

Platforms All

max-wait *number*

| | |
|------------|--|
| Synopsis | Maximum session idle time after repeated instability |
| Context | configure service vprn <i>string</i> bgp damp-peer-oscillations idle-hold-time max-wait <i>number</i> |
| Tree | max-wait |
| Range | 1 to 2048 |
| Default | 60 |
| Introduced | 16.0.R1 |
| Platforms | All |

second-wait *number*

| | |
|-------------|---|
| Synopsis | Time that doubles after each session failure |
| Context | configure service vprn <i>string</i> bgp damp-peer-oscillations idle-hold-time second-wait <i>number</i> |
| Tree | second-wait |
| Description | This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time. |
| Range | 1 to 2048 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

damping *boolean*

| | |
|-------------|--|
| Synopsis | Use BGP route damping to reduce route flap |
| Context | configure service vprn <i>string</i> bgp damping <i>boolean</i> |
| Tree | damping |
| Description | <p>When configured to true, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> • Half-life: 15 minutes • Max-suppress: 60 minutes • Suppress-threshold: 3000 • Reuse-threshold: 750 |

When configured to **false**, BGP route damping for learned routes is disabled.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

default-label-preference

| | |
|------------|---|
| Synopsis | Enter the default-label-preference context |
| Context | configure service vprn string bgp default-label-preference |
| Tree | default-label-preference |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp number

| | |
|------------|---|
| Synopsis | Default preference for EBGP |
| Context | configure service vprn string bgp default-label-preference ebgp number |
| Tree | ebgp |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp number

| | |
|------------|---|
| Synopsis | Default preference for IBGP |
| Context | configure service vprn string bgp default-label-preference ibgp number |
| Tree | ibgp |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 19.5.R1 |
| Platforms | All |

default-preference

| | |
|------------|---|
| Synopsis | Enter the default-preference context |
| Context | configure service vprn string bgp default-preference |
| Tree | default-preference |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp number

| | |
|------------|---|
| Synopsis | Default preference for EBGp |
| Context | configure service vprn string bgp default-preference ebgp number |
| Tree | ebgp |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp number

| | |
|------------|---|
| Synopsis | Default preference for IBGP |
| Context | configure service vprn string bgp default-preference ibgp number |
| Tree | ibgp |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 19.5.R1 |
| Platforms | All |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string bgp description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

domain-id *string*

| | |
|-------------|--|
| Synopsis | Domain ID of received BGP route before readvertisement |
| Context | configure service vprn <i>string</i> bgp domain-id <i>string</i> |
| Tree | domain-id |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> |
| Introduced | 21.10.R1 |
| Platforms | All |

dynamic-neighbor-limit *number*

| | |
|-------------|---|
| Synopsis | Max dynamic BGP sessions to accept from remote peers |
| Context | configure service vprn <i>string</i> bgp dynamic-neighbor-limit <i>number</i> |
| Tree | dynamic-neighbor-limit |
| Description | <p>This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.</p> |
| Range | 1 to 8192 |
| Introduced | 16.0.R1 |
| Platforms | All |

ebgp-default-reject-policy

| | |
|------------|--|
| Synopsis | Enter the ebgp-default-reject-policy context |
| Context | configure service vpn string bgp ebgp-default-reject-policy |
| Tree | ebgp-default-reject-policy |
| Introduced | 19.5.R1 |
| Platforms | All |

export boolean

| | |
|------------|---|
| Synopsis | Enable default reject export policy for external peers |
| Context | configure service vpn string bgp ebgp-default-reject-policy export boolean |
| Tree | export |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

import boolean

| | |
|------------|---|
| Synopsis | Enable default reject import policy for external peers |
| Context | configure service vpn string bgp ebgp-default-reject-policy import boolean |
| Tree | import |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

eibgp-loadbalance boolean

| | |
|------------|---|
| Synopsis | Use ECMP over BGP VPN and BGP routes |
| Context | configure service vpn string bgp eibgp-loadbalance boolean |
| Tree | eibgp-loadbalance |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

enforce-first-as *boolean*

| | |
|-------------|--|
| Synopsis | Enforce the configured peer AS value in received routes |
| Context | configure <i>service vprn string</i> bgp enforce-first-as <i>boolean</i> |
| Tree | enforce-first-as |
| Description | <p>When configured to true for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to false, received routes are not checked for compliance with the rule.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

error-handling

| | |
|------------|---|
| Synopsis | Enter the error-handling context |
| Context | configure <i>service vprn string</i> bgp error-handling |
| Tree | error-handling |
| Introduced | 16.0.R1 |
| Platforms | All |

update-fault-tolerance *boolean*

| | |
|-------------|--|
| Synopsis | Tolerate non-critical errors in UPDATE messages |
| Context | configure <i>service vprn string</i> bgp error-handling update-fault-tolerance <i>boolean</i> |
| Tree | update-fault-tolerance |
| Description | <p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When configured to false, most errors trigger a session reset.</p> |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

export

Synopsis Enable the **export** context
 Context **configure service vprn string bgp export**
 Tree **export**
 Introduced 16.0.R1
 Platforms All

policy (*policy-expr-string* | *string*)

Synopsis Export policy name
 Context **configure service vprn string bgp export policy (*policy-expr-string* | *string*)**
 Tree **policy**
 String Length 1 to 255
 Max. Instances 15
 Min. Instances 1
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms All

extended-nh-encoding

Synopsis Enter the **extended-nh-encoding** context
 Context **configure service vprn string bgp extended-nh-encoding**
 Tree **extended-nh-encoding**
 Introduced 19.5.R1
 Platforms All

ipv4 *boolean*

Synopsis Enable/disable family type ipv4.
 Context **configure service vprn string bgp extended-nh-encoding ipv4 *boolean***

| | |
|------------|----------------------|
| Tree | ipv4 |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

family

| | |
|-------------|--|
| Synopsis | Enter the family context |
| Context | configure service vprn <i>string</i> bgp family |
| Tree | family |
| Description | Commands in this context specify the BGP address families supported by the base router BGP sessions. |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Advertise support for the flowspec-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp family flow-ipv4 <i>boolean</i> |
| Tree | flow-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Advertise support for the flowspec-IPv6 address family |
| Context | configure service vprn <i>string</i> bgp family flow-ipv6 <i>boolean</i> |
| Tree | flow-ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise MP-BGP support for the IPv4 address family |
| Context | configure service vprn <i>string</i> bgp family ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Advertise MP-BGP support for the IPv6 address family |
| Context | configure service vprn <i>string</i> bgp family ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the label-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp family label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mcast-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the MCAST-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp family mcast-ipv4 <i>boolean</i> |
| Tree | mcast-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mcast-ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the MCAST-IPv6 address family |
| Context | configure service vprn string bgp family mcast-ipv6 boolean |
| Tree | mcast-ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-external-failover *boolean*

| | |
|-------------|---|
| Synopsis | Drop external BGP session immediately when link fails |
| Context | configure service vprn string bgp fast-external-failover boolean |
| Tree | fast-external-failover |
| Description | When configured to true , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down.
When configured to false , the BGP session remains up until the hold time expires. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

flowspec

| | |
|------------|---|
| Synopsis | Enter the flowspec context |
| Context | configure service vprn string bgp flowspec |
| Tree | flowspec |
| Introduced | 16.0.R1 |
| Platforms | All |

validate-dest-prefix *boolean*

| | |
|-------------|--|
| Synopsis | Validate destination prefix in FlowSpec-IPv4/IPv6 route |
| Context | configure service vprn string bgp flowspec validate-dest-prefix boolean |
| Tree | validate-dest-prefix |
| Description | When configured to true , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. |

A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true:

- it was originated outside the local AS of the receiving BGP router
- the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix

An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers.

When configured to **false**, destination-prefix validation is disabled.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

validate-redirect-ip *boolean*

| | |
|-------------|--|
| Synopsis | Validate the redirect-to-IPv4 action in FlowSpec route |
| Context | configure service vprn <i>string</i> bgp flowspec validate-redirect-ip <i>boolean</i> |
| Tree | validate-redirect-ip |
| Description | <p>When configured to true, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.</p> <p>A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.</p> <p>When configured to false, the validation check is disabled.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-restart

| | |
|------------|---|
| Synopsis | Enable the graceful-restart context |
| Context | configure service vprn <i>string</i> bgp graceful-restart |
| Tree | graceful-restart |
| Introduced | 16.0.R1 |
| Platforms | All |

gr-notification *boolean*

| | |
|-------------|---|
| Synopsis | Perform Graceful Restart procedures |
| Context | configure service vprn <i>string</i> bgp graceful-restart gr-notification <i>boolean</i> |
| Tree | gr-notification |
| Description | When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to false , NOTIFICATION messages are not supported. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

long-lived

| | |
|------------|---|
| Synopsis | Enable the long-lived context |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived |
| Tree | long-lived |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-stale-to-all-neighbors *boolean*

| | |
|------------|---|
| Synopsis | Advertise stale routes to all BGP peers |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i> |
| Tree | advertise-stale-to-all-neighbors |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

advertised-stale-time *number*

| | |
|----------|---|
| Synopsis | LLGR stale routes time |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived advertised-stale-time <i>number</i> |

| | |
|------------|---------------------------------------|
| Tree | advertised-stale-time |
| Range | 0 to 16777215 |
| Default | 86400 |
| Introduced | 16.0.R1 |
| Platforms | All |

family [[family-type](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the family list instance |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> |
| Tree | family |
| Introduced | 16.0.R1 |
| Platforms | All |

[family-type] *keyword*

| | |
|------------|---|
| Synopsis | Address family type for LLGR |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> |
| Tree | family |
| Options | ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertised-stale-time *number*

| | |
|------------|---|
| Synopsis | LLGR stale routes time for family override |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i> |
| Tree | advertised-stale-time |
| Range | 0 to 16777215 |
| Default | 86400 |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-override-stale-time *number*

| | |
|------------|--|
| Synopsis | Locally-configured stale routes override time |
| Context | configure service vpn <i>string</i> bgp graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i> |
| Tree | helper-override-stale-time |
| Range | 0 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

forwarding-bits-set *keyword*

| | |
|-------------|---|
| Synopsis | BGP LLGR forwarding-bit behavior for address family |
| Context | configure service vpn <i>string</i> bgp graceful-restart long-lived forwarding-bits-set <i>keyword</i> |
| Tree | forwarding-bits-set |
| Description | <p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p> |
| Default | none |
| Options | none, all, non-fw |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-override-restart-time *number*

| | |
|-------------|--|
| Synopsis | Locally-configured override for restart time |
| Context | configure service vpn <i>string</i> bgp graceful-restart long-lived helper-override-restart-time <i>number</i> |
| Tree | helper-override-restart-time |
| Description | <p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p> |

| | |
|------------|-----------|
| Range | 0 to 4095 |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-override-stale-time *number*

| | |
|-------------|---|
| Synopsis | Locally-configured stale routes override time |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived helper-override-stale-time <i>number</i> |
| Tree | helper-override-stale-time |
| Description | This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.

This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override. |
| Range | 0 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

without-no-export *boolean*

| | |
|-------------|--|
| Synopsis | Advertise LLGR stale routes to non-LLGR peers |
| Context | configure service vprn <i>string</i> bgp graceful-restart long-lived without-no-export <i>boolean</i> |
| Tree | without-no-export |
| Description | When configured to true , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

When configured to false , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

restart-time *number*

| | |
|------------|--|
| Synopsis | Restart time advertised by GR capability |
| Context | configure service vprn <i>string</i> bgp graceful-restart restart-time <i>number</i> |
| Tree | restart-time |
| Range | 0 to 4095 |
| Default | 120 |
| Introduced | 16.0.R1 |
| Platforms | All |

stale-routes-time *number*

| | |
|------------|---|
| Synopsis | Maximum time to maintain routes after graceful restart |
| Context | configure service vprn <i>string</i> bgp graceful-restart stale-routes-time <i>number</i> |
| Tree | stale-routes-time |
| Range | 1 to 3600 |
| Default | 360 |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the group list instance |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-name] *string*

| | |
|---------------|---|
| Synopsis | BGP peer group name |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> |
| Tree | group |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

admin-state *keyword*

Synopsis Administrative state of the BGP group

Context **configure service vprn string bgp group string admin-state keyword**

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

advertise-inactive *boolean*

Synopsis Advertise an inactive BGP route to peers

Context **configure service vprn string bgp group string advertise-inactive boolean**

Tree [advertise-inactive](#)

Description When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 16.0.R1

Platforms All

advertise-ipv6-next-hops

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure service vprn string bgp group string advertise-ipv6-next-hops**

| | |
|------------|--|
| Tree | advertise-ipv6-next-hops |
| Introduced | 19.5.R1 |
| Platforms | All |

ipv4 boolean

| | |
|------------|---|
| Synopsis | Enable IPv4 routes to be advertised |
| Context | configure service vprn string bgp group string advertise-ipv6-next-hops ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

aggregator-id-zero boolean

| | |
|------------|--|
| Synopsis | Set router ID in the BGP AGGREGATOR attribute to zero |
| Context | configure service vprn string bgp group string aggregator-id-zero boolean |
| Tree | aggregator-id-zero |
| Introduced | 16.0.R1 |
| Platforms | All |

as-override boolean

| | |
|-------------|---|
| Synopsis | Replace the peer's ASN with the local ASN in AS Path |
| Context | configure service vprn string bgp group string as-override boolean |
| Tree | as-override |
| Description | <p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When configured to false, no AS override is performed.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

asn-4-byte *boolean*

| | |
|-------------|--|
| Synopsis | Advertise the use of 4-byte ASNs |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> asn-4-byte <i>boolean</i> |
| Tree | asn-4-byte |
| Description | When this command inherits a value of true , the use of 4-byte ASNs is supported.
When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true .
When configured to false , this command disables the use of 4-byte ASNs. |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | BGP authentication key for peers in the group |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the configure system security hash-control management-interface md-cli hash-algorithm setting. |
| String Length | 1 to 370 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|-------------|--|
| Synopsis | TCP authentication keychain for the session |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> authentication-keychain <i>reference</i> |
| Tree | authentication-keychain |
| Description | This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session. |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|-------------|--|
| Synopsis | Enable BFD |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Description | <p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

capability-negotiation *boolean*

| | |
|-------------|---|
| Synopsis | Enable capability negotiation |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> capability-negotiation <i>boolean</i> |
| Tree | capability-negotiation |
| Description | <p>When configured to true, this command enables the exchange of capabilities.</p> <p>When configured to false and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

client-reflect *boolean*

| | |
|-------------|--|
| Synopsis | Allow cluster RR to advertise routes to its clients |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> client-reflect <i>boolean</i> |
| Tree | client-reflect |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When the command inherits a value of true, client reflection of routes is enabled.</p> <p>When configured to false, this command disables client reflection of routes.</p> |
| Introduced | 16.0.R1 |

Platforms All

cluster

Synopsis Enter the **cluster** context

Context **configure** [service vprn string](#) [bgp group string](#) [cluster](#)

Tree [cluster](#)

Introduced 16.0.R1

Platforms All

cluster-id *string*

Synopsis Route reflector cluster ID

Context **configure** [service vprn string](#) [bgp group string](#) [cluster cluster-id string](#)

Tree [cluster-id](#)

Introduced 16.0.R1

Platforms All

connect-retry *number*

Synopsis BGP connect retry timer value

Context **configure** [service vprn string](#) [bgp group string](#) [connect-retry number](#)

Tree [connect-retry](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

damp-peer-oscillations

Synopsis Enable the **damp-peer-oscillations** context

Context **configure** [service vprn string](#) [bgp group string](#) [damp-peer-oscillations](#)

Tree [damp-peer-oscillations](#)

Description Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.

When unconfigured, command settings are inherited from the global-level configuration.

Introduced 16.0.R1
 Platforms All

error-interval *number*

Synopsis Time after a reset that the session must be error-free
 Context **configure** [service vprn string](#) [bgp group string](#) [damp-peer-oscillations error-interval number](#)
 Tree [error-interval](#)
 Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
 Range 0 to 2048
 Default 30
 Introduced 16.0.R1
 Platforms All

idle-hold-time

Synopsis Enter the **idle-hold-time** context
 Context **configure** [service vprn string](#) [bgp group string](#) [damp-peer-oscillations idle-hold-time](#)
 Tree [idle-hold-time](#)
 Introduced 16.0.R1
 Platforms All

initial-wait *number*

Synopsis Time session remains in idle state after stabilization
 Context **configure** [service vprn string](#) [bgp group string](#) [damp-peer-oscillations idle-hold-time initial-wait number](#)
 Tree [initial-wait](#)
 Range 0 to 2048
 Default 0
 Introduced 16.0.R1
 Platforms All

max-wait *number*

| | |
|------------|--|
| Synopsis | Maximum session idle time after repeated instability |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time max-wait <i>number</i> |
| Tree | max-wait |
| Range | 1 to 2048 |
| Default | 60 |
| Introduced | 16.0.R1 |
| Platforms | All |

second-wait *number*

| | |
|-------------|---|
| Synopsis | Time that doubles after each repeated session failure |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> damp-peer-oscillations idle-hold-time second-wait <i>number</i> |
| Tree | second-wait |
| Description | This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time. |
| Range | 1 to 2048 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

damping *boolean*

| | |
|------------|--|
| Synopsis | Use BGP route damping to reduce route flap |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> damping <i>boolean</i> |
| Tree | damping |
| Introduced | 16.0.R1 |
| Platforms | All |

default-label-preference

| | |
|----------|--|
| Synopsis | Enter the default-label-preference context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> default-label-preference |

| | |
|------------|--|
| Tree | default-label-preference |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp number

| | |
|------------|--|
| Synopsis | Default preference for EBGp |
| Context | configure service vprn string bgp group string default-label-preference ebgp number |
| Tree | ebgp |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp number

| | |
|------------|--|
| Synopsis | Default preference for IBGP |
| Context | configure service vprn string bgp group string default-label-preference ibgp number |
| Tree | ibgp |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

default-preference

| | |
|------------|--|
| Synopsis | Enter the default-preference context |
| Context | configure service vprn string bgp group string default-preference |
| Tree | default-preference |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp number

| | |
|----------|--|
| Synopsis | Default preference for EBGp |
| Context | configure service vprn string bgp group string default-preference ebgp number |
| Tree | ebgp |

| | |
|------------|----------|
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp number

| | |
|------------|--|
| Synopsis | Default preference for IBGP |
| Context | configure service vprn string bgp group string default-preference ibgp number |
| Tree | ibgp |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string bgp group string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-neighbor

| | |
|-------------|--|
| Synopsis | Enter the dynamic-neighbor context |
| Context | configure service vprn string bgp group string dynamic-neighbor |
| Tree | dynamic-neighbor |
| Description | Commands in this context configure dynamic BGP sessions for a peer group. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [interface-name] reference

| | |
|----------|--|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn string bgp group string dynamic-neighbor interface reference |

| | |
|-------------|--|
| Tree | interface |
| Description | <p>Commands in this context configure an unnumbered VPRN access IP interface for dynamic neighbors.</p> <p>If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.</p> <p>The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.</p> <p>When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.</p> |
| Introduced | 22.10.R1 |
| Platforms | All |

[interface-name] *reference*

| | |
|------------|---|
| Synopsis | Name of the dynamic neighbor interface |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>reference</i> |
| Tree | interface |
| Reference | configure service vprn <i>string</i> interface <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 22.10.R1 |
| Platforms | All |

allowed-peer-as *string*

| | |
|-------------|---|
| Synopsis | Allowed peer AS value or range of acceptable values |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>reference</i> allowed-peer-as <i>string</i> |
| Tree | allowed-peer-as |
| Description | This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> . |

All values greater than or equal to $n1$ and less than or equal to $n2$ are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

| | |
|----------------|--------------------------------------|
| Max. Instances | 32 |
| Notes | This element is ordered by the user. |
| Introduced | 22.10.R1 |
| Platforms | All |

max-sessions *number*

| | |
|-------------|--|
| Synopsis | Maximum number of dynamic sessions allowed |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor interface <i>reference</i> max-sessions <i>number</i> |
| Tree | max-sessions |
| Description | This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements. |
| Range | 1 to 255 |
| Default | 1 |
| Introduced | 22.10.R1 |
| Platforms | All |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor match |
| Tree | match |
| Introduced | 19.5.R1 |
| Platforms | All |

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|----------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | prefix |

| | |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Dynamic peer prefix for the group |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

allowed-peer-as *string*

| | |
|----------------|---|
| Synopsis | Allowed peer AS value or range of acceptable values |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor match prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) allowed-peer-as <i>string</i> |
| Tree | allowed-peer-as |
| Description | This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .

All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100]. |
| Max. Instances | 32 |
| Notes | This element is ordered by the user. |
| Introduced | 19.5.R1 |
| Platforms | All |

dynamic-neighbor-limit *number*

| | |
|-------------|--|
| Synopsis | Maximum dynamic BGP sessions to accept from remote peer |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> dynamic-neighbor-limit <i>number</i> |
| Tree | dynamic-neighbor-limit |
| Description | This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new |

dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.

When unconfigured, the setting is inherited from the BGP global-level configuration.

| | |
|------------|-----------|
| Range | 1 to 8192 |
| Introduced | 16.0.R1 |
| Platforms | All |

ebgp-default-reject-policy

| | |
|------------|---|
| Synopsis | Enable the ebgp-default-reject-policy context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy |
| Tree | ebgp-default-reject-policy |
| Introduced | 19.5.R1 |
| Platforms | All |

export *boolean*

| | |
|------------|--|
| Synopsis | Enable default reject export policy for external peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy export <i>boolean</i> |
| Tree | export |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

import *boolean*

| | |
|------------|--|
| Synopsis | Enable default reject import policy for external peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> ebgp-default-reject-policy import <i>boolean</i> |
| Tree | import |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

enforce-first-as *boolean*

| | |
|----------|---|
| Synopsis | Enforce the configured peer AS value in received routes |
|----------|---|

| | |
|------------|--|
| Context | configure service vpn <i>string</i> bgp group <i>string</i> enforce-first-as <i>boolean</i> |
| Tree | enforce-first-as |
| Introduced | 16.0.R1 |
| Platforms | All |

error-handling

| | |
|------------|---|
| Synopsis | Enter the error-handling context |
| Context | configure service vpn <i>string</i> bgp group <i>string</i> error-handling |
| Tree | error-handling |
| Introduced | 16.0.R1 |
| Platforms | All |

update-fault-tolerance *boolean*

| | |
|-------------|---|
| Synopsis | Tolerate non-critical errors in UPDATE messages |
| Context | configure service vpn <i>string</i> bgp group <i>string</i> error-handling update-fault-tolerance <i>boolean</i> |
| Tree | update-fault-tolerance |
| Description | <p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, all errors trigger a session reset.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn-link-bandwidth

| | |
|------------|--|
| Synopsis | Enter the evpn-link-bandwidth context |
| Context | configure service vpn <i>string</i> bgp group <i>string</i> evpn-link-bandwidth |
| Tree | evpn-link-bandwidth |
| Introduced | 22.7.R1 |
| Platforms | All |

add-to-received-bgp *number*

| | |
|-------------|---|
| Synopsis | Weight added to received PE-CE BGP routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> evpn-link-bandwidth add-to-received-bgp <i>number</i> |
| Tree | add-to-received-bgp |
| Description | This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.

For the load-balancing between EVPN-IFL and BGP PE-CE routes the configure service vprn bgp eibgp-loadbalance command must already be configured in the system. |
| Range | 1 to 128 |
| Introduced | 22.7.R1 |
| Platforms | All |

export

| | |
|------------|--|
| Synopsis | Enable the export context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> export |
| Tree | export |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|---|
| Synopsis | Export policy name |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

extended-nh-encoding

| | |
|------------|--|
| Synopsis | Enable the extended-nh-encoding context |
| Context | configure service vprn string bgp group string extended-nh-encoding |
| Tree | extended-nh-encoding |
| Introduced | 19.5.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable family type ipv4. |
| Context | configure service vprn string bgp group string extended-nh-encoding ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

family

| | |
|------------|--|
| Synopsis | Enable the family context |
| Context | configure service vprn string bgp group string family |
| Tree | family |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the flowspec-IPv4 address family |
| Context | configure service vprn string bgp group string family flow-ipv4 boolean |
| Tree | flow-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Advertise support for the flowspec-IPv6 address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> family flow-ipv6 <i>boolean</i> |
| Tree | flow-ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Add support for the IPv4 address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> family ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Advertise MP-BGP support for the IPv6 address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> family ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the label-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> family label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mcast-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the MCAST-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> family mcast-ipv4 <i>boolean</i> |
| Tree | mcast-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mcast-ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the MCAST-IPv6 address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> family mcast-ipv6 <i>boolean</i> |
| Tree | mcast-ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-external-failover *boolean*

| | |
|-------------|--|
| Synopsis | Drop external BGP session immediately when link fails |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> fast-external-failover <i>boolean</i> |
| Tree | fast-external-failover |
| Description | <p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-restart

| | |
|----------|--|
| Synopsis | Enable the graceful-restart context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart |
| Tree | graceful-restart |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

gr-notification *boolean*

| | |
|-------------|---|
| Synopsis | Perform graceful restart procedures after NOTIFICATION |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart gr-notification <i>boolean</i> |
| Tree | gr-notification |
| Description | When configured to true , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to false , NOTIFICATION messages are not supported. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

long-lived

| | |
|------------|---|
| Synopsis | Enable the long-lived context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived |
| Tree | long-lived |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-stale-to-all-neighbors *boolean*

| | |
|------------|---|
| Synopsis | Advertise stale routes to all BGP peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i> |
| Tree | advertise-stale-to-all-neighbors |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

advertised-stale-time *number*

| | |
|------------|---|
| Synopsis | Advertised long-lived stale time for LLGR routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived advertised-stale-time <i>number</i> |
| Tree | advertised-stale-time |
| Range | 0 to 16777215 |
| Default | 86400 |
| Introduced | 16.0.R1 |
| Platforms | All |

family [[family-type](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the family list instance |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> |
| Tree | family |
| Introduced | 16.0.R1 |
| Platforms | All |

[family-type] *keyword*

| | |
|------------|---|
| Synopsis | Address family type for LLGR |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> |
| Tree | family |
| Options | ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertised-stale-time *number*

| | |
|-------------|---|
| Synopsis | LLGR stale routes time for family override |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> advertised-stale-time <i>number</i> |
| Tree | advertised-stale-time |
| Description | This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability. |

This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.

| | |
|------------|---------------|
| Range | 0 to 16777215 |
| Default | 86400 |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-override-stale-time *number*

| | |
|-------------|--|
| Synopsis | Locally-configured stale routes override time |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived family <i>keyword</i> helper-override-stale-time <i>number</i> |
| Tree | helper-override-stale-time |
| Description | This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value. |
| Range | 0 to 16777216 |
| Default | 16777216 |
| Introduced | 16.0.R1 |
| Platforms | All |

forwarding-bits-set *keyword*

| | |
|-------------|---|
| Synopsis | BGP LLGR forwarding-bit behavior for address family |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart long-lived forwarding-bits-set <i>keyword</i> |
| Tree | forwarding-bits-set |
| Description | <p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p> |
| Default | none |
| Options | none, all, non-fwd |
| Introduced | 16.0.R1 |

Platforms All

helper-override-restart-time *number*

Synopsis Locally-configured override for restart time

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [graceful-restart long-lived helper-override-restart-time](#) *number*

Tree [helper-override-restart-time](#)

Description This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.

Range 0 to 4095

Introduced 16.0.R1

Platforms All

helper-override-stale-time *number*

Synopsis Locally-configured stale routes override time

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [graceful-restart long-lived helper-override-stale-time](#) *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.

This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.

Range 0 to 16777215

Introduced 16.0.R1

Platforms All

without-no-export *boolean*

Synopsis Advertise LLGR stale routes to non-LLGR peers

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [graceful-restart long-lived without-no-export](#) *boolean*

Tree [without-no-export](#)

| | |
|-------------|---|
| Description | <p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

restart-time *number*

| | |
|------------|---|
| Synopsis | Restart time advertised by GR capability |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart restart-time <i>number</i> |
| Tree | restart-time |
| Range | 0 to 4095 |
| Default | 300 |
| Introduced | 16.0.R1 |
| Platforms | All |

stale-routes-time *number*

| | |
|------------|--|
| Synopsis | Maximum time to maintain routes after graceful restart |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> graceful-restart stale-routes-time <i>number</i> |
| Tree | stale-routes-time |
| Range | 1 to 3600 |
| Default | 360 |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time

| | |
|----------|---|
| Synopsis | Enter the hold-time context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> hold-time |

| | |
|------------|---------------------------|
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | All |

minimum-hold-time *number*

| | |
|-------------|---|
| Synopsis | Minimum hold time between successive messages |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> hold-time minimum-hold-time <i>number</i> |
| Tree | minimum-hold-time |
| Description | This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
When unconfigured, the command value is inherited from the BGP global-level setting. |
| Range | 0 3 to 65536 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|-------------|--|
| Synopsis | Maximum time BGP waits between successive messages |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> hold-time seconds <i>number</i> |
| Tree | seconds |
| Description | This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.
Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances. <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer. When unconfigured, the command setting is inherited from the BGP global-level configuration. |
| Range | 0 3 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

import

| | |
|------------|--|
| Synopsis | Enable the import context |
| Context | configure service vprn string bgp group string import |
| Tree | import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|---|
| Synopsis | Route policy name |
| Context | configure service vprn string bgp group string import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-send-delay-zero *boolean*

| | |
|-------------|---|
| Synopsis | Send BGP updates as soon as the session comes up |
| Context | configure service vprn string bgp group string initial-send-delay-zero <i>boolean</i> |
| Tree | initial-send-delay-zero |
| Description | When configured to true , BGP updates are sent as soon as the session comes up.
When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false .
When this command inherits a value of false , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established. |
| Introduced | 16.0.R1 |
| Platforms | All |

keepalive *number*

| | |
|-------------|--|
| Synopsis | Time after which the BGP KEEPALIVE message is sent |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> keepalive <i>number</i> |
| Tree | keepalive |
| Description | <p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the hold-time seconds context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> • If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value. • If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval. • If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command inherits the BGP global-level setting.</p> |
| Range | 0 to 21845 |
| Introduced | 16.0.R1 |
| Platforms | All |

label-preference *number*

| | |
|------------|--|
| Synopsis | Route preference for routes from labeled-unicast peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> label-preference <i>number</i> |
| Tree | label-preference |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

link-bandwidth

| | |
|----------|--|
| Synopsis | Enter the link-bandwidth context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth |
| Tree | link-bandwidth |

| | |
|-------------|---|
| Description | <p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p> |
| Introduced | 16.0.R3 |
| Platforms | All |

accept-from-ebgp

| | |
|------------|---|
| Synopsis | Enter the accept-from-ebgp context |
| Context | configure service vprn string bgp group string link-bandwidth accept-from-ebgp |
| Tree | accept-from-ebgp |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv4 boolean

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in IPv4 routes |
| Context | configure service vprn string bgp group string link-bandwidth accept-from-ebgp ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6 boolean

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
| Context | configure service vprn string bgp group string link-bandwidth accept-from-ebgp ipv6 boolean |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in label-IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth accept-from-ebgp label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

add-to-received-ebgp

| | |
|------------|---|
| Synopsis | Enter the add-to-received-ebgp context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp |
| Tree | add-to-received-ebgp |
| Introduced | 16.0.R3 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in label-IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

aggregate-used-paths

| | |
|------------|---|
| Synopsis | Enter the aggregate-used-paths context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth aggregate-used-paths |
| Tree | aggregate-used-paths |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth aggregate-used-paths ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth aggregate-used-paths ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R4 |

Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth aggregate-used-paths label-ipv4](#) *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

send-to-ebgp

Synopsis Enter the **send-to-ebgp** context

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth send-to-ebgp](#)

Tree [send-to-ebgp](#)

Introduced 16.0.R4

Platforms All

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth send-to-ebgp ipv4](#) *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [link-bandwidth send-to-ebgp ipv6](#) *boolean*

Tree [ipv6](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in label-IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> link-bandwidth send-to-ebgp label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

local-address (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

| | |
|---------------|--|
| Synopsis | Local IP address used when communicating with BGP peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> local-address (<i>ipv4-address-no-zone ipv6-address-no-zone interface-name</i>) |
| Tree | local-address |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

local-as

| | |
|------------|---|
| Synopsis | Enter the local-as context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> local-as |
| Tree | local-as |
| Introduced | 16.0.R1 |
| Platforms | All |

as-number *number*

| | |
|----------|--|
| Synopsis | Local (or virtual) BGP AS number |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> local-as as-number <i>number</i> |

| | |
|------------|---------------------------|
| Tree | as-number |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

prepend-global-as *boolean*

| | |
|-------------|--|
| Synopsis | Prepend global ASN when advertising routes to BGP peer |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> local-as prepend-global-as <i>boolean</i> |
| Tree | prepend-global-as |
| Description | When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.
When configured to false , the global ASN is not included in the AS_PATH attribute. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

private *boolean*

| | |
|-------------|--|
| Synopsis | Hide the local ASN in sent paths learned from peering |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> local-as private <i>boolean</i> |
| Tree | private |
| Description | When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.
When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

local-preference *number*

| | |
|----------|--|
| Synopsis | Default local preference if not in incoming routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> local-preference <i>number</i> |
| Tree | local-preference |
| Range | 0 to 4294967295 |

Introduced 16.0.R1
Platforms All

loop-detect *keyword*

Synopsis Strategy for loop detection in the AS path
Context **configure** [service vprn](#) *string* [bgp group](#) *string* **loop-detect** *keyword*
Tree [loop-detect](#)
Options drop-peer, ignore-loop, off, discard-route
Introduced 16.0.R1
Platforms All

loop-detect-threshold *number*

Synopsis Threshold for the global ASN in a received AS path
Context **configure** [service vprn](#) *string* [bgp group](#) *string* **loop-detect-threshold** *number*
Tree [loop-detect-threshold](#)
Range 0 to 15
Introduced 16.0.R6
Platforms All

med-out (*number* | *keyword*)

Synopsis Default MED attribute value to advertise to peers
Context **configure** [service vprn](#) *string* [bgp group](#) *string* **med-out** (*number* | *keyword*)
Tree [med-out](#)
Max. Range 0 to 4294967295
Options igp-cost
Introduced 16.0.R1
Platforms All

min-route-advertisement *number*

Synopsis Minimum time before a prefix can be advertised to peer
Context **configure** [service vprn](#) *string* [bgp group](#) *string* **min-route-advertisement** *number*

| | |
|------------|---|
| Tree | min-route-advertisement |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor

| | |
|------------|---|
| Synopsis | Enable the monitor context |
| Context | configure service vprn string bgp group string monitor |
| Tree | monitor |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BMP monitoring |
| Context | configure service vprn string bgp group string monitor admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

all-stations *boolean*

| | |
|-------------|--|
| Synopsis | Send BMP messages to all configured stations |
| Context | configure service vprn string bgp group string monitor all-stations boolean |
| Tree | all-stations |
| Description | <p>When configured to true, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to false, the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

route-monitoring

| | |
|------------|--|
| Synopsis | Enter the route-monitoring context |
| Context | configure service vprn string bgp group string monitor route-monitoring |
| Tree | route-monitoring |
| Introduced | 16.0.R1 |
| Platforms | All |

post-policy *boolean*

| | |
|------------|---|
| Synopsis | Allow post-policy route-monitoring messages to be sent |
| Context | configure service vprn string bgp group string monitor route-monitoring post-policy <i>boolean</i> |
| Tree | post-policy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pre-policy *boolean*

| | |
|------------|--|
| Synopsis | Allow pre-policy route-monitoring messages to be sent |
| Context | configure service vprn string bgp group string monitor route-monitoring pre-policy <i>boolean</i> |
| Tree | pre-policy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

station [[station-name](#)] *reference*

| | |
|----------------|--|
| Synopsis | Add a list entry for station |
| Context | configure service vprn string bgp group string monitor station <i>reference</i> |
| Tree | station |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |

Platforms All

[station-name] reference

Synopsis BMP monitoring station
 Context **configure service vprn string bgp group string monitor station reference**
 Tree [station](#)
 Reference **configure bmp station string**
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

multihop number

Synopsis TTL in IP packet headers for EBGp peers multi-hops away
 Context **configure service vprn string bgp group string multihop number**
 Tree [multihop](#)
 Range 1 to 255
 Introduced 16.0.R1
 Platforms All

multipath-eligible boolean

Synopsis Allow routes from group peers in multipath eligibility
 Context **configure service vprn string bgp group string multipath-eligible boolean**
 Tree [multipath-eligible](#)
 Default false
 Introduced 19.5.R1
 Platforms All

next-hop-self boolean

Synopsis Advertise routes with local address as next-hop address
 Context **configure service vprn string bgp group string next-hop-self boolean**
 Tree [next-hop-self](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

origin-validation

| | |
|------------|---|
| Synopsis | Enter the origin-validation context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> origin-validation |
| Tree | origin-validation |
| Introduced | 19.7.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Enable support for unlabeled unicast IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> origin-validation ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Enable support for unlabeled unicast IPv6 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> origin-validation ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|----------|---|
| Synopsis | Enable support for labeled-unicast IPv4 routes |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> origin-validation label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |

| | |
|------------|---------|
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

passive *boolean*

| | |
|------------|---|
| Synopsis | Enable passive mode for BGP communication |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> passive <i>boolean</i> |
| Tree | passive |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

path-mtu-discovery *boolean*

| | |
|-------------|--|
| Synopsis | Enable Path MTU Discovery |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> path-mtu-discovery <i>boolean</i> |
| Tree | path-mtu-discovery |
| Description | <p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-as *number*

| | |
|----------|--|
| Synopsis | Peer AS number |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> peer-as <i>number</i> |

| | |
|------------|-------------------------|
| Tree | peer-as |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-ip-tracking *boolean*

| | |
|-------------|--|
| Synopsis | Enable BGP peer tracking |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> peer-ip-tracking <i>boolean</i> |
| Tree | peer-ip-tracking |
| Description | <p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, peer tracking is disabled.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | Route preference for routes learned from all peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-limit [[family](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the prefix-limit list instance |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> |
| Tree | prefix-limit |
| Introduced | 16.0.R1 |

Platforms All

[family] *keyword*

Synopsis Address family to which the limit applies

Context **configure** [service](#) [vprn](#) *string* [bgp](#) [group](#) *string* [prefix-limit](#) *keyword*

Tree [prefix-limit](#)

Options ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

idle-timeout *number*

Synopsis Time BGP peering remains idle before reconnecting

Context **configure** [service](#) [vprn](#) *string* [bgp](#) [group](#) *string* [prefix-limit](#) *keyword* [idle-timeout](#) *number*

Tree [idle-timeout](#)

Range 1 to 1024

Introduced 16.0.R1

Platforms All

log-only *boolean*

Synopsis Send warning message at threshold instead of take-down

Context **configure** [service](#) [vprn](#) *string* [bgp](#) [group](#) *string* [prefix-limit](#) *keyword* [log-only](#) *boolean*

Tree [log-only](#)

Default false

Introduced 16.0.R1

Platforms All

maximum *number*

Synopsis Maximum number of routes to be learned from a peer

Context **configure** [service](#) [vprn](#) *string* [bgp](#) [group](#) *string* [prefix-limit](#) *keyword* [maximum](#) *number*

Tree [maximum](#)

| | |
|-------------|--|
| Description | This command configures the maximum number of BGP routes that can be received from a peer before administrative action is taken. |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R2 |
| Platforms | All |

post-import *boolean*

| | |
|------------|---|
| Synopsis | Apply limit only to routes accepted by import policies |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> post-import <i>boolean</i> |
| Tree | post-import |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|--|
| Synopsis | Percentage threshold that triggers a warning message |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> prefix-limit <i>keyword</i> threshold <i>number</i> |
| Tree | threshold |
| Range | 1 to 100 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | All |

remove-private

| | |
|------------|---|
| Synopsis | Enable the remove-private context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> remove-private |
| Tree | remove-private |
| Introduced | 16.0.R1 |
| Platforms | All |

limited *boolean*

| | |
|------------|--|
| Synopsis | Remove private ASNs up to first public ASN encountered |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> remove-private limited <i>boolean</i> |
| Tree | limited |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

replace *boolean*

| | |
|------------|--|
| Synopsis | Replace private ASN with global ASN before advertising |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> remove-private replace <i>boolean</i> |
| Tree | replace |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

skip-peer-as *boolean*

| | |
|------------|---|
| Synopsis | Keep private ASN if it is the same as the BGP peer ASN |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> remove-private skip-peer-as <i>boolean</i> |
| Tree | skip-peer-as |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

send-communities

| | |
|------------|---|
| Synopsis | Enter the send-communities context |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> send-communities |
| Tree | send-communities |
| Introduced | 16.0.R1 |
| Platforms | All |

extended boolean

| | |
|-------------|--|
| Synopsis | Advertise the Extended Communities attribute to peers |
| Context | configure service vprn string bgp group string send-communities extended boolean |
| Tree | extended |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to false, all extended communities are removed from all routes advertised to BGP peers.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

large boolean

| | |
|-------------|---|
| Synopsis | Advertise the Large Communities attribute to peers |
| Context | configure service vprn string bgp group string send-communities large boolean |
| Tree | large |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to false, all large communities are removed from all routes advertised to BGP peers.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

standard boolean

| | |
|-------------|---|
| Synopsis | Advertise the Communities attribute to peers |
| Context | configure service vprn string bgp group string send-communities standard boolean |
| Tree | standard |
| Description | <p>When unconfigured, this command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> |

When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1
 Platforms All

send-default

Synopsis Enable the **send-default** context
 Context **configure service vprn string bgp group string send-default**
 Tree [send-default](#)
 Introduced 19.7.R1
 Platforms All

export-policy *reference*

Synopsis Export policy name
 Context **configure service vprn string bgp group string send-default export-policy *reference***
 Tree [export-policy](#)
 Reference **configure policy-options policy-statement string**
 Introduced 19.7.R1
 Platforms All

ipv4 *boolean*

Synopsis Generate and advertise an IPv4 default route (0/0)
 Context **configure service vprn string bgp group string send-default ipv4 *boolean***
 Tree [ipv4](#)
 Default false
 Introduced 19.7.R1
 Platforms All

ipv6 *boolean*

Synopsis Generate and advertise an IPv6 default route (::/0)
 Context **configure service vprn string bgp group string send-default ipv6 *boolean***

| | |
|------------|----------------------|
| Tree | ipv6 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|---|
| Synopsis | Prevent routes being reflected back to best-route peer |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | <p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGp and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

static-group *boolean*

| | |
|------------|--|
| Synopsis | Use group for static peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> static-group <i>boolean</i> |
| Tree | static-group |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

tcp-mss (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | TCP maximum segment size override |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> tcp-mss (<i>number</i> <i>keyword</i>) |
| Tree | tcp-mss |

| | |
|-------------|---|
| Description | <p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p> |
| Range | 384 to 9746 |
| Options | ip-stack |
| Introduced | 21.2.R1 |
| Platforms | All |

third-party-nexthop *boolean*

| | |
|-------------|---|
| Synopsis | Apply third-party next-hop processing to EBGP peers |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> third-party-nexthop <i>boolean</i> |
| Tree | third-party-nexthop |
| Description | <p>When configured to true, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

ttl-security *number*

| | |
|----------|---|
| Synopsis | Minimum TTL value for an incoming BGP packet |
| Context | configure service vprn <i>string</i> bgp group <i>string</i> ttl-security <i>number</i> |
| Tree | ttl-security |

| | |
|-------------|--|
| Description | This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded. |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword*

| | |
|------------|---|
| Synopsis | BGP peer type |
| Context | configure <i>service vprn string</i> <i>bgp group string</i> <i>type keyword</i> |
| Tree | <i>type</i> |
| Default | no-type |
| Options | no-type, internal, external |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time

| | |
|------------|--|
| Synopsis | Enter the hold-time context |
| Context | configure <i>service vprn string</i> <i>bgp hold-time</i> |
| Tree | <i>hold-time</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

minimum-hold-time *number*

| | |
|-------------|---|
| Synopsis | Minimum hold time between successive messages |
| Context | configure <i>service vprn string</i> <i>bgp hold-time minimum-hold-time number</i> |
| Tree | <i>minimum-hold-time</i> |
| Description | This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. |
| Range | 0 3 to 65535 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|-------------|---|
| Synopsis | Maximum time BGP waits between successive messages |
| Context | configure <i>service vprn string bgp hold-time seconds number</i> |
| Tree | <i>seconds</i> |
| Description | <p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer. |
| Range | 0 3 to 65535 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | All |

ibgp-multipath *boolean*

| | |
|-------------|---|
| Synopsis | Enable IBGP multipath load balancing |
| Context | configure <i>service vprn string bgp ibgp-multipath boolean</i> |
| Tree | <i>ibgp-multipath</i> |
| Description | <p>When configured to true, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.</p> <p>When configured to false, this command disables IBGP multipath load balancing.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import

| | |
|----------|--|
| Synopsis | Enable the import context |
| Context | configure <i>service vprn string bgp import</i> |

| | |
|------------|------------------------|
| Tree | import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|---|
| Synopsis | Import policy name |
| Context | configure service vprn <i>string</i> bgp import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-send-delay-zero *boolean*

| | |
|------------|--|
| Synopsis | Send BGP updates as soon as session comes up |
| Context | configure service vprn <i>string</i> bgp initial-send-delay-zero <i>boolean</i> |
| Tree | initial-send-delay-zero |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

keepalive *number*

| | |
|------------|---|
| Synopsis | Time after which the BGP KEEPALIVE message is sent |
| Context | configure service vprn <i>string</i> bgp keepalive <i>number</i> |
| Tree | keepalive |
| Range | 0 to 21845 |
| Default | 30 |
| Introduced | 16.0.R1 |

Platforms All

label-preference *number*

Synopsis Route preference for routes from labeled-unicast peers

Context **configure service vprn string bgp label-preference number**

Tree [label-preference](#)

Range 1 to 255

Default 170

Introduced 16.0.R1

Platforms All

local-as

Synopsis Enter the **local-as** context

Context **configure service vprn string bgp local-as**

Tree [local-as](#)

Introduced 16.0.R1

Platforms All

as-number *number*

Synopsis Local (or virtual) BGP AS number

Context **configure service vprn string bgp local-as as-number number**

Tree [as-number](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

prepend-global-as *boolean*

Synopsis Prepend global AS when advertising routes to BGP peer

Context **configure service vprn string bgp local-as prepend-global-as boolean**

Tree [prepend-global-as](#)

Description When configured to **true**, the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.

When configured to **false**, the global ASN is hidden in paths announced to the EBGP peer.

| | |
|------------|---------|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

private *boolean*

| | |
|-------------|---|
| Synopsis | Hide the local ASN in sent paths learned from peering |
| Context | configure service vprn <i>string</i> bgp local-as private <i>boolean</i> |
| Tree | private |
| Description | When configured to true , the local ASN is hidden in paths learned from the peering.
When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

local-preference *number*

| | |
|------------|---|
| Synopsis | Default local preference if not in incoming routes |
| Context | configure service vprn <i>string</i> bgp local-preference <i>number</i> |
| Tree | local-preference |
| Max. Range | 0 to 4294967295 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

loop-detect *keyword*

| | |
|------------|---|
| Synopsis | Strategy for loop detection in the AS path |
| Context | configure service vprn <i>string</i> bgp loop-detect <i>keyword</i> |
| Tree | loop-detect |
| Default | ignore-loop |
| Options | drop-peer, ignore-loop, off, discard-route |
| Introduced | 16.0.R1 |

Platforms All

loop-detect-threshold *number*

Synopsis Threshold for the global ASN in a received AS path

Context **configure service vprn string bgp loop-detect-threshold number**

Tree [loop-detect-threshold](#)

Range 0 to 15

Default 0

Introduced 16.0.R6

Platforms All

med-out (*number | keyword*)

Synopsis Default MED attribute value to advertise to peers

Context **configure service vprn string bgp med-out (number | keyword)**

Tree [med-out](#)

Max. Range 0 to 4294967295

Options igp-cost

Introduced 16.0.R1

Platforms All

min-route-advertisement *number*

Synopsis Minimum time before a prefix can be advertised to peer

Context **configure service vprn string bgp min-route-advertisement number**

Tree [min-route-advertisement](#)

Range 1 to 255

Default 30

Introduced 16.0.R1

Platforms All

monitor

Synopsis Enable the **monitor** context

| | |
|------------|--|
| Context | configure service vprn string bgp monitor |
| Tree | monitor |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BMP monitoring |
| Context | configure service vprn string bgp monitor admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

all-stations *boolean*

| | |
|-------------|--|
| Synopsis | Send BMP messages to all configured stations |
| Context | configure service vprn string bgp monitor all-stations boolean |
| Tree | all-stations |
| Description | <p>When configured to true, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to false, the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

route-monitoring

| | |
|------------|---|
| Synopsis | Enter the route-monitoring context |
| Context | configure service vprn string bgp monitor route-monitoring |
| Tree | route-monitoring |
| Introduced | 16.0.R1 |
| Platforms | All |

post-policy *boolean*

| | |
|------------|---|
| Synopsis | Allow post-policy route-monitoring messages to be sent |
| Context | configure service vprn <i>string</i> bgp monitor route-monitoring post-policy <i>boolean</i> |
| Tree | post-policy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pre-policy *boolean*

| | |
|------------|--|
| Synopsis | Allow pre-policy route-monitoring messages to be sent |
| Context | configure service vprn <i>string</i> bgp monitor route-monitoring pre-policy <i>boolean</i> |
| Tree | pre-policy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

station [[station-name](#)] *reference*

| | |
|----------------|--|
| Synopsis | Add a list entry for station |
| Context | configure service vprn <i>string</i> bgp monitor station <i>reference</i> |
| Tree | station |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

[station-name] *reference*

| | |
|-----------|--|
| Synopsis | BMP monitoring station |
| Context | configure service vprn <i>string</i> bgp monitor station <i>reference</i> |
| Tree | station |
| Reference | configure bmp station <i>string</i> |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

multihop *number*

| | |
|-------------|--|
| Synopsis | TTL in IP packet headers for EBGP peers multi-hops away |
| Context | configure service vprn <i>string</i> bgp multihop <i>number</i> |
| Tree | multihop |
| Description | This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP. |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

multipath

| | |
|------------|---|
| Synopsis | Enter the multipath context |
| Context | configure service vprn <i>string</i> bgp multipath |
| Tree | multipath |
| Introduced | 16.0.R1 |
| Platforms | All |

ebgp *number*

| | |
|------------|--|
| Synopsis | Maximum multipaths per prefix for EBGP learned routes |
| Context | configure service vprn <i>string</i> bgp multipath ebgp <i>number</i> |
| Tree | ebgp |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

family [[family-type](#)] *keyword*

| | |
|----------|---|
| Synopsis | Enter the family list instance |
| Context | configure service vprn <i>string</i> bgp multipath family <i>keyword</i> |

| | |
|-------------|--|
| Tree | family |
| Description | <p>Commands in this context set ECMP multipath parameters that apply only to the specified label unicast address family.</p> <p>When multipath is enabled, traffic to the destination is load-shared across a set of paths (BGP routes) that the BGP decision process considers equal to the best path. The distribution of traffic over the multiple paths may or may not be equal. The distribution is based on weights derived from the Link Bandwidth Extended Community.</p> <p>For more information about the criteria a non-best route must meet to qualify as a multipath, see “BGP route installation in the route table” in the <i>7450 ESS 7750 SR 7950 XRS VSR Unicast Routing Protocols User Guide</i>.</p> |
| Introduced | 19.5.R1 |
| Platforms | All |

[family-type] *keyword*

| | |
|------------|---|
| Synopsis | Address family type for the multipath selection |
| Context | configure service vprn <i>string</i> bgp multipath family <i>keyword</i> |
| Tree | family |
| Options | ipv4, ipv6, label-ipv4, label-ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp *number*

| | |
|-------------|--|
| Synopsis | Maximum multipaths when best path is EBGp learned route |
| Context | configure service vprn <i>string</i> bgp multipath family <i>keyword</i> ebgp <i>number</i> |
| Tree | ebgp |
| Description | This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled. |
| Range | 1 to 64 |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp number

| | |
|-------------|---|
| Synopsis | Maximum multipaths when best path is IBGP learned route |
| Context | configure service vprn string bgp multipath family keyword ibgp number |
| Tree | ibgp |
| Description | This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the max-paths command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled. |
| Range | 1 to 64 |
| Introduced | 19.5.R1 |
| Platforms | All |

max-paths number

| | |
|-------------|--|
| Synopsis | Maximum number of multipaths per prefix or NLRI |
| Context | configure service vprn string bgp multipath family keyword max-paths number |
| Tree | max-paths |
| Description | <p>This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the family command.</p> <p>Consider the following when configuring this command:</p> <ul style="list-style-type: none"> • If the best path is an EBGP-learned route and the ebgp command is configured, the limit configured in the ebgp command overrides the limit configured in this command. • If the best path is an IBGP-learned route and the ibgp command is configured, the limit configured in the ibgp command overrides the limit configured in this command. • If the best path is an EBGP-learned route and the ebgp command is not configured, and this command is configured to 1, multipaths are disabled. • If the best path is an IBGP-learned route and the ibgp command is not configured, and this command is configured to 1, multipaths are disabled. |
| Range | 1 to 64 |
| Introduced | 19.5.R1 |
| Platforms | All |

restrict keyword

| | |
|----------|--|
| Synopsis | AS path restriction for the non-best path |
| Context | configure service vprn string bgp multipath family keyword restrict keyword |
| Tree | restrict |

| | |
|------------|--|
| Default | same-as-path-length |
| Options | same-as-path-length, same-neighbor-as, exact-as-path |
| Introduced | 19.5.R1 |
| Platforms | All |

unequal-cost *boolean*

| | |
|-------------|--|
| Synopsis | Ignore differences in the next-hop cost for multipath |
| Context | configure service vprn <i>string</i> bgp multipath family <i>keyword</i> unequal-cost <i>boolean</i> |
| Tree | unequal-cost |
| Description | When configured to true , BGP ignores differences in the next-hop cost when determining eligible multipaths. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp *number*

| | |
|------------|---|
| Synopsis | Maximum multipaths per prefix for IBGP learned routes |
| Context | configure service vprn <i>string</i> bgp multipath ibgp <i>number</i> |
| Tree | ibgp |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

max-paths *number*

| | |
|------------|--|
| Synopsis | Maximum multipaths per prefix |
| Context | configure service vprn <i>string</i> bgp multipath max-paths <i>number</i> |
| Tree | max-paths |
| Range | 1 to 64 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

restrict *keyword*

| | |
|------------|--|
| Synopsis | AS path restriction for the non-best path |
| Context | configure <i>service vprn string bgp multipath restrict keyword</i> |
| Tree | <i>restrict</i> |
| Default | same-as-path-length |
| Options | same-as-path-length, same-neighbor-as, exact-as-path |
| Introduced | 16.0.R1 |
| Platforms | All |

unequal-cost *boolean*

| | |
|------------|--|
| Synopsis | Ignore differences in the next-hop cost for multipath |
| Context | configure <i>service vprn string bgp multipath unequal-cost boolean</i> |
| Tree | <i>unequal-cost</i> |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

neighbor [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|------------|--|
| Synopsis | Enter the neighbor list instance |
| Context | configure <i>service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone)</i> |
| Tree | <i>neighbor</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|------------|--|
| Synopsis | IP address of the BGP peer router |
| Context | configure <i>service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone)</i> |
| Tree | <i>neighbor</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

admin-state *keyword*

Synopsis Administrative state of the BGP neighbor

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **admin-state** *keyword*

Tree **admin-state**

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

advertise-inactive *boolean*

Synopsis Advertise an inactive BGP route to peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-inactive** *boolean*

Tree **advertise-inactive**

Description When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 16.0.R1

Platforms All

advertise-ipv6-next-hops

| | |
|------------|--|
| Synopsis | Enable the advertise-ipv6-next-hops context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) advertise-ipv6-next-hops |
| Tree | advertise-ipv6-next-hops |
| Introduced | 19.5.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Enable IPv4 routes to be advertised |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) advertise-ipv6-next-hops ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

aggregator-id-zero *boolean*

| | |
|------------|--|
| Synopsis | Set router ID in the BGP AGGREGATOR attribute to zero |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) aggregator-id-zero boolean |
| Tree | aggregator-id-zero |
| Introduced | 16.0.R1 |
| Platforms | All |

as-override *boolean*

| | |
|-------------|--|
| Synopsis | Replace the peer ASN with the local ASN in AS Path |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) as-override boolean |
| Tree | as-override |
| Description | <p>When configured to true, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> |

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). This command cannot be explicitly configured to **false**.

When the command inherits a value of **false**, no AS override is performed.

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

asn-4-byte *boolean*

| | |
|------------|---|
| Synopsis | Advertise the use of 4-byte ASNs |
| Context | configure service vpn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) asn-4-byte <i>boolean</i> |
| Tree | asn-4-byte |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|--|
| Synopsis | BGP authentication key |
| Context | configure service vpn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 370 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|-------------|--|
| Synopsis | TCP authentication keychain for the session |
| Context | configure service vpn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) authentication-keychain <i>reference</i> |
| Tree | authentication-keychain |
| Description | This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session. |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|-------------|---|
| Synopsis | Enable BFD |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Description | <p>When configured to true, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, BFD is removed from the associated protocol adjacency.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

capability-negotiation *boolean*

| | |
|------------|---|
| Synopsis | Enable capability negotiation |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) capability-negotiation <i>boolean</i> |
| Tree | capability-negotiation |
| Introduced | 16.0.R1 |
| Platforms | All |

client-reflect *boolean*

| | |
|------------|---|
| Synopsis | Allow cluster RR to advertise routes to its clients |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) client-reflect <i>boolean</i> |
| Tree | client-reflect |
| Introduced | 16.0.R1 |
| Platforms | All |

cluster

| | |
|----------|----------------------------------|
| Synopsis | Enter the cluster context |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster |
| Tree | cluster |
| Introduced | 16.0.R1 |
| Platforms | All |

cluster-id *string*

| | |
|------------|---|
| Synopsis | Route reflector cluster ID |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cluster cluster-id <i>string</i> |
| Tree | cluster-id |
| Introduced | 16.0.R1 |
| Platforms | All |

connect-retry *number*

| | |
|------------|--|
| Synopsis | BGP connect retry timer value |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) connect-retry <i>number</i> |
| Tree | connect-retry |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

damp-peer-oscillations

| | |
|------------|---|
| Synopsis | Enable the damp-peer-oscillations context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations |
| Tree | damp-peer-oscillations |
| Introduced | 16.0.R1 |
| Platforms | All |

error-interval *number*

| | |
|----------|--|
| Synopsis | Time after a reset that the session must be error-free |
|----------|--|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations error-interval <i>number</i> |
| Tree | error-interval |
| Description | This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time. |
| Range | 0 to 2048 |
| Default | 30 |
| Introduced | 16.0.R1 |
| Platforms | All |

idle-hold-time

| | |
|------------|--|
| Synopsis | Enter the idle-hold-time context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time |
| Tree | idle-hold-time |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-wait *number*

| | |
|------------|---|
| Synopsis | Time session remains in idle state after stabilization |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time initial-wait <i>number</i> |
| Tree | initial-wait |
| Range | 0 to 2048 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

max-wait *number*

| | |
|----------|---|
| Synopsis | Maximum session idle time after repeated instability |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time max-wait <i>number</i> |
| Tree | max-wait |

| | |
|------------|-----------|
| Range | 1 to 2048 |
| Default | 60 |
| Introduced | 16.0.R1 |
| Platforms | All |

second-wait *number*

| | |
|-------------|---|
| Synopsis | Time that doubles after each repeated session failure |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damp-peer-oscillations idle-hold-time second-wait <i>number</i> |
| Tree | second-wait |
| Description | This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time. |
| Range | 1 to 2048 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

damping *boolean*

| | |
|------------|--|
| Synopsis | Use BGP route damping to reduce route flap |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) damping <i>boolean</i> |
| Tree | damping |
| Introduced | 16.0.R1 |
| Platforms | All |

default-label-preference

| | |
|------------|--|
| Synopsis | Enter the default-label-preference context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) default-label-preference |
| Tree | default-label-preference |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp number

| | |
|------------|--|
| Synopsis | Default preference for EBGp |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-label-preference ebgp number |
| Tree | ebgp |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

ibgp number

| | |
|------------|--|
| Synopsis | Default preference for IBGP |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-label-preference ibgp number |
| Tree | ibgp |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

default-preference

| | |
|------------|--|
| Synopsis | Enter the default-preference context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-preference |
| Tree | default-preference |
| Introduced | 19.5.R1 |
| Platforms | All |

ebgp number

| | |
|------------|--|
| Synopsis | Default preference for EBGp |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) default-preference ebgp number |
| Tree | ebgp |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |

Platforms All

ibgp *number*

Synopsis Default preference for IBGP

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **default-preference ibgp** *number*

Tree [ibgp](#)

Range 0 to 255

Introduced 19.5.R1

Platforms All

description *string*

Synopsis Text description

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

ebgp-default-reject-policy

Synopsis Enable the **ebgp-default-reject-policy** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy**

Tree [ebgp-default-reject-policy](#)

Introduced 19.5.R1

Platforms All

export *boolean*

Synopsis Enable default reject export policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy export** *boolean*

Tree [export](#)

| | |
|------------|---------|
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

import *boolean*

| | |
|------------|---|
| Synopsis | Enable default reject import policy for external peers |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ebgp-default-reject-policy import <i>boolean</i> |
| Tree | import |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

enforce-first-as *boolean*

| | |
|-------------|---|
| Synopsis | Enforce the configured peer AS value in received routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) enforce-first-as <i>boolean</i> |
| Tree | enforce-first-as |
| Description | <p>When configured to true for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the update-fault-tolerance command in the error-handling context is set to false) or the session is left up but the route is treated as withdrawn (if update-fault-tolerance is set to true).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, received routes are not checked for compliance with the rule.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

error-handling

| | |
|----------|---|
| Synopsis | Enter the error-handling context |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling |
| Tree | error-handling |
| Introduced | 16.0.R1 |
| Platforms | All |

update-fault-tolerance *boolean*

| | |
|-------------|--|
| Synopsis | Tolerate non-critical errors in UPDATE messages |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) error-handling update-fault-tolerance <i>boolean</i> |
| Tree | update-fault-tolerance |
| Description | <p>When configured to true, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, all errors trigger a session reset.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn-link-bandwidth

| | |
|------------|--|
| Synopsis | Enter the evpn-link-bandwidth context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) evpn-link-bandwidth |
| Tree | evpn-link-bandwidth |
| Introduced | 22.7.R1 |
| Platforms | All |

add-to-received-bgp *number*

| | |
|----------|--|
| Synopsis | Weight added to received PE-CE BGP routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) evpn-link-bandwidth add-to-received-bgp <i>number</i> |
| Tree | add-to-received-bgp |

| | |
|-------------|---|
| Description | This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.

For the load-balancing between EVPN-IFL and BGP PE-CE routes the configure service vprn bgp eibgp-loadbalance command must already be configured in the system. |
| Range | 1 to 128 |
| Introduced | 22.7.R1 |
| Platforms | All |

export

| | |
|------------|---|
| Synopsis | Enable the export context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) export |
| Tree | export |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Export policy name |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

extended-nh-encoding

| | |
|----------|--|
| Synopsis | Enable the extended-nh-encoding context |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) extended-nh-encoding |
| Tree | extended-nh-encoding |
| Introduced | 19.5.R1 |
| Platforms | All |

ipv4 boolean

| | |
|------------|---|
| Synopsis | Enable/disable family type ipv4. |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) extended-nh-encoding ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

family

| | |
|------------|--|
| Synopsis | Enable the family context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) family |
| Tree | family |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-ipv4 boolean

| | |
|------------|--|
| Synopsis | Advertise support for the flowspec-IPv4 address family |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) family flow-ipv4 boolean |
| Tree | flow-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Advertise support for the flowspec-IPv6 address family |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family flow-ipv6 <i>boolean</i> |
| Tree | flow-ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Add support for the IPv4 address family |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Advertise MP-BGP support for the IPv6 address family |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|----------|--|
| Synopsis | Advertise support for the label-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

mcast-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the MCAST-IPv4 address family |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv4 <i>boolean</i> |
| Tree | mcast-ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mcast-ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Advertise support for the MCAST-IPv6 address family |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) family mcast-ipv6 <i>boolean</i> |
| Tree | mcast-ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fast-external-failover *boolean*

| | |
|-------------|---|
| Synopsis | Drop external BGP session immediately when link fails |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) fast-external-failover <i>boolean</i> |
| Tree | fast-external-failover |
| Description | <p>When this command inherits a value of true, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When configured to false, the BGP session remains up until the hold time expires.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-restart

| | |
|------------|--|
| Synopsis | Enable the graceful-restart context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) graceful-restart |
| Tree | graceful-restart |
| Introduced | 16.0.R1 |
| Platforms | All |

gr-notification *boolean*

| | |
|-------------|--|
| Synopsis | Perform graceful restart procedures after NOTIFICATION |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) graceful-restart gr-notification boolean |
| Tree | gr-notification |
| Description | <p>When configured to true, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to false, NOTIFICATION messages are not supported.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

long-lived

| | |
|------------|---|
| Synopsis | Enable the long-lived context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) graceful-restart long-lived |
| Tree | long-lived |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-stale-to-all-neighbors *boolean*

| | |
|----------|---|
| Synopsis | Advertise stale routes to all BGP peers |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertise-stale-to-all-neighbors <i>boolean</i> |
| Tree | advertise-stale-to-all-neighbors |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

advertised-stale-time *number*

| | |
|------------|--|
| Synopsis | Advertised long-lived stale time for LLGR routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived advertised-stale-time <i>number</i> |
| Tree | advertised-stale-time |
| Range | 0 to 16777215 |
| Default | 86400 |
| Introduced | 16.0.R1 |
| Platforms | All |

family [*family-type*] *keyword*

| | |
|------------|--|
| Synopsis | Enter the family list instance |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i> |
| Tree | family |
| Introduced | 16.0.R1 |
| Platforms | All |

[*family-type*] *keyword*

| | |
|------------|--|
| Synopsis | Address family type for LLGR |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived family <i>keyword</i> |
| Tree | family |
| Options | ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

advertised-stale-time *number*

Synopsis LLGR stale routes time for family override

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived family** *keyword* **advertised-stale-time** *number*

Tree [advertised-stale-time](#)

Description This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.
This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.

Range 0 to 16777215

Default 86400

Introduced 16.0.R1

Platforms All

helper-override-stale-time *number*

Synopsis Locally-configured stale routes override time

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived family** *keyword* **helper-override-stale-time** *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.

Range 0 to 16777216

Default 16777216

Introduced 16.0.R1

Platforms All

forwarding-bits-set *keyword*

Synopsis BGP LLGR forwarding-bit behavior for address family

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **graceful-restart long-lived forwarding-bits-set** *keyword*

Tree [forwarding-bits-set](#)

| | |
|-------------|---|
| Description | <p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p> |
| Default | none |
| Options | none, all, non-fwd |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-override-restart-time *number*

| | |
|-------------|--|
| Synopsis | Locally-configured override for restart time |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-restart-time <i>number</i> |
| Tree | helper-override-restart-time |
| Description | <p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p> |
| Range | 0 to 4095 |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-override-stale-time *number*

| | |
|-------------|--|
| Synopsis | Locally-configured stale routes override time |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived helper-override-stale-time <i>number</i> |
| Tree | helper-override-stale-time |
| Description | <p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p> <p>This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.</p> |
| Range | 0 to 16777215 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

without-no-export *boolean*

| | |
|-------------|---|
| Synopsis | Advertise LLGR stale routes to non-LLGR peers |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart long-lived without-no-export <i>boolean</i> |
| Tree | without-no-export |
| Description | <p>When configured to true, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to false, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

restart-time *number*

| | |
|------------|---|
| Synopsis | Restart time advertised by GR capability |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart restart-time <i>number</i> |
| Tree | restart-time |
| Range | 0 to 4095 |
| Default | 300 |
| Introduced | 16.0.R1 |
| Platforms | All |

stale-routes-time *number*

| | |
|----------|--|
| Synopsis | Maximum time to maintain routes after graceful restart |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) graceful-restart stale-routes-time <i>number</i> |

| | |
|------------|-----------------------------------|
| Tree | stale-routes-time |
| Range | 1 to 3600 |
| Default | 360 |
| Introduced | 16.0.R1 |
| Platforms | All |

group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Neighbor to group |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) group reference |
| Tree | group |
| Reference | configure service vprn <i>string</i> bgp group <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-time

| | |
|------------|--|
| Synopsis | Enter the hold-time context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | All |

minimum-hold-time *number*

| | |
|----------|--|
| Synopsis | Minimum time BGP waits between successive messages |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time minimum-hold-time <i>number</i> |
| Tree | minimum-hold-time |
| Range | 0 3 to 65536 |

| | |
|------------|---------|
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|-------------|---|
| Synopsis | Maximum hold time between successive messages |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) hold-time seconds <i>number</i> |
| Tree | seconds |
| Description | <p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none"> • If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed. • If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer. <p>When unconfigured, the command setting is inherited from the BGP group-level configuration.</p> |
| Range | 0 3 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

import

| | |
|------------|--|
| Synopsis | Enable the import context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import |
| Tree | import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Route policy name |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-send-delay-zero *boolean*

| | |
|-------------|--|
| Synopsis | Send BGP updates as soon as the session comes up |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) initial-send-delay-zero <i>boolean</i> |
| Tree | initial-send-delay-zero |
| Description | When configured to true , BGP updates are sent as soon as the session comes up.
When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false .
When this command inherits a value of false , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established. |
| Introduced | 16.0.R1 |
| Platforms | All |

keepalive *number*

| | |
|------------|--|
| Synopsis | Time after which the BGP KEEPALIVE message is sent |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) keepalive <i>number</i> |
| Tree | keepalive |
| Range | 0 to 21845 |
| Introduced | 16.0.R1 |
| Platforms | All |

label-preference *number*

| | |
|------------|--|
| Synopsis | Route preference for routes from labeled-unicast peers |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) label-preference number |
| Tree | label-preference |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

link-bandwidth

| | |
|------------|---|
| Synopsis | Enter the link-bandwidth context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth |
| Tree | link-bandwidth |
| Introduced | 16.0.R3 |
| Platforms | All |

accept-from-ebgp

| | |
|------------|--|
| Synopsis | Enable the accept-from-ebgp context |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp |
| Tree | accept-from-ebgp |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Support Link Bandwidth EC in IPv4 routes |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth accept-from-ebgp ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R4 |

Platforms All

ipv6 *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** **service** **vprn** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth** **accept-from-ebgp** **ipv6** *boolean*

Tree [ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

label-ipv4 *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure** **service** **vprn** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth** **accept-from-ebgp** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

add-to-received-ebgp

Synopsis Enable the **add-to-received-ebgp** context

Context **configure** **service** **vprn** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth** **add-to-received-ebgp**

Tree [add-to-received-ebgp](#)

Introduced 16.0.R3

Platforms All

ipv4 *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** **service** **vprn** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth** **add-to-received-ebgp** **ipv4** *boolean*

Tree [ipv4](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in label-IPv4 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth add-to-received-ebgp label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

aggregate-used-paths

| | |
|------------|---|
| Synopsis | Enable the aggregate-used-paths context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths |
| Tree | aggregate-used-paths |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv4 *boolean*

| | |
|----------|--|
| Synopsis | Support Link Bandwidth EC in IPv4 routes |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

label-ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in label-IPv4 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth aggregate-used-paths label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

send-to-ebgp

| | |
|------------|--|
| Synopsis | Enable the send-to-ebgp context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp |
| Tree | send-to-ebgp |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv4 boolean

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in IPv4 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6 boolean

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in IPv6 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp ipv6 boolean |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

label-ipv4 boolean

| | |
|------------|--|
| Synopsis | Support Link Bandwidth EC in label-IPv4 routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) link-bandwidth send-to-ebgp label-ipv4 boolean |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

| | |
|---------------|--|
| Synopsis | Local IP address used when communicating with BGP peers |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>interface-name</i>) |
| Tree | local-address |
| String Length | 1 to 32 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

local-as

| | |
|------------|--|
| Synopsis | Enter the local-as context |
| Context | configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) local-as |
| Tree | local-as |
| Introduced | 16.0.R1 |
| Platforms | All |

as-number *number*

| | |
|------------|--|
| Synopsis | Local (or virtual) BGP AS number |
| Context | configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) local-as as-number <i>number</i> |
| Tree | as-number |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

prepend-global-as *boolean*

| | |
|-------------|--|
| Synopsis | Prepend global ASN when advertising routes to BGP peer |
| Context | configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) local-as prepend-global-as <i>boolean</i> |
| Tree | prepend-global-as |
| Description | When configured to true , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.
When configured to false , the global ASN is not included in the AS_PATH attribute. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

private *boolean*

| | |
|-------------|--|
| Synopsis | Hide the local ASN in sent paths learned from peering |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-as private <i>boolean</i> |
| Tree | private |
| Description | When configured to true , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions.
When configured to false , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

local-preference *number*

| | |
|------------|--|
| Synopsis | Default local preference if not in incoming routes |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) local-preference <i>number</i> |
| Tree | local-preference |
| Range | 0 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

loop-detect *keyword*

| | |
|------------|--|
| Synopsis | Strategy for loop detection in the AS path |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect <i>keyword</i> |
| Tree | loop-detect |
| Options | drop-peer, ignore-loop, off, discard-route |
| Introduced | 16.0.R1 |
| Platforms | All |

loop-detect-threshold *number*

| | |
|----------|--|
| Synopsis | Threshold for the global ASN in a received AS path |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) loop-detect-threshold <i>number</i> |
| Tree | loop-detect-threshold |
| Range | 0 to 15 |
| Introduced | 16.0.R6 |
| Platforms | All |

med-out (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Default MED attribute value to advertise to peers |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) med-out (<i>number</i> <i>keyword</i>) |
| Tree | med-out |
| Max. Range | 0 to 4294967295 |
| Options | igp-cost |
| Introduced | 16.0.R1 |
| Platforms | All |

min-route-advertisement *number*

| | |
|------------|--|
| Synopsis | Minimum interval between successive prefix updates |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) min-route-advertisement <i>number</i> |
| Tree | min-route-advertisement |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor

| | |
|------------|--|
| Synopsis | Enable the monitor context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor |
| Tree | monitor |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BMP monitoring |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

all-stations *boolean*

| | |
|-------------|--|
| Synopsis | Send BMP messages to all configured stations |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor all-stations <i>boolean</i> |
| Tree | all-stations |
| Description | <p>When configured to true, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to false, the command is not used to indicate the stations which can receive BMP messages. The station command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

route-monitoring

| | |
|------------|---|
| Synopsis | Enter the route-monitoring context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring |
| Tree | route-monitoring |
| Introduced | 16.0.R1 |
| Platforms | All |

post-policy *boolean*

| | |
|------------|---|
| Synopsis | Allow post-policy route-monitoring messages to be sent |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring post-policy <i>boolean</i> |
| Tree | post-policy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pre-policy *boolean*

| | |
|------------|--|
| Synopsis | Allow pre-policy route-monitoring messages to be sent |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor route-monitoring pre-policy <i>boolean</i> |
| Tree | pre-policy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

station [[station-name](#)] *reference*

| | |
|----------------|--|
| Synopsis | Add a list entry for station |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station <i>reference</i> |
| Tree | station |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

[station-name] *reference*

| | |
|----------|--|
| Synopsis | BMP monitoring station |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) monitor station <i>reference</i> |
| Tree | station |

| | |
|------------|---|
| Reference | configure bmp station string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

multihop *number*

| | |
|------------|--|
| Synopsis | TTL in IP packet headers for EBGPeers multi-hops away |
| Context | configure service vpn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) multihop number |
| Tree | multihop |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

multipath-eligible *boolean*

| | |
|------------|---|
| Synopsis | Allow routes from this peer in multipath eligibility |
| Context | configure service vpn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) multipath-eligible boolean |
| Tree | multipath-eligible |
| Introduced | 19.5.R1 |
| Platforms | All |

next-hop-self *boolean*

| | |
|-------------|--|
| Synopsis | Advertise routes with local address as next-hop address |
| Context | configure service vpn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) next-hop-self boolean |
| Tree | next-hop-self |
| Description | <p>When configured to true, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the configure router bgp rr-vpn-forwarding command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> |

When this command inherits a value of **false**, protocol standard behavior is applied to determine whether to set **next-hop-self** in advertised routes.

Introduced 16.0.R1
 Platforms All

origin-validation

Synopsis Enable the **origin-validation** context
 Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) origin-validation**
 Tree [origin-validation](#)
 Introduced 19.7.R1
 Platforms All

ipv4 boolean

Synopsis Enable support for unlabeled unicast IPv4 routes
 Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) origin-validation ipv4 boolean**
 Tree [ipv4](#)
 Default false
 Introduced 19.7.R1
 Platforms All

ipv6 boolean

Synopsis Enable support for unlabeled unicast IPv6 routes
 Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) origin-validation ipv6 boolean**
 Tree [ipv6](#)
 Default false
 Introduced 19.7.R1
 Platforms All

label-ipv4 boolean

Synopsis Enable support for labeled-unicast IPv4 routes

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) origin-validation label-ipv4 <i>boolean</i> |
| Tree | label-ipv4 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

passive *boolean*

| | |
|------------|---|
| Synopsis | Use passive mode for BGP communication |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) passive <i>boolean</i> |
| Tree | passive |
| Introduced | 16.0.R1 |
| Platforms | All |

path-mtu-discovery *boolean*

| | |
|-------------|---|
| Synopsis | Enable path MTU discovery |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) path-mtu-discovery <i>boolean</i> |
| Tree | path-mtu-discovery |
| Description | <p>When configured to true, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to true, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to false and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-as *number*

| | |
|-------------|---|
| Synopsis | Peer AS number |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-as <i>number</i> |
| Tree | peer-as |
| Description | <p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p> |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-creation-type *keyword*

| | |
|------------|---|
| Synopsis | Peer creation type |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-creation-type <i>keyword</i> |
| Tree | peer-creation-type |
| Default | static |
| Options | static, dynamic, dynamic-if-remote, dynamic-if-local |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-ip-tracking *boolean*

| | |
|-------------|---|
| Synopsis | Enable BGP peer tracking |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) peer-ip-tracking <i>boolean</i> |
| Tree | peer-ip-tracking |
| Description | <p>When configured to true, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> |

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, peer tracking is disabled.

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

preference number

| | |
|-------------|---|
| Synopsis | Route preference for routes learned from all peers |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) preference number |
| Tree | preference |
| Description | This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

When unconfigured, the command setting is inherited from the group-level configuration. |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-limit [family] keyword

| | |
|------------|--|
| Synopsis | Enter the prefix-limit list instance |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) prefix-limit keyword |
| Tree | prefix-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

[family] keyword

| | |
|----------|--|
| Synopsis | Address family to which the limit applies |
| Context | configure service vprn string bgp neighbor (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) prefix-limit keyword |
| Tree | prefix-limit |

| | |
|------------|--|
| Options | ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

idle-timeout *number*

| | |
|-------------|---|
| Synopsis | Time which BGP peering remains idle before reconnecting |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> idle-timeout <i>number</i> |
| Tree | idle-timeout |
| Description | This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer.

When unconfigured, the command inherits the value from the group-level configuration. |
| Range | 1 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|------------|---|
| Synopsis | Send warning message at threshold instead of take-down |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> log-only <i>boolean</i> |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum *number*

| | |
|-------------|---|
| Synopsis | Maximum number of routes to be learned from a peer |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> maximum <i>number</i> |
| Tree | maximum |
| Description | This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken. |

| | |
|------------|----------------------------|
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R2 |
| Platforms | All |

post-import *boolean*

| | |
|------------|---|
| Synopsis | Apply limit only to routes accepted by import policies |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> post-import <i>boolean</i> |
| Tree | post-import |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|--|
| Synopsis | Percentage threshold that triggers a warning message |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-limit <i>keyword</i> threshold <i>number</i> |
| Tree | threshold |
| Range | 1 to 100 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | All |

remove-private

| | |
|------------|--|
| Synopsis | Enable the remove-private context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private |
| Tree | remove-private |
| Introduced | 16.0.R1 |
| Platforms | All |

limited *boolean*

| | |
|------------|---|
| Synopsis | Remove private ASNs up to first public ASN encountered |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private limited <i>boolean</i> |
| Tree | limited |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

replace *boolean*

| | |
|------------|---|
| Synopsis | Replace private ASN with global ASN before advertising |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private replace <i>boolean</i> |
| Tree | replace |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

skip-peer-as *boolean*

| | |
|------------|--|
| Synopsis | Keep private ASN if it is the same as the BGP peer ASN |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) remove-private skip-peer-as <i>boolean</i> |
| Tree | skip-peer-as |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

send-communities

| | |
|------------|--|
| Synopsis | Enter the send-communities context |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-communities |
| Tree | send-communities |
| Introduced | 16.0.R1 |

Platforms All

extended *boolean*

Synopsis Advertise the Extended Communities attribute to peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **send-communities extended** *boolean*

Tree **extended**

Description When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP extended communities are sent to peers in the Extended Communities attribute.

When configured to **false**, all extended communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

large *boolean*

Synopsis Advertise the Large Communities attribute to peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **send-communities large** *boolean*

Tree **large**

Description When unconfigured, this command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.

When this command inherits a value of **true**, BGP large communities are sent to peers in the Large Communities attribute.

When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1

Platforms All

standard *boolean*

Synopsis Advertise the Communities attribute to peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **send-communities standard** *boolean*

Tree **standard**

| | |
|-------------|--|
| Description | <p>When unconfigured, this command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to true.</p> <p>When this command inherits a value of true, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to false, all standard communities are removed from all routes advertised to BGP peers.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

send-default

| | |
|------------|--|
| Synopsis | Enable the send-default context |
| Context | configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) send-default |
| Tree | send-default |
| Introduced | 19.7.R1 |
| Platforms | All |

export-policy *reference*

| | |
|------------|---|
| Synopsis | Export policy name |
| Context | configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) send-default export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement string |
| Introduced | 19.7.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Enable IPv4 family type |
| Context | configure service vprn string bgp neighbor (ipv4-address-with-zone ipv6-address-with-zone) send-default ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Enable IPv6 family type |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) send-default ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|--|
| Synopsis | Prevent routes being reflected back to best-route peer |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | <p>When configured to true, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (true or false). The command cannot be explicitly configured to false.</p> <p>When this command inherits a value of false, the use of split-horizon is disabled.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

tcp-mss (*number* | *keyword*)

| | |
|-------------|--|
| Synopsis | TCP maximum segment size override |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tcp-mss (<i>number</i> <i>keyword</i>) |
| Tree | tcp-mss |
| Description | <p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> |

TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

| | |
|------------|-------------|
| Range | 384 to 9746 |
| Options | ip-stack |
| Introduced | 21.2.R1 |
| Platforms | All |

third-party-nexthop *boolean*

| | |
|------------|--|
| Synopsis | Apply third-party next-hop processing to EBGP peers |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) third-party-nexthop <i>boolean</i> |
| Tree | third-party-nexthop |
| Introduced | 16.0.R1 |
| Platforms | All |

ttl-security *number*

| | |
|-------------|---|
| Synopsis | Minimum TTL value for an incoming BGP packet |
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) ttl-security <i>number</i> |
| Tree | ttl-security |
| Description | This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

When unconfigured, the command inherits the value of the group-level setting. |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword*

| | |
|----------|---------------|
| Synopsis | BGP peer type |
|----------|---------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp neighbor (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) <i>type</i> <i>keyword</i> |
| Tree | type |
| Options | no-type, internal, external |
| Introduced | 16.0.R1 |
| Platforms | All |

next-hop-resolution

| | |
|------------|--|
| Synopsis | Enter the next-hop-resolution context |
| Context | configure service vprn <i>string</i> bgp next-hop-resolution |
| Tree | next-hop-resolution |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|------------|---|
| Synopsis | Policy that filters routes for BGP next-hop resolution |
| Context | configure service vprn <i>string</i> bgp next-hop-resolution policy reference |
| Tree | policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

use-bgp-routes *boolean*

| | |
|-------------|--|
| Synopsis | Use BGP routes to resolve BGP next hops |
| Context | configure service vprn <i>string</i> bgp next-hop-resolution use-bgp-routes <i>boolean</i> |
| Tree | use-bgp-routes |
| Description | <p>When configured to true, BGP routes resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p> <p>When configured to false, BGP next hops are not resolved.</p> |

| | |
|------------|----------|
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

path-mtu-discovery *boolean*

| | |
|-------------|---|
| Synopsis | Enable Path MTU Discovery |
| Context | configure service vprn <i>string</i> bgp path-mtu-discovery <i>boolean</i> |
| Tree | path-mtu-discovery |
| Description | When configured to true , Path MTU Discovery (PMTUD) is enabled for the associated TCP connections. |

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When PMTUD is configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-ip-tracking *boolean*

| | |
|------------|---|
| Synopsis | Enable BGP peer tracking |
| Context | configure service vprn <i>string</i> bgp peer-ip-tracking <i>boolean</i> |
| Tree | peer-ip-tracking |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

peer-tracking-policy *reference*

| | |
|----------|---|
| Synopsis | Policy for BGP peer tracking on router instance |
|----------|---|

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> bgp peer-tracking-policy <i>reference</i> |
| Tree | peer-tracking-policy |
| Description | <p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p> <p>Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.</p> |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|-------------|---|
| Synopsis | Route preference for routes learned from all peers |
| Context | configure service vprn <i>string</i> bgp preference <i>number</i> |
| Tree | preference |
| Description | <p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p> |
| Range | 1 to 255 |
| Default | 170 |
| Introduced | 16.0.R1 |
| Platforms | All |

rapid-withdrawal *boolean*

| | |
|-------------|---|
| Synopsis | Send BGP withdrawal UPDATE messages immediately |
| Context | configure service vprn <i>string</i> bgp rapid-withdrawal <i>boolean</i> |
| Tree | rapid-withdrawal |
| Description | <p>When configured to true, UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.</p> <p>When configured to false, withdrawal processing continues with the normal behavior.</p> |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

remove-private

| | |
|------------|---|
| Synopsis | Enable the remove-private context |
| Context | configure service vprn string bgp remove-private |
| Tree | remove-private |
| Introduced | 16.0.R1 |
| Platforms | All |

limited boolean

| | |
|------------|---|
| Synopsis | Remove private ASNs up to first public ASN encountered |
| Context | configure service vprn string bgp remove-private limited boolean |
| Tree | limited |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

replace boolean

| | |
|------------|---|
| Synopsis | Replace private ASN with global ASN before advertising |
| Context | configure service vprn string bgp remove-private replace boolean |
| Tree | replace |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

skip-peer-as boolean

| | |
|----------|--|
| Synopsis | Keep private ASN if AS-PATH contains eBGP peer's ASN |
| Context | configure service vprn string bgp remove-private skip-peer-as boolean |
| Tree | skip-peer-as |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rib-management

| | |
|------------|---|
| Synopsis | Enter the rib-management context |
| Context | configure service vprn string bgp rib-management |
| Tree | rib-management |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn string bgp rib-management ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

leak-import

| | |
|------------|--|
| Synopsis | Enter the leak-import context |
| Context | configure service vprn string bgp rib-management ipv4 leak-import |
| Tree | leak-import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|-------------|---|
| Synopsis | Leak import policy name |
| Context | configure service vprn string bgp rib-management ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | This command specifies one or more leak import policies. |

Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

| | |
|----------------|--------------------------------------|
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

route-table-import

| | |
|------------|---|
| Synopsis | Enter the route-table-import context |
| Context | configure service vprn string bgp rib-management ipv4 route-table-import |
| Tree | route-table-import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|-------------|---|
| Synopsis | Name of policy that controls route importation into RIB |
| Context | configure service vprn string bgp rib-management ipv4 route-table-import policy-name <i>reference</i> |
| Tree | policy-name |
| Description | <p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p> |
| Reference | configure policy-options policy-statement string |
| Introduced | 16.0.R1 |

Platforms All

ipv6

Synopsis Enter the **ipv6** context

Context **configure service vprn string bgp rib-management ipv6**

Tree [ipv6](#)

Introduced 16.0.R1

Platforms All

leak-import

Synopsis Enter the **leak-import** context

Context **configure service vprn string bgp rib-management ipv6 leak-import**

Tree [leak-import](#)

Introduced 16.0.R1

Platforms All

policy (*policy-expr-string* | *string*)

Synopsis Leak import policy name

Context **configure service vprn string bgp rib-management ipv6 leak-import policy (*policy-expr-string* | *string*)**

Tree [policy](#)

Description This command specifies one or more leak import policies.
Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

String Length 1 to 255

Max. Instances 15

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

route-table-import

| | |
|------------|---|
| Synopsis | Enter the route-table-import context |
| Context | configure service vprn string bgp rib-management ipv6 route-table-import |
| Tree | route-table-import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|-------------|---|
| Synopsis | Name of policy that controls route importation into RIB |
| Context | configure service vprn string bgp rib-management ipv6 route-table-import policy-name <i>reference</i> |
| Tree | policy-name |
| Description | <p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p> |
| Reference | configure policy-options policy-statement string |
| Introduced | 16.0.R1 |
| Platforms | All |

label-ipv4

| | |
|------------|--|
| Synopsis | Enter the label-ipv4 context |
| Context | configure service vprn string bgp rib-management label-ipv4 |
| Tree | label-ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

leak-import

| | |
|------------|---|
| Synopsis | Enter the leak-import context |
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv4 leak-import |
| Tree | leak-import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Leak import policy name |
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv4 leak-import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | This command specifies one or more leak import policies.

Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

route-table-import

| | |
|------------|--|
| Synopsis | Enter the route-table-import context |
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv4 route-table-import |
| Tree | route-table-import |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|----------|---|
| Synopsis | Name of policy that controls route importation into RIB |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv4 route-table-import policy-name <i>reference</i> |
| Tree | policy-name |
| Description | <p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p> |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

label-ipv6

| | |
|------------|--|
| Synopsis | Enter the label-ipv6 context |
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv6 |
| Tree | label-ipv6 |
| Introduced | 22.2.R1 |
| Platforms | All |

leak-import

| | |
|------------|--|
| Synopsis | Enter the leak-import context |
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv6 leak-import |
| Tree | leak-import |
| Introduced | 22.2.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Leak import policy name |
| Context | configure service vprn <i>string</i> bgp rib-management label-ipv6 leak-import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | This command specifies one or more leak import policies.

Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Notes | This element is ordered by the user. |
| Introduced | 22.2.R1 |
| Platforms | All |

router-id *string*

| | |
|-------------|--|
| Synopsis | Router ID for the BGP instance in the AS |
| Context | configure service vprn <i>string</i> bgp router-id <i>string</i> |
| Tree | router-id |
| Description | This command specifies the router ID to be used with the BGP instance.

Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.

When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address. |
| Introduced | 16.0.R1 |
| Platforms | All |

send-communities

| | |
|------------|--|
| Synopsis | Enter the send-communities context |
| Context | configure service vprn <i>string</i> bgp send-communities |
| Tree | send-communities |
| Introduced | 16.0.R1 |
| Platforms | All |

extended *boolean*

| | |
|------------|---|
| Synopsis | Advertise the Extended Communities attribute to peers |
| Context | configure service vprn string bgp send-communities extended <i>boolean</i> |
| Tree | extended |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

large *boolean*

| | |
|------------|--|
| Synopsis | Advertise the Large Communities attribute to peers |
| Context | configure service vprn string bgp send-communities large <i>boolean</i> |
| Tree | large |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

standard *boolean*

| | |
|------------|---|
| Synopsis | Advertise the Communities attribute to peers |
| Context | configure service vprn string bgp send-communities standard <i>boolean</i> |
| Tree | standard |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

send-default

| | |
|------------|---|
| Synopsis | Enter the send-default context |
| Context | configure service vprn string bgp send-default |
| Tree | send-default |
| Introduced | 19.7.R1 |
| Platforms | All |

export-policy *reference*

| | |
|------------|---|
| Synopsis | Export policy name |
| Context | configure service vprn <i>string</i> bgp send-default export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Enable IPv4 family type |
| Context | configure service vprn <i>string</i> bgp send-default ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Enable IPv6 family type |
| Context | configure service vprn <i>string</i> bgp send-default ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|--|
| Synopsis | Prevent routes being reflected back to best-route peer |
| Context | configure service vprn <i>string</i> bgp split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | When configured to true , this command enables the use of split-horizon.

This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP. |

Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.

When configured to **false**, the use of split-horizon is disabled.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tcp-mss number

| | |
|-------------|---|
| Synopsis | TCP maximum segment size override |
| Context | configure service vprn string bgp tcp-mss number |
| Tree | tcp-mss |
| Description | <p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p> |
| Range | 384 to 9746 |
| Introduced | 21.2.R1 |
| Platforms | All |

third-party-nexthop boolean

| | |
|-------------|---|
| Synopsis | Apply third-party next-hop processing to EBGp peers |
| Context | configure service vprn string bgp third-party-nexthop boolean |
| Tree | third-party-nexthop |
| Description | <p>When configured to true, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to false, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p> |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-evpn

| | |
|------------|---|
| Synopsis | Enter the bgp-evpn context |
| Context | configure service vprn string bgp-evpn |
| Tree | bgp-evpn |
| Introduced | 20.10.R1 |
| Platforms | All |

mpls [**bgp-instance**] *number*

| | |
|------------|---|
| Synopsis | Enter the mpls list instance |
| Context | configure service vprn string bgp-evpn mpls number |
| Tree | mpls |
| Introduced | 20.10.R1 |
| Platforms | All |

[**bgp-instance**] *number*

| | |
|------------|---|
| Synopsis | BGP instance ID |
| Context | configure service vprn string bgp-evpn mpls number |
| Tree | mpls |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of BGP-EVPN MPLS |
| Context | configure service vprn string bgp-evpn mpls number admin-state keyword |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | All |

auto-bind-tunnel

| | |
|-------------|--|
| Synopsis | Enter the auto-bind-tunnel context |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel |
| Tree | auto-bind-tunnel |
| Description | Commands in this context configure the automatic binding parameters of a BGP-EVPN service using tunnels to MP-BGP peers. |
| Introduced | 20.10.R1 |
| Platforms | All |

allow-flex-algo-fallback *boolean*

| | |
|-------------|---|
| Synopsis | Enable flexible algorithm fallback |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel allow-flex-algo-fallback boolean |
| Tree | allow-flex-algo-fallback |
| Description | <p>When configured to true, a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to false, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p> |
| Default | false |
| Introduced | 20.10.R3 |
| Platforms | All |

ecmp *number*

| | |
|----------|--|
| Synopsis | Maximum ECMP routes allowed |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel ecmp number |
| Tree | ecmp |
| Range | 1 to 32 |

| | |
|------------|----------|
| Default | 1 |
| Introduced | 20.10.R1 |
| Platforms | All |

enforce-strict-tunnel-tagging *boolean*

| | |
|------------|--|
| Synopsis | Allow enforcement of strict tunnel tagging |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i> |
| Tree | enforce-strict-tunnel-tagging |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

resolution *keyword*

| | |
|------------|---|
| Synopsis | Resolution method for tunnel selection |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution <i>keyword</i> |
| Tree | resolution |
| Default | none |
| Options | none, filter, any |
| Introduced | 20.10.R1 |
| Platforms | All |

resolution-filter

| | |
|-------------|---|
| Synopsis | Enter the resolution-filter context |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter |
| Tree | resolution-filter |
| Description | Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-EVPN routes within the automatic binding of the BGP-EVPN MPLS service to tunnels to MP-BGP peers. |
| Introduced | 20.10.R1 |
| Platforms | All |

bgp *boolean*

| | |
|-------------|---|
| Synopsis | Use BGP tunneling for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter
bgp <i>boolean</i> |
| Tree | bgp |
| Description | When configured to true , BGP searches the BGP LSP for the address of the BGP next hop.

When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

ldp *boolean*

| | |
|-------------|--|
| Synopsis | Use LDP tunneling for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter
ldp <i>boolean</i> |
| Tree | ldp |
| Description | When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.

When configured to false , LDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

mpls-fwd-policy *boolean*

| | |
|-------------|---|
| Synopsis | Use MPLS forwarding policy for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter
mpls-fwd-policy <i>boolean</i> |
| Tree | mpls-fwd-policy |
| Description | When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.

When configured to false , the MPLS forwarding policy is not used for next-hop resolution. |
| Default | false |

| | |
|------------|----------|
| Introduced | 20.10.R1 |
| Platforms | All |

rib-api *boolean*

| | |
|-------------|---|
| Synopsis | Use RIB API gRPC service for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
rib-api <i>boolean</i> |
| Tree | rib-api |
| Description | When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.

When configured to false , the RIB API service tunnels are not used for next-hop resolution. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

rsvp *boolean*

| | |
|-------------|---|
| Synopsis | Use RSVP tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
rsvp <i>boolean</i> |
| Tree | rsvp |
| Description | When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.

When configured to false , the RSVP LSP is not used for next-hop resolution. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

sr-isis *boolean*

| | |
|----------|--|
| Synopsis | Use IS-IS SR tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> auto-bind-tunnel resolution-filter
sr-isis <i>boolean</i> |

| | |
|-------------|--|
| Tree | sr-isis |
| Description | <p>When configured to true, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.</p> <p>When configured to false, IS-IS tunneling is not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

sr-ospf boolean

| | |
|-------------|---|
| Synopsis | Use OSPF SR tunneling for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf boolean |
| Tree | sr-ospf |
| Description | <p>When configured to true, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.</p> <p>When configured to false, OSPF tunneling is not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

sr-ospf3 boolean

| | |
|-------------|--|
| Synopsis | Use OSPFv3 SR tunneling for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf3 boolean |
| Tree | sr-ospf3 |
| Description | <p>When configured to true, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.</p> <p>When configured to false, OSPF3 tunneling is not used for next-hop resolution.</p> |
| Default | false |

| | |
|------------|----------|
| Introduced | 20.10.R1 |
| Platforms | All |

sr-policy *boolean*

| | |
|-------------|---|
| Synopsis | Use SR policies for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-policy <i>boolean</i> |
| Tree | sr-policy |
| Description | <p>When configured to true, this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.</p> <p>When configured to false, SR policies are not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

sr-te *boolean*

| | |
|-------------|---|
| Synopsis | Use SR-TE tunneling for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-te <i>boolean</i> |
| Tree | sr-te |
| Description | <p>When configured to true, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.</p> <p>When configured to false, SR-TE tunneling is not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

udp *boolean*

| | |
|----------|--|
| Synopsis | Use MPLS over UDP tunneling for next-hop resolution |
| Context | configure service vprn string bgp-evpn mpls number auto-bind-tunnel resolution-filter udp <i>boolean</i> |

| | |
|-------------|--|
| Tree | udp |
| Description | When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.
When configured to false , MPLS over UDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> default-route-tag <i>string</i> |
| Tree | default-route-tag |
| Description | This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.

When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.

The following are examples of the conflict priority handling: <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero. |
| Introduced | 20.10.R1 |
| Platforms | All |

domain-id string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Domain ID of received BGP route before readvertisement |
| Context | configure service vprn string bgp-evpn mpls number domain-id string |
| Tree | domain-id |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> |
| Introduced | 21.10.R1 |
| Platforms | All |

dynamic-egress-label-limit boolean

| | |
|-------------|---|
| Synopsis | Enables dynamic egress label limit |
| Context | configure service vprn string bgp-evpn mpls number dynamic-egress-label-limit boolean |
| Tree | dynamic-egress-label-limit |
| Description | <p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> |

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

| | |
|------------|---------|
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

evi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | EVPN instance ID |
| Context | configure service vprn string bgp-evpn mpls number evi number |
| Tree | evi |
| Description | This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment. |
| Range | 1 to 16777215 |
| Introduced | 22.10.R1 |
| Platforms | All |

evpn-link-bandwidth

| | |
|------------|---|
| Synopsis | Enter the evpn-link-bandwidth context |
| Context | configure service vprn string bgp-evpn mpls number evpn-link-bandwidth |
| Tree | evpn-link-bandwidth |
| Introduced | 22.7.R1 |
| Platforms | All |

advertise

| | |
|----------|-------------------------------------|
| Synopsis | Enable the advertise context |
|----------|-------------------------------------|

| | |
|------------|---|
| Context | configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise |
| Tree | advertise |
| Introduced | 22.7.R1 |
| Platforms | All |

max-dynamic-weight *number*

| | |
|-------------|---|
| Synopsis | Maximum dynamic weight of the route |
| Context | configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise max-dynamic-weight number |
| Tree | max-dynamic-weight |
| Description | This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If weight dynamic is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight. |
| Range | 1 to 128 |
| Default | 128 |
| Introduced | 22.7.R1 |
| Platforms | All |

weight (*number* | *keyword*)

| | |
|-------------|---|
| Synopsis | Weight of the route |
| Context | configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise weight (number keyword) |
| Tree | weight |
| Description | This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service.

If set to dynamic , the weight is dynamically set based on the number of BGP PE-CE paths for the IP-Prefix that is advertised in an EVPN IP-Prefix route. |
| Range | 1 to 128 |
| Default | dynamic |
| Options | dynamic |
| Introduced | 22.7.R1 |
| Platforms | All |

weighted-ecmp *boolean*

| | |
|-------------|--|
| Synopsis | Enable weighted ECMP |
| Context | configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> evpn-link-bandwidth weighted-ecmp <i>boolean</i> |
| Tree | weighted-ecmp |
| Description | <p>When configured to true, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.</p> <p>Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).</p> <p>The command also enables the weighted ECMP functionality for BGP CEs that are configured with an evpn-link-bandwidth add-to-received-bgp weight.</p> <p>When configured to false, the router disables the processing of the EVPN link bandwidth extended community.</p> |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | All |

route-distinguisher (*string* | *keyword*)

| | |
|-------------|--|
| Synopsis | Route distinguisher |
| Context | configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> route-distinguisher (<i>string</i> <i>keyword</i>) |
| Tree | route-distinguisher |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to. |
| Options | auto-rd |
| Introduced | 20.10.R1 |
| Platforms | All |

send-tunnel-encap

| | |
|------------|--|
| Synopsis | Enter the send-tunnel-encap context |
| Context | configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> send-tunnel-encap |
| Tree | send-tunnel-encap |
| Introduced | 20.10.R1 |

Platforms All

mpls *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS encapsulation

Context **configure** [service vprn string](#) [bgp-evpn mpls number](#) [send-tunnel-encap mpls boolean](#)

Tree [mpls](#)

Default true

Introduced 20.10.R1

Platforms All

mpls-over-udp *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS over UDP encapsulation

Context **configure** [service vprn string](#) [bgp-evpn mpls number](#) [send-tunnel-encap mpls-over-udp boolean](#)

Tree [mpls-over-udp](#)

Default false

Introduced 20.10.R1

Platforms All

vrf-export

Synopsis Enable the **vrf-export** context

Context **configure** [service vprn string](#) [bgp-evpn mpls number](#) [vrf-export](#)

Tree [vrf-export](#)

Introduced 20.10.R1

Platforms All

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 20.10.R1 |
| Platforms | All |

vrf-import

| | |
|------------|---|
| Synopsis | Enable the vrf-import context |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-import |
| Tree | vrf-import |
| Introduced | 20.10.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------|-------------|
| Synopsis | Policy name |
|----------|-------------|

| | |
|----------------|--|
| Context | configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> vrf-import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 20.10.R1 |
| Platforms | All |

vrf-target

| | |
|-------------|---|
| Synopsis | Enter the vrf-target context |
| Context | configure service vpn <i>string</i> bgp-evpn mpls <i>number</i> vrf-target |
| Tree | vrf-target |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced | 20.10.R1 |
| Platforms | All |

community *string*

| | |
|---------------|--|
| Synopsis | Extended BGP community |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-target community <i>string</i> |
| Tree | community |
| Description | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 20.10.R1 |
| Platforms | All |

export-community *string*

| | |
|---------------|---|
| Synopsis | Communities sent to remote PE neighbors |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-target export-community <i>string</i> |
| Tree | export-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 20.10.R1 |
| Platforms | All |

import-community *string*

| | |
|---------------|---|
| Synopsis | Communities accepted from remote PE neighbors |
| Context | configure service vprn <i>string</i> bgp-evpn mpls <i>number</i> vrf-target import-community <i>string</i> |
| Tree | import-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 20.10.R1 |
| Platforms | All |

segment-routing-v6 [**bgp-instance**] *number*

| | |
|------------|---|
| Synopsis | Enter the segment-routing-v6 list instance |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[bgp-instance] *number*

| | |
|------------|---|
| Synopsis | BGP instance |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Range | 1 |
| Notes | This element is part of a list key. |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of segment routing over IPv6 |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-route-tag *string*

| | |
|----------|--|
| Synopsis | Default route tag |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> default-route-tag <i>string</i> |
| Tree | default-route-tag |

| | |
|-------------|--|
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag X and proxy-arp evpn-route-tag Y, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the default-route-tag, then EVPN keeps tag A when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

domain-id string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Domain ID of received BGP route before readvertisement |
| Context | configure service vpn string bgp-evpn segment-routing-v6 number domain-id string |
| Tree | domain-id |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> |

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

| | |
|------------|---|
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

evi number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | EVI information |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> evi <i>number</i> |
| Tree | evi |
| Description | This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) or an R-VPLS (for the EVPN-IFF model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment. |
| Range | 1 to 16777215 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

resolution keyword

| | |
|------------|--|
| Synopsis | Resolution options for routes |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> resolution <i>keyword</i> |
| Tree | resolution |
| Default | route-table |
| Options | route-table, tunnel-table, fallback-tunnel-to-route-table |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

route-distinguisher (*string* | *keyword*)

| | |
|-------------|---|
| Synopsis | Route distinguisher |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> route-distinguisher (<i>string</i> <i>keyword</i>) |
| Tree | route-distinguisher |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.

Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the configure service system level. |
| Options | auto-rd |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

source-address *string*

| | |
|-------------|---|
| Synopsis | Source IPv6 address |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> source-address <i>string</i> |
| Tree | source-address |
| Description | When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.

When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.

A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address. |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

srv6

| | |
|------------|---|
| Synopsis | Enter the srv6 context |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 |
| Tree | srv6 |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-locator *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Default route locator |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 default-locator <i>string</i> |
| Tree | default-locator |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

instance *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Segment Routing IPv6 instance |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> srv6 instance <i>reference</i> |
| Tree | instance |
| Reference | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vrf-export

| | |
|------------|--|
| Synopsis | Enable the vrf-export context |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-export |
| Tree | vrf-export |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vrf-import

| | |
|------------|--|
| Synopsis | Enable the vrf-import context |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-import |
| Tree | vrf-import |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

policy (*policy-expr-string* | *string*)

| | |
|----------|--|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-import policy (<i>policy-expr-string</i> <i>string</i>) |

| | |
|----------------|--|
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vrf-target

| | |
|-------------|---|
| Synopsis | Enter the vrf-target context |
| Context | configure service vpn <i>string</i> bgp-evpn segment-routing-v6 <i>number</i> vrf-target |
| Tree | vrf-target |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

community string

| | |
|---------------|---|
| Synopsis | Extended BGP community |
| Context | configure service vprn string bgp-evpn segment-routing-v6 number vrf-target community string |
| Tree | community |
| Description | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

export-community string

| | |
|---------------|--|
| Synopsis | Communities sent to remote PE neighbors |
| Context | configure service vprn string bgp-evpn segment-routing-v6 number vrf-target export-community string |
| Tree | export-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

import-community string

| | |
|---------------|--|
| Synopsis | Communities accepted from remote PE neighbors |
| Context | configure service vprn string bgp-evpn segment-routing-v6 number vrf-target import-community string |
| Tree | import-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

bgp-ipvpn

| | |
|------------|--|
| Synopsis | Enter the bgp-ipvpn context |
| Context | configure service vprn string bgp-ipvpn |
| Tree | bgp-ipvpn |
| Introduced | 21.2.R1 |
| Platforms | All |

mpls

| | |
|------------|---|
| Synopsis | Enter the mpls context |
| Context | configure service vprn string bgp-ipvpn mpls |
| Tree | mpls |
| Introduced | 21.2.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BGP-IPVPN MPLS |
| Context | configure service vprn string bgp-ipvpn mpls admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.2.R1 |
| Platforms | All |

auto-bind-tunnel

| | |
|-------------|---|
| Synopsis | Enter the auto-bind-tunnel context |
| Context | configure service vprn string bgp-ipvpn mpls auto-bind-tunnel |
| Tree | auto-bind-tunnel |
| Description | Commands in this context configure the automatic binding parameters of a BGP-IPVPN service using tunnels to MP-BGP peers. |
| Introduced | 21.2.R1 |
| Platforms | All |

allow-flex-algo-fallback *boolean*

| | |
|-------------|--|
| Synopsis | Enable flexible algorithm fallback |
| Context | configure service vprn <i>string</i> bgp-ipvprn mpls auto-bind-tunnel allow-flex-algo-fallback <i>boolean</i> |
| Tree | allow-flex-algo-fallback |
| Description | When configured to true , a BGP router with a Flex-Algorithm action configured (via the configure policy-options policy-statement entry action flex-algo command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.

When configured to false , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

ecmp *number*

| | |
|-------------|---|
| Synopsis | Maximum ECMP routes allowed |
| Context | configure service vprn <i>string</i> bgp-ipvprn mpls auto-bind-tunnel ecmp <i>number</i> |
| Tree | ecmp |
| Description | This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the configure service vprn context level. |
| Range | 1 to 32 |
| Default | 1 |
| Introduced | 21.2.R1 |
| Platforms | All |

enforce-strict-tunnel-tagging *boolean*

| | |
|-------------|---|
| Synopsis | Allow enforcement of strict tunnel tagging |
| Context | configure service vprn <i>string</i> bgp-ipvprn mpls auto-bind-tunnel enforce-strict-tunnel-tagging <i>boolean</i> |
| Tree | enforce-strict-tunnel-tagging |
| Description | When configured to true , the system must only consider LSPs marked with an administrative tag for next-hop resolution. |

When configured to **false**, tagged RSVP and SR-TE LSPs are considered first. The system then uses untagged LSPs of other types.

| | |
|------------|---------|
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

resolution keyword

| | |
|------------|---|
| Synopsis | Resolution method for tunnel selection |
| Context | configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution <i>keyword</i> |
| Tree | resolution |
| Default | none |
| Options | none, filter, any |
| Introduced | 21.2.R1 |
| Platforms | All |

resolution-filter

| | |
|-------------|---|
| Synopsis | Enter the resolution-filter context |
| Context | configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter |
| Tree | resolution-filter |
| Description | Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-IPVPN routes within the automatic binding of the BGP-IPVPN MPLS service to tunnels to MP-BGP peers. |
| Introduced | 21.2.R1 |
| Platforms | All |

bgp boolean

| | |
|-------------|---|
| Synopsis | Use BGP tunneling for next-hop resolution |
| Context | configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter bgp <i>boolean</i> |
| Tree | bgp |
| Description | When configured to true , BGP searches the BGP LSP for the address of the BGP next hop.

When configured to false , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved. |

| | |
|------------|---------|
| Default | true |
| Introduced | 21.2.R1 |
| Platforms | All |

gre boolean

| | |
|-------------|--|
| Synopsis | Use GRE tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter gre <i>boolean</i> |
| Tree | gre |
| Description | When configured to true , this command enables setting the tunnel type for the auto bind tunnel.
When configured to false , this command disables setting the tunnel type for the auto bind tunnel. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

ldp boolean

| | |
|-------------|--|
| Synopsis | Use LDP tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter ldp <i>boolean</i> |
| Tree | ldp |
| Description | When configured to true , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.
When configured to false , LDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

mpls-fwd-policy boolean

| | |
|----------|--|
| Synopsis | Use MPLS forwarding policy for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy <i>boolean</i> |
| Tree | mpls-fwd-policy |

| | |
|-------------|---|
| Description | When configured to true , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.
When configured to false , the MPLS forwarding policy is not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

rib-api *boolean*

| | |
|-------------|---|
| Synopsis | Use RIB API gRPC service for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter rib-api <i>boolean</i> |
| Tree | rib-api |
| Description | When configured to true , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.
When configured to false , the RIB API service tunnels are not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

rsvp *boolean*

| | |
|-------------|---|
| Synopsis | Use RSVP tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter rsvp <i>boolean</i> |
| Tree | rsvp |
| Description | When configured to true , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.
When configured to false , the RSVP LSP is not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

sr-isis *boolean*

| | |
|-------------|---|
| Synopsis | Use IS-IS SR tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-isis <i>boolean</i> |
| Tree | sr-isis |
| Description | When configured to true , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.

When configured to false , IS-IS tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

sr-ospf *boolean*

| | |
|-------------|--|
| Synopsis | Use OSPF SR tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf <i>boolean</i> |
| Tree | sr-ospf |
| Description | When configured to true , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.

When configured to false , OSPF tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

sr-ospf3 *boolean*

| | |
|-------------|---|
| Synopsis | Use OSPFv3 SR tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf3 <i>boolean</i> |
| Tree | sr-ospf3 |
| Description | When configured to true , BGP uses an OSPFv3 tunnel type to determine the address of the BGP next hop. |

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPFv3 instance.

When configured to **false**, OSPFv3 tunneling is not used for next-hop resolution.

| | |
|------------|---------|
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

sr-policy *boolean*

| | |
|-------------|--|
| Synopsis | Use SR policies for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-policy <i>boolean</i> |
| Tree | sr-policy |
| Description | <p>When configured to true, SR policies are used to determine the address of the BGP next hop.</p> <p>The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.</p> <p>When configured to false, SR policies are not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

sr-te *boolean*

| | |
|-------------|---|
| Synopsis | Use SR-TE tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-te <i>boolean</i> |
| Tree | sr-te |
| Description | <p>When configured to true, BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.</p> <p>When configured to false, SR-TE tunneling is not used for next-hop resolution.</p> |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

udp *boolean*

| | |
|-------------|--|
| Synopsis | Use MPLS over UDP tunneling for next-hop resolution |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel resolution-filter udp <i>boolean</i> |
| Tree | udp |
| Description | When configured to true , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.
When configured to false , MPLS over UDP tunneling is not used for next-hop resolution. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

weighted-ecmp *boolean*

| | |
|-------------|--|
| Synopsis | Allow weighted load-balancing |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls auto-bind-tunnel weighted-ecmp <i>boolean</i> |
| Tree | weighted-ecmp |
| Description | When configured to true , this command enables weighted ECMP for packets using tunnels that a VPRN automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.
When configured to false , this command disables weighted ECMP for next-hop tunnel selection. |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

domain-id *string*

| | |
|-------------|---|
| Synopsis | Domain ID of received BGP route before readvertisement |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls domain-id <i>string</i> |
| Tree | domain-id |
| Description | This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i> . Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The |

VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

| | |
|------------|----------|
| Introduced | 21.10.R1 |
| Platforms | All |

dynamic-egress-label-limit *boolean*

| | |
|-------------|---|
| Synopsis | Enables dynamic egress label limit |
| Context | configure service vprn <i>string</i> bgp-ipvpn mpls dynamic-egress-label-limit <i>boolean</i> |
| Tree | dynamic-egress-label-limit |
| Description | <p>When configured to true, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to false this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p> |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

route-distinguisher (*string* | *keyword*)

| | |
|----------|---------------------|
| Synopsis | Route distinguisher |
|----------|---------------------|

| | |
|-------------|--|
| Context | configure service vpn <i>string</i> bgp-ipvpn mpls route-distinguisher (<i>string</i> <i>keyword</i>) |
| Tree | route-distinguisher |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to. |
| Options | auto-rd |
| Introduced | 21.2.R1 |
| Platforms | All |

vrf-export

| | |
|------------|---|
| Synopsis | Enable the vrf-export context |
| Context | configure service vpn <i>string</i> bgp-ipvpn mpls vrf-export |
| Tree | vrf-export |
| Introduced | 21.2.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Policy name |
| Context | configure service vpn <i>string</i> bgp-ipvpn mpls vrf-export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |

| | |
|------------|--------------------------------------|
| Notes | This element is ordered by the user. |
| Introduced | 21.2.R1 |
| Platforms | All |

vrf-import

| | |
|------------|---|
| Synopsis | Enable the vrf-import context |
| Context | configure service vprn string bgp-ipvprn mpls vrf-import |
| Tree | vrf-import |
| Introduced | 21.2.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Policy name |
| Context | configure service vprn string bgp-ipvprn mpls vrf-import policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 21.2.R1 |
| Platforms | All |

vrf-target

| | |
|-------------|---|
| Synopsis | Enter the vrf-target context |
| Context | configure service vprn string bgp-ipvpn mpls vrf-target |
| Tree | vrf-target |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced | 21.2.R1 |
| Platforms | All |

community string

| | |
|---------------|--|
| Synopsis | Extended BGP community |
| Context | configure service vprn string bgp-ipvpn mpls vrf-target community string |
| Tree | community |
| Description | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 21.2.R1 |
| Platforms | All |

export-community string

| | |
|---------------|---|
| Synopsis | Communities sent to remote PE neighbors |
| Context | configure service vprn string bgp-ipvpn mpls vrf-target export-community string |
| Tree | export-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |

Introduced 21.2.R1
 Platforms All

import-community *string*

Synopsis Communities accepted from remote PE neighbors
 Context **configure** [service vprn](#) *string* [bgp-ipvpn mpls vrf-target](#) **import-community** *string*
 Tree [import-community](#)
 String Length 10 to 28
 Notes The following elements are part of a choice: **community** or (**export-community** and **import-community**).
 Introduced 21.2.R1
 Platforms All

segment-routing-v6 [[bgp-instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance
 Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) **segment-routing-v6** *number*
 Tree [segment-routing-v6](#)
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[bgp-instance] *number*

Synopsis BGP instance
 Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) **segment-routing-v6** *number*
 Tree [segment-routing-v6](#)
 Range 1
 Notes This element is part of a list key.
 Introduced 21.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

admin-state *keyword*

Synopsis Administrative state of segment routing over IPv6

| | |
|------------|--|
| Context | configure service vpn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-route-tag *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Default route tag |
| Context | configure service vpn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> default-route-tag <i>string</i> |
| Tree | default-route-tag |
| Description | <p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> • If a service is configured with both default-route-tag <i>X</i> and proxy-arp evpn-route-tag <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement. • If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the default-route-tag, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB. <p>The default-route-tag configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p> |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

domain-id string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Domain ID of received BGP route before readvertisement |
| Context | configure service vprn string bgp-ipvpn segment-routing-v6 number domain-id string |
| Tree | domain-id |
| Description | <p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p>Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p>Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

resolution keyword

| | |
|------------|---|
| Synopsis | Resolution options for routes |
| Context | configure service vprn string bgp-ipvpn segment-routing-v6 number resolution keyword |
| Tree | resolution |
| Default | route-table |
| Options | route-table, tunnel-table, fallback-tunnel-to-route-table |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

route-distinguisher (*string* | *keyword*)

| | |
|-------------|---|
| Synopsis | Route distinguisher |
| Context | configure service vpn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> route-distinguisher (<i>string</i> <i>keyword</i>) |
| Tree | route-distinguisher |
| Description | This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.

Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the configure service system level. |
| Options | auto-rd |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

source-address *string*

| | |
|-------------|---|
| Synopsis | Source IPv6 address |
| Context | configure service vpn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> source-address <i>string</i> |
| Tree | source-address |
| Description | When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.

When not configured, the source IPv6 address is inherited from the configuration of the global default address in the router "base" segment-routing segment-routing-v6 source-address context.

A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

srv6

| | |
|------------|--|
| Synopsis | Enter the srv6 context |
| Context | configure service vpn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> srv6 |
| Tree | srv6 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

default-locator *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Default route locator |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> srv6 default-locator <i>string</i> |
| Tree | default-locator |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

instance *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Segment Routing IPv6 instance |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> srv6 instance <i>reference</i> |
| Tree | instance |
| Reference | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vrf-export

| | |
|------------|--|
| Synopsis | Enable the vrf-export context |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-export |
| Tree | vrf-export |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

policy (*policy-expr-string* | *string*)

| | |
|----------------|--|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vrf-import

| | |
|------------|---|
| Synopsis | Enable the vrf-import context |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-import |
| Tree | vrf-import |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

policy (*policy-expr-string* | *string*)

| | |
|----------|--|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-import policy (<i>policy-expr-string</i> <i>string</i>) |

| | |
|----------------|--|
| Tree | policy |
| Description | <p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p> |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | This element is ordered by the user. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

vrf-target

| | |
|-------------|---|
| Synopsis | Enter the vrf-target context |
| Context | configure service vprn <i>string</i> bgp-ipvpn segment-routing-v6 <i>number</i> vrf-target |
| Tree | vrf-target |
| Description | <p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p> |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

community string

| | |
|---------------|--|
| Synopsis | Extended BGP community |
| Context | configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target community string |
| Tree | community |
| Description | This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers. |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

export-community string

| | |
|---------------|---|
| Synopsis | Communities sent to remote PE neighbors |
| Context | configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target export-community string |
| Tree | export-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

import-community string

| | |
|---------------|---|
| Synopsis | Communities accepted from remote PE neighbors |
| Context | configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target import-community string |
| Tree | import-community |
| String Length | 10 to 28 |
| Notes | The following elements are part of a choice: community or (export-community and import-community). |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

bgp-shared-queue

| | |
|------------|--|
| Synopsis | Enable the bgp-shared-queue context |
| Context | configure service vpn string bgp-shared-queue |
| Tree | bgp-shared-queue |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Committed information rate for shared queue |
| Context | configure service vpn string bgp-shared-queue cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 100000000 |
| Default | 4000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Peak information rate for shared queue |
| Context | configure service vpn string bgp-shared-queue pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 100000000 |
| Default | 4000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-vpn-backup

| | |
|----------|---|
| Synopsis | Enter the bgp-vpn-backup context |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> bgp-vpn-backup |
| Tree | bgp-vpn-backup |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Allow BGP-VPN to be used as backup for IPv4 prefixes |
| Context | configure service vprn <i>string</i> bgp-vpn-backup ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|--|
| Synopsis | Allow BGP-VPN to be used as backup for IPv6 prefixes |
| Context | configure service vprn <i>string</i> bgp-vpn-backup ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

carrier-carrier-vpn *boolean*

| | |
|------------|--|
| Synopsis | Allow VPRN service to support a Carrier Supporting Carrier model |
| Context | configure service vprn <i>string</i> carrier-carrier-vpn <i>boolean</i> |
| Tree | carrier-carrier-vpn |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

class-forwarding *boolean*

| | |
|----------|---|
| Synopsis | Allow packet forwarding based on forwarding class |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> <i>class-forwarding</i> <i>boolean</i> |
| Tree | class-forwarding |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

confederation

| | |
|------------|--|
| Synopsis | Enter the confederation context |
| Context | configure service vprn <i>string</i> <i>confederation</i> |
| Tree | confederation |
| Introduced | 16.0.R1 |
| Platforms | All |

confed-as-num *number*

| | |
|------------|--|
| Synopsis | Confederation number within an autonomous system |
| Context | configure service vprn <i>string</i> <i>confederation confed-as-num</i> <i>number</i> |
| Tree | confed-as-num |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

members [[as-number](#)] *number*

| | |
|----------------|--|
| Synopsis | Add a list entry for members |
| Context | configure service vprn <i>string</i> <i>confederation members</i> <i>number</i> |
| Tree | members |
| Max. Instances | 256 |
| Introduced | 16.0.R1 |
| Platforms | All |

[[as-number](#)] *number*

| | |
|----------|-------------------------|
| Synopsis | Confederation AS number |
|----------|-------------------------|

| | |
|------------|---|
| Context | configure service vprn string confederation members number |
| Tree | members |
| Range | 1 to 4294967295 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

customer reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Service customer ID |
| Context | configure service vprn string customer reference |
| Tree | customer |
| Reference | configure service customer string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

d-path-length-ignore boolean

| | |
|-------------|--|
| Synopsis | Enable D-PATH length ignore |
| Context | configure service vprn string d-path-length-ignore boolean |
| Tree | d-path-length-ignore |
| Description | <p>When configured to true, this command makes the VPRN RTM ignore the D-PATH domain segment length for best path selection purposes (for routes in the VPRN). This allows the user to control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p> <p>When configured to false, this command does not ignore the D-PATH domain segment length.</p> |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

dhcp-server

| | |
|------------|---|
| Synopsis | Enter the dhcp-server context |
| Context | configure service vprn <i>string</i> dhcp-server |
| Tree | dhcp-server |
| Introduced | 16.0.R1 |
| Platforms | All |

dhcpv4 [[name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the dhcpv4 list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> |
| Tree | dhcpv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | DHCP server name |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> |
| Tree | dhcpv4 |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the DHCP server |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover

| | |
|------------|--|
| Synopsis | Enter the failover context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover |
| Tree | failover |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the failover mechanism |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-mclt-on-takeover *boolean*

| | |
|-------------|--|
| Synopsis | Ignore maximum client lead during takeover from partner |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i> |
| Tree | ignore-mclt-on-takeover |
| Description | When configured to true , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.

When configured to false , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-client-lead-time *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum time that DHCP server can extend client's lease |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover maximum-client-lead-time <i>number</i> |
| Tree | maximum-client-lead-time |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range | 600 to 86399 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

partner-down-delay *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Delay to prevent lease duplication during link failure |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover partner-down-delay <i>number</i> |
| Tree | partner-down-delay |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure. |
| Range | 0 to 86399 |
| Default | 86399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

peer [[address](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the peer list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i> |
| Tree | peer |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[address] *reference*

| | |
|-----------|---|
| Synopsis | IP address of the failover peer |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer <i>reference</i> |
| Tree | peer |
| Reference | configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Tag that identifies synchronizing server or pool pairs |
| Context | configure service vpn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover peer reference sync-tag <i>string</i> |
| Tree | sync-tag |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Time between initialization and assuming active role |
| Context | configure service vpn <i>string</i> dhcp-server dhcpv4 <i>string</i> failover startup-wait-time <i>number</i> |
| Tree | startup-wait-time |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range | 60 to 3600 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-renews *boolean*

| | |
|-------------|---|
| Synopsis | Send FORCERENEW messages to force renewals of leases |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> force-renews <i>boolean</i> |
| Tree | force-renews |
| Description | When configured to true , FORCERENEW messages are enabled for DHCP. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-hold

| | |
|------------|--|
| Synopsis | Enter the lease-hold context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold |
| Tree | lease-hold |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

additional-scenarios

| | |
|-------------|---|
| Synopsis | Enter the additional-scenarios context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios |
| Tree | additional-scenarios |
| Description | Commands in this context configure additional types of leases or triggers that cause the system to hold up leases. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

internal-lease-ipsec *boolean*

| | |
|----------|---|
| Synopsis | Apply the lease hold timer to local IPsec clients |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i> |
| Tree | internal-lease-ipsec |
| Default | false |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

solicited-release *boolean*

Synopsis Apply lease hold timer for solicited releases
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [lease-hold additional-scenarios solicited-release](#) *boolean*
 Tree [solicited-release](#)
 Description This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis Lease hold time
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [lease-hold time](#) *number*
 Tree [time](#)
 Range 1 to 631152000
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool [[pool-name](#)] *string*

Synopsis Enter the **pool** list instance
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string*
 Tree [pool](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[[pool-name](#)] *string*

Synopsis DHCP server pool name

| | |
|---------------|--|
| Context | configure service vprn string dhcp-server dhcpv4 string pool string |
| Tree | pool |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover

| | |
|------------|---|
| Synopsis | Enter the failover context |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string failover |
| Tree | failover |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the failover mechanism |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string failover admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-mclt-on-takeover *boolean*

| | |
|-------------|--|
| Synopsis | Ignore maximum client lead during takeover from partner |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i> |
| Tree | ignore-mclt-on-takeover |
| Description | When configured to true , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.

When configured to false , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-client-lead-time *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum time that DHCP server can extend client's lease |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover maximum-client-lead-time <i>number</i> |
| Tree | maximum-client-lead-time |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range | 600 to 86399 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

partner-down-delay *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Delay to prevent lease duplication during link failure |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string failover partner-down-delay number</i> |
| Tree | partner-down-delay |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure. |
| Range | 0 to 86399 |
| Default | 86399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

peer [[address](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the peer list instance |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string failover peer reference</i> |
| Tree | peer |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[address] *reference*

| | |
|----------|---|
| Synopsis | IP address of the failover peer |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string failover peer reference</i> |
| Tree | peer |

| | |
|------------|---|
| Reference | configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Tag that identifies synchronizing server or pool pairs |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i> |
| Tree | sync-tag |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Time between initialization and assuming active role |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i> |
| Tree | startup-wait-time |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range | 60 to 3600 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-lease-time *number*

Synopsis Maximum lease time

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string* **max-lease-time** *number*

Tree [max-lease-time](#)

Range 10 to 315446399

Default 864000

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-lease-time *number*

Synopsis Minimum lease time

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string* **min-lease-time** *number*

Tree [min-lease-time](#)

Range 10 to 315446399

Default 600

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

minimum-free

Synopsis Enter the **minimum-free** context

Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string* **minimum-free**

Tree [minimum-free](#)

Description Commands in this context specify the minimum number of free addresses in this pool.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

absolute number

| | |
|------------|---|
| Synopsis | Minimum number of free addresses in this pool or subnet |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string minimum-free absolute number |
| Tree | absolute |
| Range | 0 to 255 |
| Default | 1 |
| Notes | The following elements are part of a choice: absolute or percent . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

event-when-depleted boolean

| | |
|-------------|--|
| Synopsis | Generate notification when addresses are depleted |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string minimum-free event-when-depleted boolean |
| Tree | event-when-depleted |
| Description | When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.

When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

percent number

| | |
|------------|--|
| Synopsis | Minimum free addresses as a percentage |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string minimum-free percent number |
| Tree | percent |
| Range | 0 to 100 |
| Default | 1 |
| Notes | The following elements are part of a choice: absolute or percent . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nak-non-matching-subnet *boolean*

| | |
|-------------|---|
| Synopsis | Send NAK if no match for request address pool range |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> nak-non-matching-subnet <i>boolean</i> |
| Tree | nak-non-matching-subnet |
| Description | When configured to true , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK.

When configured to false or unconfigured, the system drops the DHCP packet. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

offer-time *number*

| | |
|------------|---|
| Synopsis | Time interval during which a DHCP offer remains valid |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> offer-time <i>number</i> |
| Tree | offer-time |
| Range | 10 to 600 |
| Default | 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|--|
| Synopsis | Enter the options context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [*number*] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the option list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | DHCP option to send identification strings to client |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 1 to 254 |
| Options | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as an ASCII string |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|----------|------------------------------|
| Synopsis | DHCP option as time duration |
|----------|------------------------------|

| | |
|------------|---|
| Context | configure service vprn string dhcp-server dhcpv4 string pool string options option
(<i>number</i> <i>keyword</i>) <i>duration number</i> |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|---|
| Synopsis | Empty DHCP option. |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string options option
(<i>number</i> <i>keyword</i>) <i>empty</i> |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure service vprn string dhcp-server dhcpv4 string pool string options option
(<i>number</i> <i>keyword</i>) <i>hex-string string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-address *string*

| | |
|----------|---|
| Synopsis | DHCP option as a list of IPv4 addresses |
|----------|---|

| | |
|----------------|---|
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i> |
| Tree | ipv4-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

netbios-node-type *keyword*

| | |
|------------|---|
| Synopsis | DHCP option as NetBIOS node type |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i> |
| Tree | netbios-node-type |
| Options | b-node, p-node, m-node, h-node |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subnet [**ipv4-prefix**] *string*

| | |
|------------|---|
| Synopsis | Enter the subnet list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> |
| Tree | subnet |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[**ipv4-prefix**] *string*

| | |
|----------|---|
| Synopsis | IPv4 prefix for the subnet |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> |
| Tree | subnet |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address-range *[start] string end string*

| | |
|------------|---|
| Synopsis | Enter the address-range list instance |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i> |
| Tree | <i>address-range</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[start] string

| | |
|-------------|---|
| Synopsis | Lower bound of the IP address range |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i> |
| Tree | <i>address-range</i> |
| Description | This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end string

| | |
|-------------|---|
| Synopsis | Upper bound of the IP address range |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i> |
| Tree | <i>address-range</i> |
| Description | This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover-control-type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Failover control type for this range |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> address-range <i>string</i> end <i>string</i> failover-control-type <i>keyword</i> |
| Tree | failover-control-type |
| Default | local |
| Options | local, remote, access-driven |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drain *boolean*

| | |
|-------------|---|
| Synopsis | Prevent new lease assignment from this subnet |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> drain <i>boolean</i> |
| Tree | drain |
| Description | When configured to true , new leases cannot be assigned and existing leases are kept up until they are released.
When configured to false , the subnet is active and new leases can be assigned. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

exclude-addresses [*start*] *string* **end** *string*

| | |
|------------|--|
| Synopsis | Add a list entry for exclude-addresses |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i> |
| Tree | exclude-addresses |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[start] *string*

| | |
|-------------|--|
| Synopsis | Lower bound of the IP address range |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i> |
| Tree | exclude-addresses |
| Description | This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end *string*

| | |
|-------------|--|
| Synopsis | Upper bound of the IP address range |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> exclude-addresses <i>string</i> end <i>string</i> |
| Tree | exclude-addresses |
| Description | This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-declined *number*

| | |
|------------|--|
| Synopsis | Maximum number of declined addresses allowed |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> maximum-declined <i>number</i> |
| Tree | maximum-declined |
| Max. Range | 0 to 4294967295 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

minimum-free

| | |
|-------------|--|
| Synopsis | Enter the minimum-free context |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string subnet string</i>
minimum-free |
| Tree | minimum-free |
| Description | Commands in this context specify the minimum number of free addresses in this pool. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

absolute number

| | |
|------------|--|
| Synopsis | Minimum number of free addresses in this pool or subnet |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string subnet string</i>
minimum-free absolute number |
| Tree | absolute |
| Range | 0 to 255 |
| Default | 1 |
| Notes | The following elements are part of a choice: absolute or percent . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

event-when-depleted boolean

| | |
|-------------|--|
| Synopsis | Generate notification when addresses are depleted |
| Context | configure <i>service vprn string dhcp-server dhcpv4 string pool string subnet string</i>
minimum-free event-when-depleted boolean |
| Tree | event-when-depleted |
| Description | When configured to true , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.

When configured to false , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

percent *number*

| | |
|------------|---|
| Synopsis | Minimum free addresses as a percentage |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> minimum-free percent <i>number</i> |
| Tree | percent |
| Range | 0 to 100 |
| Default | 1 |
| Notes | The following elements are part of a choice: absolute or percent . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|--|
| Synopsis | Enter the options context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [[number](#)] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the option list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | DHCP option to send identification strings to client |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 1 to 254 |

| | |
|------------|---|
| Options | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as an ASCII string |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|------------|--|
| Synopsis | DHCP option as time duration |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) duration <i>number</i> |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|----------|---|
| Synopsis | Empty DHCP option |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options option (<i>number</i> <i>keyword</i>) empty |
| Tree | empty |

| | |
|------------|---|
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-address *string*

| | |
|----------------|--|
| Synopsis | DHCP option as a list of IPv4 addresses |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i> |
| Tree | ipv4-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

netbios-node-type *keyword*

| | |
|----------|--|
| Synopsis | DHCP option as NetBIOS node type |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> pool <i>string</i> subnet <i>string</i> options <i>option</i> (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i> |
| Tree | netbios-node-type |

| | |
|------------|---|
| Options | b-node, p-node, m-node, h-node |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pool-selection

| | |
|------------|---|
| Synopsis | Enter the pool-selection context |
| Context | configure service vprn string dhcp-server dhcpv4 string pool-selection |
| Tree | pool-selection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-gi-address

| | |
|-------------|--|
| Synopsis | Enable the use-gi-address context |
| Context | configure service vprn string dhcp-server dhcpv4 string pool-selection use-gi-address |
| Tree | use-gi-address |
| Description | <p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scope keyword

| | |
|----------|--|
| Synopsis | GI address-matching scope |
| Context | configure service vprn string dhcp-server dhcpv4 string pool-selection use-gi-address scope keyword |
| Tree | scope |
| Default | subnet |

| | |
|------------|---|
| Options | subnet, pool |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-pool-from-client

| | |
|------------|---|
| Synopsis | Enable the use-pool-from-client context |
| Context | configure service vpn string dhcp-server dhcpv4 string pool-selection use-pool-from-client |
| Tree | use-pool-from-client |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delimiter string

| | |
|---------------|---|
| Synopsis | Delimiter to combine primary and secondary pool names |
| Context | configure service vpn string dhcp-server dhcpv4 string pool-selection use-pool-from-client delimiter string |
| Tree | delimiter |
| Description | This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client. |
| String Length | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db reference

| | |
|------------|---|
| Synopsis | Local user database for authentication |
| Context | configure service vpn string dhcp-server dhcpv4 string user-db reference |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-identification *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | User identification method for the DHCP server |
| Context | configure service vprn <i>string dhcp-server dhcpv4 string user-identification keyword</i> |
| Tree | user-identification |
| Options | mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcpv6 [*name*] *string*

| | |
|------------|---|
| Synopsis | Enter the dhcpv6 list instance |
| Context | configure service vprn <i>string dhcp-server dhcpv6 string</i> |
| Tree | dhcpv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | DHCP server name |
| Context | configure service vprn <i>string dhcp-server dhcpv6 string</i> |
| Tree | dhcpv6 |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the DHCP server |
| Context | configure service vprn <i>string dhcp-server dhcpv6 string admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|---|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-provisioned *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Auto-provision the pools of this server |
| Context | configure service vprn <i>string dhcp-server dhcpv6 string auto-provisioned boolean</i> |
| Tree | auto-provisioned |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|--|
| Synopsis | Enter the defaults context |
| Context | configure service vprn <i>string dhcp-server dhcpv6 string defaults</i> |
| Tree | defaults |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|--|
| Synopsis | Enter the options context |
| Context | configure service vprn <i>string dhcp-server dhcpv6 string defaults options</i> |
| Tree | options |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [[number](#)] (*number | keyword*)

| | |
|----------|---------------------------------------|
| Synopsis | Enter the option list instance |
|----------|---------------------------------------|

| | |
|------------|---|
| Context | configure service vprn string dhcp-server dhcpv6 string defaults options option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | DHCP option to send as identification string |
| Context | configure service vprn string dhcp-server dhcpv6 string defaults options option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 1 to 65535 |
| Options | dns-server, domain-name |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as an ASCII string |
| Context | configure service vprn string dhcp-server dhcpv6 string defaults options option (<i>number</i> <i>keyword</i>) ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-string *string*

| | |
|----------|--|
| Synopsis | DHCP option specified as a domain name |
| Context | configure service vprn string dhcp-server dhcpv6 string defaults options option (<i>number</i> <i>keyword</i>) domain-string string |
| Tree | domain-string |

| | |
|---------------|---|
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|------------|---|
| Synopsis | DHCP option specified as time |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) duration <i>number</i> |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|--|
| Synopsis | Empty DHCP option |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |

| | |
|------------|---|
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *string*

| | |
|----------------|--|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults options option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i> |
| Tree | ipv6-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime *number*

| | |
|-------------|--|
| Synopsis | Time this lease remains preferred |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults preferred-lifetime <i>number</i> |
| Tree | preferred-lifetime |
| Description | This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.

Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level). |
| Range | 300 to 315446399 |
| Default | 3600 |
| Units | seconds |

| | |
|------------|---|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rebind-time *number*

| | |
|-------------|--|
| Synopsis | Rebind time for the lease |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults rebind-time <i>number</i> |
| Tree | rebind-time |
| Description | <p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p> |
| Range | 0 to 1209600 |
| Default | 2880 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew-time *number*

| | |
|-------------|--|
| Synopsis | Renew time for the lease |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults renew-time <i>number</i> |
| Tree | renew-time |
| Description | <p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> |

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

| | |
|------------|---|
| Range | 0 to 604800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime *number*

| | |
|-------------|--|
| Synopsis | Time for the lease to remain valid |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> defaults valid-lifetime <i>number</i> |
| Tree | valid-lifetime |
| Description | <p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p> |
| Range | 300 to 315446399 |
| Default | 86400 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> description <i>string</i> |
| Tree | description |

| | |
|---------------|---|
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover

| | |
|------------|---|
| Synopsis | Enter the failover context |
| Context | configure service vprn string dhcp-server dhcpv6 string failover |
| Tree | failover |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the failover mechanism |
| Context | configure service vprn string dhcp-server dhcpv6 string failover admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-mclt-on-takeover *boolean*

| | |
|-------------|---|
| Synopsis | Ignore maximum client lead during takeover from partner |
| Context | configure service vprn string dhcp-server dhcpv6 string failover ignore-mclt-on-takeover boolean |
| Tree | ignore-mclt-on-takeover |
| Description | <p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p> |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum time that DHCP server can extend client's lease |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover maximum-client-lead-time <i>number</i> |
| Tree | maximum-client-lead-time |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range | 600 to 86399 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

partner-down-delay *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Delay to prevent lease duplication during link failure |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover partner-down-delay <i>number</i> |
| Tree | partner-down-delay |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure. |
| Range | 0 to 86399 |

| | |
|------------|---|
| Default | 86399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

peer [[address](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the peer list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover peer <i>reference</i> |
| Tree | peer |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[address] *reference*

| | |
|------------|---|
| Synopsis | IP address of the failover peer |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover peer <i>reference</i> |
| Tree | peer |
| Reference | configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Tag that identifies synchronizing server or pool pairs |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i> |
| Tree | sync-tag |
| String Length | 1 to 32 |

| | |
|------------|---|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Time between initialization and assuming active role |
| Context | configure service vprn string dhcp-server dhcpv6 string failover startup-wait-time number |
| Tree | startup-wait-time |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range | 60 to 3600 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-rapid-commit *boolean*

| | |
|-------------|---|
| Synopsis | Ignore Rapid Commit option |
| Context | configure service vprn string dhcp-server dhcpv6 string ignore-rapid-commit boolean |
| Tree | ignore-rapid-commit |
| Description | When configured to true , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-id-mapping *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Map hosts within interface-to-prefix combinations |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> interface-id-mapping <i>boolean</i> |
| Tree | interface-id-mapping |
| Description | When configured to true , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-hold

| | |
|------------|---|
| Synopsis | Enter the lease-hold context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold |
| Tree | lease-hold |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

additional-scenarios

| | |
|-------------|--|
| Synopsis | Enter the additional-scenarios context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios |
| Tree | additional-scenarios |
| Description | Commands in this context configure additional types of leases or triggers that cause the system to hold up leases. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

internal-lease-ipsec *boolean*

| | |
|------------|--|
| Synopsis | Apply the lease hold timer to local IPsec clients |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios internal-lease-ipsec <i>boolean</i> |
| Tree | internal-lease-ipsec |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicited-release *boolean*

| | |
|-------------|---|
| Synopsis | Apply lease hold timer for solicited releases |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold additional-scenarios solicited-release <i>boolean</i> |
| Tree | solicited-release |
| Description | This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

time *number*

| | |
|------------|--|
| Synopsis | Lease hold time |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-hold time <i>number</i> |
| Tree | time |
| Range | 1 to 631152000 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-query *boolean*

| | |
|----------|---|
| Synopsis | Handle and reply to lease query messages |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> lease-query <i>boolean</i> |
| Tree | lease-query |

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pool [*pool-name*] *string*

| | |
|------------|---|
| Synopsis | Enter the pool list instance |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string</i> |
| Tree | <i>pool</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[pool-name] *string*

| | |
|---------------|---|
| Synopsis | DHCP server pool name |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string</i> |
| Tree | <i>pool</i> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delegated-prefix

| | |
|------------|--|
| Synopsis | Enter the delegated-prefix context |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string delegated-prefix</i> |
| Tree | <i>delegated-prefix</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

length *number*

| | |
|----------|--|
| Synopsis | Prefix length for pool if unspecified by client |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string delegated-prefix length number</i> |

| | |
|------------|---|
| Tree | length |
| Range | 48 to 127 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum number

| | |
|------------|---|
| Synopsis | Maximum delegated prefix length for this pool |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> delegated-prefix maximum number |
| Tree | maximum |
| Range | 48 to 127 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

minimum number

| | |
|------------|---|
| Synopsis | Minimum delegated prefix length for this pool |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> delegated-prefix minimum number |
| Tree | minimum |
| Range | 48 to 127 |
| Default | 48 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exclude-prefix [*ipv6-prefix*] *string*

Synopsis Add a list entry for **exclude-prefix**

Context **configure service vprn** *string dhcp-server dhcpv6 string pool string exclude-prefix string*

Tree [exclude-prefix](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-prefix] *string*

Synopsis IPv6 prefix to be excluded from available pool prefixes

Context **configure service vprn** *string dhcp-server dhcpv6 string pool string exclude-prefix string*

Tree [exclude-prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis Enter the **failover** context

Context **configure service vprn** *string dhcp-server dhcpv6 string pool string failover*

Tree [failover](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the failover mechanism

Context **configure service vprn** *string dhcp-server dhcpv6 string pool string failover admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-mclt-on-takeover *boolean*

| | |
|-------------|---|
| Synopsis | Ignore maximum client lead during takeover from partner |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover ignore-mclt-on-takeover <i>boolean</i> |
| Tree | ignore-mclt-on-takeover |
| Description | <p>When configured to true, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to false, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-client-lead-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum time that DHCP server can extend client's lease |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover maximum-client-lead-time <i>number</i> |
| Tree | maximum-client-lead-time |
| Description | This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT. |
| Range | 600 to 86399 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

partner-down-delay *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Delay to prevent lease duplication during link failure |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string failover partner-down-delay number</i> |
| Tree | <i>partner-down-delay</i> |
| Description | This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure. |
| Range | 0 to 86399 |
| Default | 86399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

peer [*address*] *reference*

| | |
|----------------|---|
| Synopsis | Enter the peer list instance |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string failover peer reference</i> |
| Tree | <i>peer</i> |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[address] *reference*

| | |
|----------|---|
| Synopsis | IP address of the failover peer |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string failover peer reference</i> |

| | |
|------------|---|
| Tree | peer |
| Reference | configure redundancy multi-chassis peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sync-tag *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Tag that identifies synchronizing server or pool pairs |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover peer <i>reference</i> sync-tag <i>string</i> |
| Tree | sync-tag |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

startup-wait-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Time between initialization and assuming active role |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> failover startup-wait-time <i>number</i> |
| Tree | startup-wait-time |
| Description | This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote. |
| Range | 60 to 3600 |
| Default | 120 |
| Units | seconds |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context
 Context **configure service vprn string dhcp-server dhcpv6 string pool string options**
 Tree [options](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number | keyword*)

Synopsis Enter the **option** list instance
 Context **configure service vprn string dhcp-server dhcpv6 string pool string options option**
 (*number | keyword*)
 Tree [option](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis DHCP option to send as identification string
 Context **configure service vprn string dhcp-server dhcpv6 string pool string options option**
 (*number | keyword*)
 Tree [option](#)
 Range 1 to 65535
 Options dns-server, domain-name
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

| | |
|---------------|--|
| Context | configure service vprn string dhcp-server dhcpv6 string pool string options option
(<i>number</i> <i>keyword</i>) ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as a domain name |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string options option
(<i>number</i> <i>keyword</i>) domain-string string |
| Tree | domain-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|------------|--|
| Synopsis | DHCP option specified as time |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string options option
(<i>number</i> <i>keyword</i>) duration number |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|----------|-------------------|
| Synopsis | Empty DHCP option |
|----------|-------------------|

| | |
|------------|---|
| Context | configure service vprn string dhcp-server dhcpv6 string pool string options option
(<i>number</i> <i>keyword</i>) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string string

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string options option
(<i>number</i> <i>keyword</i>) hex-string string |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address string

| | |
|----------------|---|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string options option
(<i>number</i> <i>keyword</i>) ipv6-address string |
| Tree | ipv6-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix [ipv6-prefix] string

| | |
|----------|---------------------------------------|
| Synopsis | Enter the prefix list instance |
|----------|---------------------------------------|

| | |
|------------|--|
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string |
| Tree | prefix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv6-prefix] string

| | |
|------------|--|
| Synopsis | IPv6 prefix to be excluded from available pool prefixes |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string |
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drain boolean

| | |
|------------|--|
| Synopsis | No new leases can be assigned |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string drain boolean |
| Tree | drain |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover-control-type keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Failover control type for this range |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string failover-control-type keyword |
| Tree | failover-control-type |
| Default | local |
| Options | local, remote, access-driven |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

options

Synopsis Enter the **options** context
 Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string options**
 Tree [options](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option [number] (*number | keyword*)

Synopsis Enter the **option** list instance
 Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (*number | keyword*)**
 Tree [option](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number | keyword*)

Synopsis DHCP option to send as identification string
 Context **configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (*number | keyword*)**
 Tree [option](#)
 Range 1 to 65535
 Options dns-server, domain-name
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

| | |
|---------------|---|
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as a domain name |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) domain-string string |
| Tree | domain-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|------------|---|
| Synopsis | DHCP option specified as time |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) duration number |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string, domain-string, duration, empty, hex-string, or ipv6-address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|----------|-------------------|
| Synopsis | Empty DHCP option |
|----------|-------------------|

| | |
|------------|---|
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) hex-string string |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (<i>number</i> <i>keyword</i>) ipv6-address string |
| Tree | ipv6-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , duration , empty , hex-string , or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime *number*

| | |
|----------|-----------------------------------|
| Synopsis | Time this lease remains preferred |
|----------|-----------------------------------|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> preferred-lifetime <i>number</i> |
| Tree | preferred-lifetime |
| Description | <p>This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.</p> <p>Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p> |
| Range | 300 to 315446399 |
| Default | 3600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-length-threshold [**prefix-length**] *number*

| | |
|----------------|--|
| Synopsis | Enter the prefix-length-threshold list instance |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i> |
| Tree | prefix-length-threshold |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[prefix-length] *number*

| | |
|----------|--|
| Synopsis | Delegated prefix length for pool thresholds |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i> |
| Tree | prefix-length-threshold |
| Range | 1 to 128 |
| Notes | This element is part of a list key. |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

absolute *number*

| | |
|------------|---|
| Synopsis | Minimum number of free prefixes for this prefix length |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i> absolute <i>number</i> |
| Tree | absolute |
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: absolute or percent . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

event-when-depleted *boolean*

| | |
|------------|---|
| Synopsis | Generate a notification when this pool is depleted |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i> |
| Tree | event-when-depleted |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

percent *number*

| | |
|------------|--|
| Synopsis | Minimum percentage of free prefixes for prefix length |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-length-threshold <i>number</i> percent <i>number</i> |
| Tree | percent |
| Range | 1 to 100 |
| Notes | The following elements are part of a choice: absolute or percent . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-type

| | |
|------------|---|
| Synopsis | Enter the prefix-type context |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-type |
| Tree | prefix-type |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Allocate IA-PD prefixes from this prefix pool |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-type pd <i>boolean</i> |
| Tree | pd |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-host *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Allocate IA-NA or SLAAC prefixes from this prefix pool |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix <i>string</i> prefix-type wan-host <i>boolean</i> |
| Tree | wan-host |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rebind-time number

| | |
|-------------|--|
| Synopsis | Rebind time for the lease |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string rebind-time number |
| Tree | rebind-time |
| Description | <p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p> |
| Range | 0 to 1209600 |
| Default | 2880 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew-time number

| | |
|-------------|---|
| Synopsis | Renew time for the lease |
| Context | configure service vprn string dhcp-server dhcpv6 string pool string prefix string renew-time number |
| Tree | renew-time |
| Description | <p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or</p> |

| | |
|------------|---|
| | equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA. |
| Range | 0 to 604800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime *number*

| | |
|-------------|--|
| Synopsis | Time for the lease to remain valid |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string prefix string valid-lifetime number</i> |
| Tree | <i>valid-lifetime</i> |
| Description | <p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p> |
| Range | 300 to 315446399 |
| Default | 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-length-threshold [*prefix-length*] *number*

| | |
|----------|--|
| Synopsis | Enter the prefix-length-threshold list instance |
| Context | configure <i>service vprn string dhcp-server dhcpv6 string pool string prefix-length-threshold number</i> |
| Tree | <i>prefix-length-threshold</i> |

| | |
|----------------|---|
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[prefix-length] number

| | |
|------------|--|
| Synopsis | Delegated prefix length for pool thresholds |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> |
| Tree | prefix-length-threshold |
| Range | 1 to 128 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

event-when-depleted boolean

| | |
|------------|--|
| Synopsis | Generate a notification when this pool is depleted |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> event-when-depleted <i>boolean</i> |
| Tree | event-when-depleted |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

minimum-free-percent number

| | |
|------------|--|
| Synopsis | Percentage of free prefixes for this prefix length |
| Context | configure service vprn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool <i>string</i> prefix-length-threshold <i>number</i> minimum-free-percent <i>number</i> |
| Tree | minimum-free-percent |
| Range | 0 to 100 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pool-selection

| | |
|------------|---|
| Synopsis | Enter the pool-selection context |
| Context | configure service vprn string dhcp-server dhcpv6 string pool-selection |
| Tree | pool-selection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-link-address

| | |
|-------------|---|
| Synopsis | Enable the use-link-address context |
| Context | configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address |
| Tree | use-link-address |
| Description | This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scope keyword

| | |
|------------|--|
| Synopsis | Scope of the IP address selection |
| Context | configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address scope keyword |
| Tree | scope |
| Default | subnet |
| Options | subnet, pool |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-pool-from-client

| | |
|----------|--|
| Synopsis | Enable the use-pool-from-client context |
| Context | configure service vprn string dhcp-server dhcpv6 string pool-selection use-pool-from-client |
| Tree | use-pool-from-client |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delimiter *string*

| | |
|---------------|--|
| Synopsis | Delimiter to combine primary and secondary pool names |
| Context | configure service vpn <i>string</i> dhcp-server dhcpv6 <i>string</i> pool-selection use-pool-from-client delimiter <i>string</i> |
| Tree | delimiter |
| Description | This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client. |
| String Length | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server-id

| | |
|------------|--|
| Synopsis | Enter the server-id context |
| Context | configure service vpn <i>string</i> dhcp-server dhcpv6 <i>string</i> server-id |
| Tree | server-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-enterprise

| | |
|------------|--|
| Synopsis | Enter the duid-enterprise context |
| Context | configure service vpn <i>string</i> dhcp-server dhcpv6 <i>string</i> server-id duid-enterprise |
| Tree | duid-enterprise |
| Notes | The following elements are part of a choice: duid-enterprise or duid-link-local . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|----------|--|
| Synopsis | DUID enterprise server ID specified as an ASCII string |
|----------|--|

| | |
|---------------|--|
| Context | configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 58 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string string

| | |
|---------------|--|
| Synopsis | DUID enterprise server ID specified as a hex string |
| Context | configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise hex-string string |
| Tree | hex-string |
| String Length | 1 to 118 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-link-local

| | |
|------------|---|
| Synopsis | Derive DUID server ID from a system link-layer address |
| Context | configure service vprn string dhcp-server dhcpv6 string server-id duid-link-local |
| Tree | duid-link-local |
| Notes | The following elements are part of a choice: duid-enterprise or duid-link-local . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-identification keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | User identification method for the DHCP server |
| Context | configure service vprn string dhcp-server dhcpv6 string user-identification keyword |

| | |
|------------|--|
| Tree | user-identification |
| Options | mac-circuit-id, duid, interface-id, interface-id-link-local, client-id, mac, circuit-id, remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dns

| | |
|------------|--|
| Synopsis | Enable the dns context |
| Context | configure service vprn string dns |
| Tree | dns |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DNS |
| Context | configure service vprn string dns admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

default-domain *string*

| | |
|---------------|---|
| Synopsis | Domain name added in DNS retries |
| Context | configure service vprn string dns default-domain string |
| Tree | default-domain |
| Description | This command configures the DNS domain name to be added in DNS retries when a DNS query is not replied or an empty DNS reply is received.

The name can contain only alphabetical characters (A-Z), numeric characters (0-9), the minus sign (-), and the period (.). |
| String Length | 1 to 255 |
| Introduced | 20.2.R1 |
| Platforms | All |

ipv4-source-address (*keyword | ipv4-unicast-address*)

| | |
|------------|--|
| Synopsis | Source address to contact an IPv4 DNS server |
| Context | configure service vprn string dns ipv4-source-address (<i>keyword ipv4-unicast-address</i>) |
| Tree | ipv4-source-address |
| Default | use-interface-ip |
| Options | use-interface-ip |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6-source-address (*keyword | ipv6-unicast-address*)

| | |
|------------|--|
| Synopsis | Source address to contact an IPv6 DNS server |
| Context | configure service vprn string dns ipv6-source-address (<i>keyword ipv6-unicast-address</i>) |
| Tree | ipv6-source-address |
| Default | use-interface-ip |
| Options | use-interface-ip |
| Introduced | 16.0.R1 |
| Platforms | All |

server (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|----------------|--|
| Synopsis | DNS server used for DNS name resolution |
| Context | configure service vprn string dns server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | server |
| Max. Instances | 3 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

ecmp number

| | |
|----------|--|
| Synopsis | Maximum equal-cost routes for routing table instance |
| Context | configure service vprn string ecmp number |

| | |
|-------------|---|
| Tree | ecmp |
| Description | <p>This command configures ECMP and defines the number of routes for path sharing. For example, the value 2 means that two equal-cost routes are used for cost sharing.</p> <p>ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>When more ECMP routes are available at the best preference than the number specified with this command, the lowest next-hop IP-address algorithm is used to select the routes.</p> <p>If this command is configured to 1, ECMP path sharing is disabled.</p> |
| Range | 1 to 64 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

ecmp-unequal-cost *boolean*

| | |
|------------|--|
| Synopsis | Enable ECMP unequal cost capability |
| Context | configure service vprn <i>string</i> ecmp-unequal-cost <i>boolean</i> |
| Tree | ecmp-unequal-cost |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

entropy-label *boolean*

| | |
|-------------|--|
| Synopsis | Use entropy label |
| Context | configure service vprn <i>string</i> entropy-label <i>boolean</i> |
| Tree | entropy-label |
| Description | <p>When configured to true, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the configure router mpls or configure router mpls lsp context.</p> <p>This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.</p> |

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, this command disables the use of entropy labels.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|---|
| Synopsis | Enter the eth-cfm context |
| Context | configure service vprn <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

export-inactive-bgp *boolean*

| | |
|-------------|---|
| Synopsis | Export preferred BGP route even if inactive |
| Context | configure service vprn <i>string</i> export-inactive-bgp <i>boolean</i> |
| Tree | export-inactive-bgp |
| Description | <p>When configured to true, the preferred BGP route learned by a VPRN is exported as the VPN-IP route even if it is inactive in the route table because a preferred BGP VPRN route from another PE is present. This overrides the default state in which the VPRN cannot export an inactive BGP route. For the BGP route to be exported, the VRF export policy must accept it. This command applies to both MPLS VPN and SRv6 VPN routes. In SRv6 VPN routes the advertised instruction is an End.DT, while in MPLS VPN routes the advertised label is a per-next-hop label. This “best-external” type of route advertisement is useful in active/standby multi-homing scenarios because it ensures that all PEs know about the backup path provided by the standby PE.</p> <p>When configured to false, the preferred BGP route is not exported if it is inactive.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

fib-priority *keyword*

| | |
|----------|----------------------------------|
| Synopsis | FIB priority for VPRN BGP routes |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string fib-priority keyword</i> |
| Tree | fib-priority |
| Default | standard |
| Options | standard, high |
| Introduced | 16.0.R1 |
| Platforms | All |

firewall

| | |
|------------|--|
| Synopsis | Enter the firewall context |
| Context | configure service vprn <i>string firewall</i> |
| Tree | firewall |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

domain [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the domain list instance |
| Context | configure service vprn <i>string firewall domain string</i> |
| Tree | domain |
| Max. Instances | 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[\[name\]](#) *string*

| | |
|---------------|--|
| Synopsis | Firewall domain name |
| Context | configure service vprn <i>string firewall domain string</i> |
| Tree | domain |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the firewall domain |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcpv6-server

| | |
|------------|--|
| Synopsis | Enter the dhcpv6-server context |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> dhcpv6-server |
| Tree | dhcpv6-server |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | DHCPv6 server name |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> dhcpv6-server <i>name</i> <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|-------------|
| Synopsis | Router name |
|----------|-------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> dhcpv6-server router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | NAT group for this domain |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> nat-group <i>reference</i> |
| Tree | nat-group |
| Reference | configure isa nat-group <i>number</i> |
| Notes | The following elements are part of a mandatory choice: nat-group or wlan-gw-group . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix [[ip-prefix](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the prefix list instance |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> prefix <i>string</i> |
| Tree | prefix |
| Max. Instances | 4096 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[ip-prefix] *string*

| | |
|----------|--|
| Synopsis | IP prefix and prefix length for the domain firewall |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> prefix <i>string</i> |
| Tree | prefix |

| | |
|-------------|---|
| Description | This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> prefix <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | WLAN GW group used for NAT |
| Context | configure service vprn <i>string</i> firewall domain <i>string</i> wlan-gw-group <i>reference</i> |
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Notes | The following elements are part of a mandatory choice: nat-group or wlan-gw-group . |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

flowspec

| | |
|------------|--|
| Synopsis | Enter the flowspec context |
| Context | configure service vprn <i>string</i> flowspec |
| Tree | flowspec |
| Introduced | 16.0.R1 |

Platforms All

filter-cam-type *keyword*

Synopsis Filter policy type for FlowSpec embedding

Context **configure service vprn** *string* **flowspec filter-cam-type** *keyword*

Tree **filter-cam-type**

Description This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.

Default normal

Options normal, packet-length

Introduced 20.7.R1

Platforms All

ip-filter-max-size *number*

Synopsis Maximum number of flowspec rule entries in IPv4 filter

Context **configure service vprn** *string* **flowspec ip-filter-max-size** *number*

Tree **ip-filter-max-size**

Description This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).

The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range 0 to 262143

Default 512

Introduced 16.0.R1

Platforms All

ipv6-filter-max-size *number*

Synopsis Maximum number of flowspec rule entries in IPv6 filter

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> flowspec ipv6-filter-max-size <i>number</i> |
| Tree | ipv6-filter-max-size |
| Description | <p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p> |
| Range | 0 to 262143 |
| Default | 512 |
| Introduced | 16.0.R1 |
| Platforms | All |

grt-leaking

| | |
|------------|--|
| Synopsis | Enter the grt-leaking context |
| Context | configure service vprn <i>string</i> grt-leaking |
| Tree | grt-leaking |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-local-management *boolean*

| | |
|-------------|--|
| Synopsis | Enable management traffic |
| Context | configure service vprn <i>string</i> grt-leaking allow-local-management <i>boolean</i> |
| Tree | allow-local-management |
| Description | <p>When configured to true, this command enables the support of specific management protocols over VPRN interfaces that terminate on Base routing context IPv4 and IPv6 interface addresses, including Base loopback and system addresses.</p> <p>This command does not control the support for management protocols terminating on VPRN interfaces directly.</p> |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

export-grt

Synopsis Enter the **export-grt** context

Context **configure service vprn string grt-leaking export-grt**

Tree **export-grt**

Introduced 16.0.R1

Platforms All

policy-name (*policy-expr-string* | *string*)

Synopsis Route policy name or policy logical expression

Context **configure service vprn string grt-leaking export-grt policy-name** (*policy-expr-string* | *string*)

Tree **policy-name**

String Length 1 to 255

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

export-limit *number*

Synopsis Maximum number of routes exported from VRF to GRT

Context **configure service vprn string grt-leaking export-limit number**

Tree **export-limit**

Range 0 to 1000

Default 5

Introduced 16.0.R1

Platforms All

export-v6-limit *number*

Synopsis Maximum number of IPv6 routes exported from VPRN to GRT

| | |
|------------|--|
| Context | configure service vprn <i>string</i> grt-leaking export-v6-limit <i>number</i> |
| Tree | export-v6-limit |
| Range | 0 to 1000 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

grt-lookup *boolean*

| | |
|------------|--|
| Synopsis | Enable global route table lookup |
| Context | configure service vprn <i>string</i> grt-leaking grt-lookup <i>boolean</i> |
| Tree | grt-lookup |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-grt

| | |
|------------|---|
| Synopsis | Enter the import-grt context |
| Context | configure service vprn <i>string</i> grt-leaking import-grt |
| Tree | import-grt |
| Introduced | 16.0.R4 |
| Platforms | All |

policy-name (*policy-expr-string* | *string*)

| | |
|----------------|---|
| Synopsis | Route policy name or policy logical expression |
| Context | configure service vprn <i>string</i> grt-leaking import-grt policy-name (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy-name |
| String Length | 1 to 255 |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |

Platforms All

gsmp

Synopsis Enter the **gsmp** context
 Context **configure service vprn string gsmp**
 Tree **gsmp**
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of GSMP
 Context **configure service vprn string gsmp admin-state keyword**
 Tree **admin-state**
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

group [*name*] *string*

Synopsis Enter the **group** list instance
 Context **configure service vprn string gsmp group string**
 Tree **group**
 Max. Instances 1024
 Introduced 16.0.R1
 Platforms All

[*name*] *string*

Synopsis GSMP group name
 Context **configure service vprn string gsmp group string**
 Tree **group**
 String Length 1 to 32

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the GSMP group |
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

ancp

| | |
|------------|--|
| Synopsis | Enter the ancp context |
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> ancp |
| Tree | ancp |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-topology-discovery *boolean*

| | |
|------------|---|
| Synopsis | Enable the ANCP dynamic topology discovery capability |
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> ancp dynamic-topology-discovery <i>boolean</i> |
| Tree | dynamic-topology-discovery |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

oam *boolean*

| | |
|----------|---|
| Synopsis | Enable GSMP ANCP OAM capability at startup of GSMP connection |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> ancp oam <i>boolean</i> |
| Tree | oam |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-multiplier *number*

| | |
|------------|--|
| Synopsis | Hold-multiplier for the GSMP connections in this group |
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> hold-multiplier <i>number</i> |
| Tree | hold-multiplier |
| Range | 1 to 100 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

idle-filter *boolean*

| | |
|------------|---|
| Synopsis | Filter ANCP messages from IDLE DSL lines |
| Context | configure service vprn <i>string</i> gsmp group <i>string</i> idle-filter <i>boolean</i> |
| Tree | idle-filter |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

keepalive *number*

| | |
|------------|--|
| Synopsis | Keepalive value for the GSMP connections in this group |
| Context | configure <i>service vprn string gsmp group string keepalive number</i> |
| Tree | <i>keepalive</i> |
| Range | 1 to 25 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor [*remote-address*] *string*

| | |
|------------|---|
| Synopsis | Enter the neighbor list instance |
| Context | configure <i>service vprn string gsmp group string neighbor string</i> |
| Tree | <i>neighbor</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[remote-address] *string*

| | |
|------------|---|
| Synopsis | GSMP neighbor remote IP address |
| Context | configure <i>service vprn string gsmp group string neighbor string</i> |
| Tree | <i>neighbor</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the GSMP neighbor |
| Context | configure <i>service vprn string gsmp group string neighbor string admin-state keyword</i> |
| Tree | <i>admin-state</i> |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

description *string*

Synopsis Text description
 Context **configure** [service vprn](#) *string* [gsmp group](#) *string* [neighbor](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

local-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Restrict connections to this local address only within the service running ANCP
 Context **configure** [service vprn](#) *string* [gsmp group](#) *string* [neighbor](#) *string* [local-address](#) *string*
 Tree [local-address](#)
 Introduced 16.0.R1
 Platforms All

priority-marking



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **priority-marking** context
 Context **configure** [service vprn](#) *string* [gsmp group](#) *string* [neighbor](#) *string* [priority-marking](#)
 Tree [priority-marking](#)
 Introduced 16.0.R1
 Platforms All

dscp *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | DSCP that is used while remarking the in profile packets |
| Context | configure service vpn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i> priority-marking dscp <i>keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Notes | The following elements are part of a choice: dscp or prec . |
| Introduced | 16.0.R1 |
| Platforms | All |

prec *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Precedence priority marking |
| Context | configure service vpn <i>string</i> gsmp group <i>string</i> neighbor <i>string</i> priority-marking prec <i>number</i> |
| Tree | prec |
| Range | 0 to 7 |
| Notes | The following elements are part of a choice: dscp or prec . |
| Introduced | 16.0.R1 |
| Platforms | All |

persistence *boolean*

| | |
|----------|---|
| Synopsis | Store DSL line information when the GSMP connection terminates |
| Context | configure service vpn <i>string</i> gsmp group <i>string</i> persistence <i>boolean</i> |
| Tree | persistence |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

gtp

| | |
|------------|--|
| Synopsis | Enter the gtp context |
| Context | configure service vprn string gtp |
| Tree | gtp |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

s11

| | |
|------------|--|
| Synopsis | Enter the s11 context |
| Context | configure service vprn string gtp s11 |
| Tree | s11 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interface [[interface-name](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn string gtp s11 interface reference |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[[interface-name](#)] *reference*

| | |
|-----------|--|
| Synopsis | Interface name |
| Context | configure service vprn string gtp s11 interface reference |
| Tree | interface |
| Reference | configure service vprn string interface string |
| Notes | This element is part of a list key. |

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

apn-policy *reference*

Synopsis Access Point Name (APN) policy for the S11 interface
 Context **configure** [service vprn string gtp s11 interface reference apn-policy reference](#)
 Tree [apn-policy](#)
 Reference **configure** [subscriber-mgmt gtp apn-policy string](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis Enter the **peer-profile-map** context
 Context **configure** [service vprn string gtp s11 peer-profile-map](#)
 Tree [peer-profile-map](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **prefix** list instance
 Context **configure** [service vprn string gtp s11 peer-profile-map prefix \(ipv4-prefix | ipv6-prefix\)](#)
 Tree [prefix](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[peer-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix and prefix length of the subnet
 Context **configure** [service vprn string gtp s11 peer-profile-map prefix \(ipv4-prefix | ipv6-prefix\)](#)
 Tree [prefix](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis Peer profile used for peers in this prefix

Context **configure service vprn** *string* **gtp s11 peer-profile-map prefix** (*ipv4-prefix* | *ipv6-prefix*) **peer-profile** *reference*

Tree **peer-profile**

Reference **configure subscriber-mgmt gtp peer-profile** *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

upf-data-endpoint

Synopsis Enable the **upf-data-endpoint** context

Context **configure service vprn** *string* **gtp upf-data-endpoint**

Tree **upf-data-endpoint**

Description Commands in this context configure a GTP-U service endpoint used by BNG CUPS FWA sessions.

Introduced 21.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*

Synopsis FPE used to encapsulate and decapsulate GTP-U traffic

Context **configure service vprn** *string* **gtp upf-data-endpoint fpe** *reference*

Tree **fpe**

Reference **configure fwd-path-ext fpe** *number*

Notes This element is mandatory.

Introduced 21.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface *reference*

| | |
|------------|--|
| Synopsis | Interface on which the GTP-U packets terminate |
| Context | configure service vprn <i>string</i> gtp upf-data-endpoint interface <i>reference</i> |
| Tree | interface |
| Reference | configure service vprn <i>string</i> interface <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 21.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

uplink

| | |
|------------|--|
| Synopsis | Enable the uplink context |
| Context | configure service vprn <i>string</i> gtp uplink |
| Tree | uplink |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

apn *string*

| | |
|---------------|--|
| Synopsis | Network Identifier part of APN |
| Context | configure service vprn <i>string</i> gtp uplink apn <i>string</i> |
| Tree | apn |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pdn-type *keyword*

| | |
|------------|--|
| Synopsis | Default 3GPP PDN in GTP |
| Context | configure service vprn <i>string</i> gtp uplink pdn-type <i>keyword</i> |
| Tree | pdn-type |
| Default | ipv4 |
| Options | ipv4, ipv6, ipv4v6 |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile-map

Synopsis Enter the **peer-profile-map** context

Context **configure service vprn string gtp uplink peer-profile-map**

Tree [peer-profile-map](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis Enter the **prefix** list instance

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

Tree [prefix](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis IP prefix and prefix length of the subnet

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile *reference*

Synopsis Peer profile name

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**
[peer-profile reference](#)

Tree [peer-profile](#)

Reference **configure subscriber-mgmt gtp peer-profile string**

Notes This element is mandatory.

| | |
|------------|------------------------------------|
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hash-label *boolean*

| | |
|------------|---|
| Synopsis | Include hash label |
| Context | configure service vprn <i>string</i> hash-label <i>boolean</i> |
| Tree | hash-label |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

igmp

| | |
|------------|--|
| Synopsis | Enable the igmp context |
| Context | configure service vprn <i>string</i> igmp |
| Tree | igmp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IGMP |
| Context | configure service vprn <i>string</i> igmp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

forwarding-group-interface [forwarding-service](#) *string* [group-interface-name](#) *reference*

| | |
|----------|--|
| Synopsis | Enter the forwarding-group-interface list instance |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> |
| Tree | forwarding-group-interface |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

forwarding-service *string*

Synopsis Forwarding service for a subscriber interface in a retailer context
 Context **configure service vprn** *string* **igmp forwarding-group-interface forwarding-service** *string*
group-interface-name *reference*
 Tree **forwarding-group-interface**
 String Length 1 to 64
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface-name *reference*

Synopsis Group interface name
 Context **configure service vprn** *string* **igmp forwarding-group-interface forwarding-service** *string*
group-interface-name *reference*
 Tree **forwarding-group-interface**
 Reference **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of IGMP
 Context **configure service vprn** *string* **igmp forwarding-group-interface forwarding-service** *string*
group-interface-name *reference* **admin-state** *keyword*
 Tree **admin-state**
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

| | |
|-------------|--|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Description | This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.

When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode). |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|-------------|--|
| Synopsis | Maximum number of group sources for this interface |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|----------|--|
| Synopsis | Maximum number of groups for this interface |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **maximum-number-sources** *number*
 Tree [maximum-number-sources](#)
 Range 1 to 1000
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis Enter the **mcac** context
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **mcac**
 Tree [mcac](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis Enter the **bandwidth** context
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **mcac** **bandwidth**
 Tree [bandwidth](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels
 Context **configure** [service vprn](#) *string* [igmp forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **mcac** **bandwidth** **mandatory** (*number* | *keyword*)
 Tree [mandatory](#)

| | |
|------------|---|
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

total (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name reference mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-policy *reference*

| | |
|------------|--|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name reference mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name reference mcac policy <i>reference</i> |
| Tree | policy |
| Description | This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment. |

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

| | |
|------------|---|
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-last-member-interval *number*

| | |
|------------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-response-interval *number*

| | |
|------------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-source-address *string*

| | |
|-------------|---|
| Synopsis | Source address for IGMP queries |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-source-address <i>string</i> |
| Tree | query-source-address |
| Description | This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-hosts-only *boolean*

| | |
|----------|--|
| Synopsis | Allow IGMP traffic from known hosts only |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> sub-hosts-only <i>boolean</i> |
| Tree | sub-hosts-only |

| | |
|------------|---|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subnet-check *boolean*

| | |
|------------|---|
| Synopsis | Allow subnet checking |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> subnet-check <i>boolean</i> |
| Tree | subnet-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP protocol version |
| Context | configure service vprn <i>string</i> igmp forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-if-query-source-address *string*

| | |
|------------|--|
| Synopsis | Default query-source address for all group interfaces |
| Context | configure service vprn <i>string</i> igmp group-if-query-source-address <i>string</i> |
| Tree | group-if-query-source-address |
| Introduced | 16.0.R1 |
| Platforms | All |

group-interface [[group-interface-name](#)] *reference*

| | |
|----------|--|
| Synopsis | Enter the group-interface list instance |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn string igmp group-interface reference |
| Tree | group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[group-interface-name] reference

| | |
|------------|---|
| Synopsis | Group interface name |
| Context | configure service vprn string igmp group-interface reference |
| Tree | group-interface |
| Reference | configure service vprn string subscriber-interface string group-interface string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of IGMP |
| Context | configure service vprn string igmp group-interface reference admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy reference

| | |
|-------------|---|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vprn string igmp group-interface reference import-policy reference |
| Tree | import-policy |
| Description | <p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p> |

| | |
|------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|-------------|--|
| Synopsis | Maximum number of group sources for this interface |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum number of groups for this interface |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of sources that are allowed per group |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mcac

Synopsis Enter the **mcac** context

Context **configure service vprn string igmp group-interface reference mcac**

Tree [mcac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure service vprn string igmp group-interface reference mcac bandwidth**

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn string igmp group-interface reference mcac bandwidth mandatory (*number* | *keyword*)**

Tree [mandatory](#)

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn string igmp group-interface reference mcac bandwidth total (*number* | *keyword*)**

Tree [total](#)

| | |
|------------|---|
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-policy *reference*

| | |
|------------|--|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> mcac policy <i>reference</i> |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-interval *number*

Synopsis Time between two consecutive host-query messages

Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-interval](#) *number*

Tree [query-interval](#)

Range 2 to 1024

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-last-member-interval *number*

Synopsis Time between group-specific query messages

Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-last-member-interval](#) *number*

Tree [query-last-member-interval](#)

Range 1 to 1023

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages

Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-response-interval](#) *number*

Tree [query-response-interval](#)

Range 1 to 1023

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

query-source-address *string*

Synopsis Source address for IGMP queries

Context **configure** [service vprn](#) *string* [igmp group-interface](#) *reference* [query-source-address](#) *string*

| | |
|-------------|--|
| Tree | query-source-address |
| Description | This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|---|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-hosts-only *boolean*

| | |
|------------|---|
| Synopsis | Allow IGMP traffic from known hosts only |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> sub-hosts-only <i>boolean</i> |
| Tree | sub-hosts-only |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subnet-check *boolean*

| | |
|------------|---|
| Synopsis | Allow subnet checking |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> subnet-check <i>boolean</i> |
| Tree | subnet-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP protocol version |
| Context | configure service vprn <i>string</i> igmp group-interface <i>reference</i> version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface [[ip-interface-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-interface-name] *string*

| | |
|---------------|--|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IGMP |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

import-policy *reference*

Synopsis Import policy that filters IGMP packets

Context **configure** [service vprn](#) *string* [igmp interface](#) *string* **import-policy** *reference*

Tree [import-policy](#)

Description This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.

When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).

Reference **configure** [policy-options policy-statement](#) *string*

Introduced 16.0.R1

Platforms All

maximum-number-group-sources *number*

Synopsis Maximum number of group sources for this interface

Context **configure** [service vprn](#) *string* [igmp interface](#) *string* **maximum-number-group-sources** *number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms All

maximum-number-groups *number*

Synopsis Maximum number of groups for this interface

Context **configure** [service vprn](#) *string* [igmp interface](#) *string* **maximum-number-groups** *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1
 Platforms All

maximum-number-sources *number*

Synopsis Maximum number of sources that are allowed per group
 Context **configure** [service vprn string igmp interface string maximum-number-sources number](#)
 Tree [maximum-number-sources](#)
 Range 1 to 1000
 Introduced 16.0.R1
 Platforms All

mcac

Synopsis Enter the **mcac** context
 Context **configure** [service vprn string igmp interface string mcac](#)
 Tree [mcac](#)
 Introduced 16.0.R1
 Platforms All

bandwidth

Synopsis Enter the **bandwidth** context
 Context **configure** [service vprn string igmp interface string mcac bandwidth](#)
 Tree [bandwidth](#)
 Introduced 16.0.R1
 Platforms All

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels
 Context **configure** [service vprn string igmp interface string mcac bandwidth mandatory \(number | keyword\)](#)
 Tree [mandatory](#)
 Range 0 to 2147483647
 Default unlimited

| | |
|------------|-----------|
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

total (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-policy *reference*

| | |
|------------|---|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-constraints

| | |
|------------|--|
| Synopsis | Enter the mc-constraints context |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints |
| Tree | mc-constraints |
| Introduced | 16.0.R1 |
| Platforms | All |

level [*level-id*] *number*

| | |
|------------|--|
| Synopsis | Enter the level list instance |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i> |
| Tree | level |
| Introduced | 16.0.R1 |
| Platforms | All |

[level-id] *number*

| | |
|------------|--|
| Synopsis | Bandwidth level ID for an MCAC constraint |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i> |
| Tree | level |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth *number*

| | |
|------------|--|
| Synopsis | Bandwidth available for this level |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i> |
| Tree | bandwidth |
| Range | 0 to 2147483647 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

number-down [*number-lag-port-down*] *number*

| | |
|----------|--|
| Synopsis | Enter the number-down list instance |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

[number-lag-port-down] *number*

| | |
|------------|--|
| Synopsis | Number of ports that are down in this LAG link |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

level *number*

| | |
|-------------|--|
| Synopsis | Level ID to associate with number of down LAG ports |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i> |
| Tree | level |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority. |
| Range | 1 to 8 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

use-lag-port-weight *boolean*

| | |
|-------------|---|
| Synopsis | Use LAG port weight in calculating MCAC constraints |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i> |
| Tree | use-lag-port-weight |
| Description | When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs. |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> mcac <i>policy reference</i> |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|------------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|------------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | All |

redundant-mcast *boolean*

| | |
|------------|---|
| Synopsis | Use interface as a redundant-pair member for multicast |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> redundant-mcast <i>boolean</i> |
| Tree | redundant-mcast |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ssm-translate

| | |
|------------|--|
| Synopsis | Enter the ssm-translate context |
| Context | configure service vprn string igmp interface string ssm-translate |
| Tree | ssm-translate |
| Introduced | 16.0.R1 |
| Platforms | All |

group-range **start string end string**

| | |
|------------|--|
| Synopsis | Enter the group-range list instance |
| Context | configure service vprn string igmp interface string ssm-translate group-range start string end string |
| Tree | group-range |
| Introduced | 16.0.R1 |
| Platforms | All |

start string

| | |
|------------|--|
| Synopsis | Lower bound of the IP address group range |
| Context | configure service vprn string igmp interface string ssm-translate group-range start string end string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

end string

| | |
|------------|--|
| Synopsis | Upper bound of the IP address group range |
| Context | configure service vprn string igmp interface string ssm-translate group-range start string end string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|----------------|--|
| Synopsis | Add a list entry for source |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i> |
| Tree | source |
| Min. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

static

| | |
|------------|--|
| Synopsis | Enter the static context |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [[group-address](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the group list instance |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> static group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[group-address] *string*

| | |
|-------------|--|
| Synopsis | Group address of static IGMP multicast channel |
| Context | configure service vprn string igmp interface string static group string |
| Tree | group |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for source |
| Context | configure service vprn string igmp interface string static group string source string |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure service vprn string igmp interface string static group string source string |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|----------|--|
| Synopsis | any source address (*,G) |
| Context | configure service vprn string igmp interface string static group string starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |

Introduced 16.0.R2
 Platforms All

group-range *start string end string step string*

Synopsis Enter the **group-range** list instance
 Context **configure** *service vprn string igmp interface string static group-range start string end string step string*
 Tree *group-range*
 Introduced 16.0.R1
 Platforms All

start *string*

Synopsis IP address for the start of the static group range
 Context **configure** *service vprn string igmp interface string static group-range start string end string step string*
 Tree *group-range*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

end *string*

Synopsis IP address for the end of the static group range
 Context **configure** *service vprn string igmp interface string static group-range start string end string step string*
 Tree *group-range*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

step *string*

Synopsis Step interval in the group-range address

| | |
|------------|--|
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [**source-address**] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for source |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|---|
| Synopsis | any source address (*,G) |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

subnet-check *boolean*

| | |
|------------|---|
| Synopsis | Allow subnet checking |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> subnet-check <i>boolean</i> |
| Tree | subnet-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP protocol version |
| Context | configure service vprn <i>string</i> igmp interface <i>string</i> version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval *number*

| | |
|-------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vprn <i>string</i> igmp query-interval <i>number</i> |
| Tree | query-interval |
| Description | This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1. |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval *number*

| | |
|----------|--|
| Synopsis | Time between group-specific query messages |
|----------|--|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> igmp query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Description | This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group. |
| Range | 1 to 1023 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vprn <i>string</i> igmp query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count *number*

| | |
|-------------|---|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vprn <i>string</i> igmp robust-count <i>number</i> |
| Tree | robust-count |
| Description | This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, the robust-count can be increased. |
| Range | 2 to 10 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

ssm-translate

| | |
|------------|---|
| Synopsis | Enter the ssm-translate context |
| Context | configure service vprn string igmp ssm-translate |
| Tree | ssm-translate |
| Introduced | 16.0.R1 |
| Platforms | All |

group-range [start string end string](#)

| | |
|------------|---|
| Synopsis | Enter the group-range list instance |
| Context | configure service vprn string igmp ssm-translate group-range start string end string |
| Tree | group-range |
| Introduced | 16.0.R1 |
| Platforms | All |

start [string](#)

| | |
|------------|---|
| Synopsis | Lower bound of the IP address group range |
| Context | configure service vprn string igmp ssm-translate group-range start string end string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

end [string](#)

| | |
|------------|---|
| Synopsis | Upper bound of the IP address group range |
| Context | configure service vprn string igmp ssm-translate group-range start string end string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|----------------|--|
| Synopsis | Add a list entry for source |
| Context | configure service vprn <i>string</i> igmp ssm-translate group-range start <i>string</i> end <i>string</i>
source <i>string</i> |
| Tree | source |
| Min. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure service vprn <i>string</i> igmp ssm-translate group-range start <i>string</i> end <i>string</i>
source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

igmp-host-tracking

| | |
|------------|--|
| Synopsis | Enter the igmp-host-tracking context |
| Context | configure service vprn <i>string</i> igmp-host-tracking |
| Tree | igmp-host-tracking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IGMP host tracking |
| Context | configure service vprn <i>string</i> igmp-host-tracking admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis Time that the system continues to track inactive hosts

Context **configure** *service vprn string igmp-host-tracking expiry-time number*

Tree [expiry-time](#)

Range 1 to 65535

Default 260

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-nh-metric *boolean*

Synopsis Ignore next hop metric

Context **configure** *service vprn string ignore-nh-metric boolean*

Tree [ignore-nh-metric](#)

Default false

Introduced 16.0.R1

Platforms All

interface [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance

Context **configure** *service vprn string interface string*

Tree [interface](#)

Introduced 16.0.R1

Platforms All

[[interface-name](#)] *string*

Synopsis Interface name

Context **configure** *service vprn string interface string*

Tree [interface](#)

| | |
|---------------|-------------------------------------|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

cflowd-parameters

| | |
|------------|--|
| Synopsis | Enter the cflowd-parameters context |
| Context | configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters |
| Tree | cflowd-parameters |
| Introduced | 16.0.R1 |
| Platforms | All |

sampling [[sampling-type](#)] *keyword*

| | |
|------------|--|
| Synopsis | Enter the sampling list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Introduced | 16.0.R1 |
| Platforms | All |

[[sampling-type](#)] *keyword*

| | |
|----------|--|
| Synopsis | Traffic sampling type |
| Context | configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |

| | |
|-------------|---|
| Tree | sampling |
| Description | This command configures the type of traffic to be sampled on the associated IP interface. |
| Options | unicast, multicast, both |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

direction *keyword*

| | |
|-------------|--|
| Synopsis | Direction of traffic for cflowd sampling |
| Context | configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i> |
| Tree | direction |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces. |
| Default | ingress-only |
| Options | ingress-only, egress-only, both |
| Introduced | 16.0.R1 |
| Platforms | All |

sample-profile (*keyword* | *number*)

| | |
|-------------|---|
| Synopsis | Sample profile ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword</i> <i>number</i>) |
| Tree | sample-profile |
| Description | This command defines the sampling rate profile associated with this interface. |
| Max. Range | 0 to 4294967295 |
| Options | 1 |
| Introduced | 19.5.R1 |
| Platforms | All |

type *keyword*

| | |
|----------|-------------------------|
| Synopsis | Type of cflowd analysis |
|----------|-------------------------|

| | |
|-------------|---|
| Context | configure service vprn string interface string cflowd-parameters sampling keyword type keyword |
| Tree | type |
| Description | This command configures the cflowd sampling type on the associated IP interface. |
| Options | acl, interface |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

cpu-protection reference

| | |
|------------|--|
| Synopsis | CPU protection policy |
| Context | configure service vprn string interface string cpu-protection reference |
| Tree | cpu-protection |
| Reference | configure system security cpu-protection policy number |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string interface string description string |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-tunnel-redundant-nexthop string

| | |
|-------------|--|
| Synopsis | Redundant next-hop address for the dynamic IPsec tunnel |
| Context | configure service vprn string interface string dynamic-tunnel-redundant-nexthop string |
| Tree | dynamic-tunnel-redundant-nexthop |
| Description | This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service. |

| | |
|------------|---|
| Notes | The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop). |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time

| | |
|------------|--|
| Synopsis | Enter the hold-time context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | All |

init-only *boolean*

| | |
|----------|---|
| Synopsis | Apply delay only at interface configuration or reboot |
|----------|---|

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 down init-only <i>boolean</i> |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Down hold time for the IP interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 down seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|----------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv4 up seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

down

| | |
|-------------|---|
| Synopsis | Enter the down context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | All |

init-only *boolean*

| | |
|-------------|--|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 down init-only <i>boolean</i> |
| Tree | init-only |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Down hold time for the IP interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 down seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> hold-time ipv6 up seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

if-attribute

| | |
|----------|--|
| Synopsis | Enter the if-attribute context |
| Context | configure service vprn <i>string</i> interface <i>string</i> if-attribute |
| Tree | if-attribute |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

admin-group *reference*

| | |
|----------------|---|
| Synopsis | Administrative group name for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> if-attribute admin-group <i>reference</i> |
| Tree | admin-group |
| Reference | configure routing-options if-attribute admin-group <i>string</i> |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

srlg-group [[name](#)] *reference*

| | |
|------------|--|
| Synopsis | Add a list entry for srlg-group |
| Context | configure service vprn <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i> |
| Tree | srlg-group |
| Introduced | 16.0.R1 |
| Platforms | All |

[[name](#)] *reference*

| | |
|------------|--|
| Synopsis | SRLG name |
| Context | configure service vprn <i>string</i> interface <i>string</i> if-attribute srlg-group <i>reference</i> |
| Tree | srlg-group |
| Reference | configure routing-options if-attribute srlg-group <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|----------|----------------------------------|
| Synopsis | Enter the ingress context |
|----------|----------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> ingress |
| Tree | ingress |
| Introduced | 19.7.R1 |
| Platforms | All |

destination-class-lookup *boolean*

| | |
|-------------|---|
| Synopsis | Enable BGP destination class lookup |
| Context | configure service vprn <i>string</i> interface <i>string</i> ingress destination-class-lookup <i>boolean</i> |
| Tree | destination-class-lookup |
| Description | When configured to true , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the destination-class match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.

When configured to false , destination class lookup is not enabled. |
| Default | false |
| Introduced | 20.7.R1 |
| Platforms | All |

policy-accounting *reference*

| | |
|------------|--|
| Synopsis | Ingress policy accounting template name |
| Context | configure service vprn <i>string</i> interface <i>string</i> ingress policy-accounting <i>reference</i> |
| Tree | policy-accounting |
| Reference | configure routing-options policy-accounting policy-acct-template <i>string</i> |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

ingress-stats *boolean*

| | |
|------------|--|
| Synopsis | Collect ingress statistics |
| Context | configure service vprn <i>string</i> interface <i>string</i> ingress-stats <i>boolean</i> |
| Tree | ingress-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-mtu *number*

| | |
|------------|---|
| Synopsis | IP MTU applied to outgoing packets |
| Context | configure service vpn <i>string</i> interface <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

ipsec

| | |
|------------|--|
| Synopsis | Enable the ipsec context |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec |
| Tree | ipsec |
| Introduced | 22.7.R1 |
| Platforms | VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of IPsec secured interface |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ip-exception *reference*

| | |
|-------------|--|
| Synopsis | IP exception filter |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ip-exception <i>reference</i> |
| Tree | ip-exception |
| Description | This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing. |

| | |
|------------|--|
| Reference | configure filter ip-exception <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipsec-tunnel [[name](#)] *string*

| | |
|-------------|--|
| Synopsis | Enter the ipsec-tunnel list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> |
| Tree | ipsec-tunnel |
| Description | Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | IPsec tunnel name |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> |
| Tree | ipsec-tunnel |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the IPsec tunnel |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

bfd

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string bfd |
| Tree | bfd |
| Introduced | 22.7.R1 |
| Platforms | VSR |

bfd-designate *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Designate IPsec tunnel to carry BFD traffic |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string bfd bfd-designate boolean |
| Tree | bfd-designate |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness |
| Tree | bfd-liveness |
| Description | Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. |

BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1
 Platforms VSR

dest-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session
 Context **configure** *service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string*
 Tree *dest-ip*
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session
 Context **configure** *service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string*
 Tree *interface*
 String Length 1 to 32
 Notes This element is mandatory.
 Introduced 22.7.R1
 Platforms VSR

service-name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Administrative service name |
| Context | configure <i>service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i> |
| Tree | <i>service-name</i> |
| Description | This command configures the name of the service where BFD traffic is forwarded to. |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Reset the DF bit to 0 in all payload IP packets |
| Context | configure <i>service vprn string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i> |
| Tree | <i>clear-df-bit</i> |
| Description | When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs. |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

copy-traffic-class-upon-decapsulation *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enable traffic class copy upon decapsulation |
|----------|--|

| | |
|-------------|---|
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> copy-traffic-class-upon-decapsulation <i>boolean</i> |
| Tree | copy-traffic-class-upon-decapsulation |
| Description | When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum size of the encapsulated tunnel packet |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i> |
| Tree | encapsulated-ip-mtu |
| Description | This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 22.7.R1 |
| Platforms | VSR |

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the icmp-generation context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation |
| Tree | icmp-generation |
| Description | Commands in this context configure settings for ICMPv4 message generation. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the frag-required context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required |
| Tree | frag-required |
| Description | Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Administrative state of sending ICMP messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i> |

| | |
|-------------|--|
| Tree | admin-state |
| Description | This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Default | enable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Interval for sending ICMP messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i> |
| Tree | interval |
| Description | This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4). |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | VSR |

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Maximum number of ICMP messages that can be sent |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i> |
| Tree | message-count |

| | |
|-------------|--|
| Description | This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enter the icmp6-generation context |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string icmp6-generation |
| Tree | icmp6-generation |
| Description | Commands in this context configure settings for ICMPv6 message generation. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enter the packet-too-big context |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big |
| Tree | packet-too-big |
| Description | <p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p> |
| Introduced | 22.7.R1 |

Platforms VSR

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Administrative state of Packet Too Big message sends |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | VSR |

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Interval for sending Packet Too Big messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i> |
| Tree | interval |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | VSR |

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum number of ICMPv6 PTB messages that can be sent |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> icmp6-generation packet-too-big message-count <i>number</i> |
| Tree | message-count |
| Description | This command configures the maximum number of PTB messages that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Private MTU of the IPsec tunnel |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Description | This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 22.7.R1 |
| Platforms | VSR |

key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the key-exchange context |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string key-exchange |
| Tree | key-exchange |
| Introduced | 22.7.R1 |
| Platforms | VSR |

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the dynamic context |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string key-exchange dynamic |
| Tree | dynamic |
| Notes | The following elements are part of a choice: dynamic or manual . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Attempt to establish a phase 1 exchange automatically |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string key-exchange dynamic auto-establish <i>boolean</i> |
| Tree | auto-establish |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the cert context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert |
| Tree | cert |
| Description | Commands in this context configure the attributes of the dynamic keying certificate. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

cert-profile *reference*

| | |
|------------|--|
| Synopsis | Certificate profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i> |
| Tree | cert-profile |
| Reference | configure ipsec cert-profile <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | VSR |

status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the status-verify context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify |
| Tree | status-verify |
| Description | Commands in this context configure attributes of Certificate Status Verification (CSV). |
| Introduced | 22.7.R1 |
| Platforms | VSR |

default-result *keyword*

| | |
|-------------|--|
| Synopsis | Default result for Certificate Status Verification |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i> |
| Tree | default-result |
| Description | This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result. |
| Default | revoked |
| Options | revoked, good |
| Introduced | 22.7.R1 |
| Platforms | VSR |

primary *keyword*

| | |
|-------------|---|
| Synopsis | Primary method of CSV to verify the revocation status |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i> |
| Tree | primary |
| Description | This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer. |
| Default | crl |
| Options | crl, ocsp |
| Introduced | 22.7.R1 |
| Platforms | VSR |

secondary *keyword*

| | |
|-------------|---|
| Synopsis | Secondary method used to verify certificate revocation |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i> |
| Tree | secondary |
| Description | This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate. |
| Default | none |
| Options | none, crl, ocsp |

Introduced 22.7.R1
 Platforms VSR

trust-anchor-profile *reference*

Synopsis Trust anchor profile name
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange dynamic cert trust-anchor-profile reference](#)
 Tree [trust-anchor-profile](#)
 Reference **configure** [ipsec trust-anchor-profile string](#)
 Introduced 22.7.R1
 Platforms VSR

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange dynamic id](#)
 Tree [id](#)
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1
 Platforms VSR

fqdn *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

| | |
|---------------|--|
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id fqdn <i>string</i> |
| Tree | fqdn |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipv4 *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv4 as the local ID type |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv4 <i>string</i> |
| Tree | ipv4 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv6 used as the local IKE ID type |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ipv6 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | IKE policy ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ike-policy <i>reference</i> |
| Tree | ike-policy |
| Description | This command specifies the ID of the IKE policy used for IKE negotiation.
The ipsec-transport-mode-profile configuration only supports IKEv2. |
| Reference | configure ipsec ike-policy <i>number</i> |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|--|
| Synopsis | IPsec transform IDs used by the dynamic key |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic ipsec-transform <i>reference</i> |
| Tree | ipsec-transform |
| Description | This command specifies IPsec transform IDs used for CHILD_SA negotiation. |
| Reference | configure ipsec ipsec-transform <i>number</i> |
| Max. Instances | 4 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Pre-shared key for authentication |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange dynamic pre-shared-key <i>string</i> |
| Tree | pre-shared-key |
| String Length | 1 to 115 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

manual



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable the manual context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual |
| Tree | manual |
| Description | Commands in this context configure settings for manually configured security associations for the IPsec tunnel. |
| Notes | The following elements are part of a choice: dynamic or manual . |
| Introduced | 22.7.R1 |
| Platforms | VSR |

keys [[security-association](#)] *number direction keyword*

| | |
|-------------|---|
| Synopsis | Enter the keys list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number direction keyword</i> |
| Tree | keys |
| Description | Commands in this context configure the security association list for the tunnel. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

[[security-association](#)] *number*

| | |
|----------|-------------|
| Synopsis | SA entry ID |
|----------|-------------|

| | |
|------------|---|
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> |
| Tree | keys |
| Range | 1 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

direction *keyword*

| | |
|------------|---|
| Synopsis | Direction of the IPsec tunnel |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> |
| Tree | keys |
| Options | inbound, outbound |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Key used for the authentication algorithm |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 130 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Key used for the encryption algorithm |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword encryption-key string |
| Tree | encryption-key |
| String Length | 1 to 66 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipsec-transform *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Transform entry used by manual SAs |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword ipsec-transform reference |
| Tree | ipsec-transform |
| Reference | configure ipsec ipsec-transform number |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

spi *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | SPI of inbound and outbound packets |
| Context | configure service vprn string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword spi number |
| Tree | spi |

| | |
|-------------|--|
| Description | This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.

The remote node can use the SPI to look up the instruction to verify and decrypt the packet. |
| Range | 256 to 16383 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

local-gateway-address-override (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Local IPsec tunnel endpoint address |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> local-gateway-address-override (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-gateway-address-override |
| Description | This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enter the max-history-key-records context |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> max-history-key-records |
| Tree | max-history-key-records |
| Description | Commands in this context configure the settings for recording historical IPsec keys. |
| Introduced | 22.7.R1 |

Platforms VSR

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of recent records

Context **configure** service vprn string interface string ipsec ipsec-tunnel string max-history-key-records esp number

Tree esp

Range 1 to 48

Introduced 22.7.R1

Platforms VSR

ike number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of historical IKE key records

Context **configure** service vprn string interface string ipsec ipsec-tunnel string max-history-key-records ike number

Tree ike

Range 1 to 3

Introduced 22.7.R1

Platforms VSR

pmtu-discovery-aging number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Aging out time of the learned path MTU

Context **configure** service vprn string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number

| | |
|-------------|--|
| Tree | pmtu-discovery-aging |
| Description | This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation. |
| Range | 900 to 3600 |
| Default | 900 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | VSR |

private-sap *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Private SAP ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-sap <i>number</i> |
| Tree | private-sap |
| Range | 0 to 4094 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

private-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|----------------------|
| Synopsis | Private service name |
|----------|----------------------|

| | |
|---------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-service <i>string</i> |
| Tree | private-service |
| Description | This command configures the private service name.
If unconfigured, the private service is the service where the secured interface resides. |
| String Length | 1 to 64 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | TCP maximum segment size (MSS) adjustment |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i> |
| Tree | private-tcp-mss-adjust |
| Description | This command specifies the TCP MSS to adjust for the tunnel on the private side.
When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 22.7.R1 |
| Platforms | VSR |

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enable propagation of the path MTU to IPv4 hosts |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i> |
| Tree | propagate-pmtu-v4 |

| | |
|-------------|--|
| Description | When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts). |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | VSR |

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable propagation of the path MTU to IPv6 hosts |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> propagate-pmtu-v6 <i>boolean</i> |
| Tree | propagate-pmtu-v6 |
| Description | When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts). |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | VSR |

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | TCP maximum segment size (MSS) on the public network |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | public-tcp-mss-adjust |
| Description | This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Options | auto |

Introduced 22.7.R1
 Platforms VSR

remote-gateway-address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Remote IPsec tunnel endpoint address
 Context **configure** **service** **vprn** *string* **interface** *string* **ipsec** **ipsec-tunnel** *string* **remote-gateway-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 Tree **remote-gateway-address**
 Introduced 22.7.R1
 Platforms VSR

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Anti-replay window size
 Context **configure** **service** **vprn** *string* **interface** *string* **ipsec** **ipsec-tunnel** *string* **replay-window** *number*
 Tree **replay-window**
 Description This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
 Range 32 | 64 | 128 | 256 | 512
 Units packets
 Introduced 22.7.R1
 Platforms VSR

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the security-policy context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy |
| Tree | security-policy |
| Description | Commands in this context specify a security policy used by the tunnel. |
| Introduced | 22.7.R1 |
| Platforms | VSR |

id number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Security policy ID for use by the tunnel |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy id number |
| Tree | id |
| Max. Range | 0 to 4294967295 |
| Introduced | 22.7.R1 |
| Platforms | VSR |

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable strict match of the security policy entry |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipsec ipsec-tunnel <i>string</i> security-policy strict-match <i>boolean</i> |
| Tree | strict-match |
| Description | When configured to true , this command enables strict match of the security policy entry. |

When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.

If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.

| | |
|------------|---------|
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | VSR |

ipv6-exception *reference*

| | |
|-------------|---|
| Synopsis | IPv6 filter exception used to bypass encryption |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec ipv6-exception <i>reference</i> |
| Tree | ipv6-exception |
| Description | This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface. |
| Reference | configure filter ipv6-exception <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | VSR |

public-sap *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Public SAP ID |
| Context | configure service vpn <i>string</i> interface <i>string</i> ipsec public-sap <i>number</i> |
| Tree | public-sap |
| Range | 0 to 4094 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |

Platforms VSR

tunnel-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tunnel group ID

Context **configure service vpn** *string* **interface** *string* **ipsec tunnel-group** *reference*

Tree **tunnel-group**

Reference **configure isa tunnel-group** *number*

Notes This element is mandatory.

Introduced 22.7.R1

Platforms VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure service vpn** *string* **interface** *string* **ipv4**

Tree **ipv4**

Introduced 16.0.R1

Platforms All

addresses

Synopsis Enter the **addresses** context

Context **configure service vpn** *string* **interface** *string* **ipv4 addresses**

Tree **addresses**

Introduced 16.0.R1

Platforms All

address [*ipv4-address*] *string*

Synopsis Enter the **address** list instance

Context **configure service vpn** *string* **interface** *string* **ipv4 addresses address** *string*

| | |
|------------|-------------------------|
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|--|
| Synopsis | IPv4 address for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 addresses address <i>string</i> |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 addresses address <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-directed-broadcasts *boolean*

| | |
|------------|---|
| Synopsis | Forward directed broadcasts |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i> |
| Tree | allow-directed-broadcasts |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service vprn string interface string ipv4 bfd |
| Tree | bfd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service vprn string interface string ipv4 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

echo-receive *number*

| | |
|------------|---|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service vprn string interface string ipv4 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vprn string interface string ipv4 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |

| | |
|------------|---------|
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

receive number

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service vprn string interface string ipv4 bfd receive number |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transmit-interval number

| | |
|-------------|---|
| Synopsis | BFD transmit interval over this interface |
| Context | configure service vprn string interface string ipv4 bfd transmit-interval number |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

type keyword

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 bfd type <i>keyword</i> |
| Tree | type |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dhcp

| | |
|------------|---|
| Synopsis | Enter the dhcp context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of DHCP |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

gi-address *string*

| | |
|-------------|---|
| Synopsis | GI address for the DHCP relay |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp gi-address <i>string</i> |
| Tree | gi-address |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

lease-populate

| | |
|------------|--|
| Synopsis | Enter the lease-populate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

max-leases *number*

| | |
|----------|---|
| Synopsis | Maximum number of DHCPv4 leases allowed |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i> |

| | |
|------------|----------------------------|
| Tree | max-leases |
| Range | 0 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | All |

option-82

| | |
|-------------|---|
| Synopsis | Enter the option-82 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 |
| Tree | option-82 |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |
| Platforms | All |

action *keyword*

| | |
|------------|---|
| Synopsis | Action to take with received DHCP Option 82 |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 action <i>keyword</i> |
| Tree | action |
| Default | keep |
| Options | replace, drop, keep |
| Introduced | 16.0.R1 |
| Platforms | All |

circuit-id

| | |
|------------|--|
| Synopsis | Enter the circuit-id context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-tuple

| | |
|------------|--|
| Synopsis | Use the ASCII-encoded tuple for the circuit ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

ifindex

| | |
|------------|--|
| Synopsis | Use the interface index for the circuit ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id ifindex |
| Tree | ifindex |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

none

| | |
|------------|---|
| Synopsis | Do not include the circuit ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id

| | |
|----------|---|
| Synopsis | Use the SAP ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 circuit-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

vlan-ascii-tuple

| | |
|-------------|---|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple |
| Context | configure service vprn string interface string ipv4 dhcp option-82 circuit-id vlan-ascii-tuple |
| Tree | vlan-ascii-tuple |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.
When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-id

| | |
|-------------|--|
| Synopsis | Enter the remote-id context |
| Context | configure service vprn string interface string ipv4 dhcp option-82 remote-id |
| Tree | remote-id |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client). |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-string *string*

| | |
|---------------|---|
| Synopsis | User-defined ASCII string for the remote ID |
| Context | configure service vprn string interface string ipv4 dhcp option-82 remote-id ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

mac

| | |
|------------|---|
| Synopsis | Use the MAC address for the remote ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 remote-id mac |
| Tree | mac |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | All |

none

| | |
|------------|--|
| Synopsis | Do not include the remote ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 remote-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | All |

vendor-specific-option

| | |
|-------------|--|
| Synopsis | Enter the vendor-specific-option context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option |
| Tree | vendor-specific-option |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced | 16.0.R1 |
| Platforms | All |

client-mac-address *boolean*

| | |
|----------|--|
| Synopsis | Send the MAC address in the VSO |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i> |

| | |
|------------|------------------------------------|
| Tree | client-mac-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pool-name *boolean*

| | |
|------------|---|
| Synopsis | Send the pool name in the VSO |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i> |
| Tree | pool-name |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id *boolean*

| | |
|------------|--|
| Synopsis | Send SAP ID in the sub-option of the DHCP relay packet |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

service-id *boolean*

| | |
|------------|--|
| Synopsis | Send the service ID in the Vendor Specific Option |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

string *string*

| | |
|---------------|--|
| Synopsis | User-defined ASCII string for the VSO |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option <i>string</i> <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

system-id *boolean*

| | |
|------------|---|
| Synopsis | Send the system ID in the VSO |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i> |
| Tree | system-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-server

| | |
|------------|--|
| Synopsis | Enter the proxy-server context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCP proxy server |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

emulated-server *string*

Synopsis IP address used as the DHCP server address for the SAP

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [emulated-server](#) *string*

Tree [emulated-server](#)

Description This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.

Introduced 16.0.R1

Platforms All

lease-time

Synopsis Enter the **lease-time** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [lease-time](#)

Tree [lease-time](#)

Introduced 16.0.R1

Platforms All

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [lease-time](#) [radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms All

value *number*

Synopsis DHCP lease time

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [lease-time](#) [value](#) *number*

| | |
|------------|-----------------------|
| Tree | value |
| Range | 300 to 315446399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

relay-plain-bootp *boolean*

| | |
|------------|--|
| Synopsis | Enable relaying of plain BOOTP packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-plain-bootp <i>boolean</i> |
| Tree | relay-plain-bootp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

relay-proxy

| | |
|------------|---|
| Synopsis | Enable the relay-proxy context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy |
| Tree | relay-proxy |
| Introduced | 16.0.R1 |
| Platforms | All |

release-update-src-ip *boolean*

| | |
|----------|--|
| Synopsis | Update the source IP address of a DHCP RELEASE message |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i> |
| Tree | release-update-src-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

siaddr-override *string*

| | |
|------------|---|
| Synopsis | DHCP server IP address for address hiding function |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i> |
| Tree | siaddr-override |
| Introduced | 16.0.R1 |
| Platforms | All |

release-include-gi-address *boolean*

| | |
|------------|---|
| Synopsis | Include gateway IP address in DHCP Release messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i> |
| Tree | release-include-gi-address |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|--|
| Synopsis | IP addresses for DHCP server requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp server <i>string</i> |
| Tree | server |
| Description | This command configures a list of servers that this interface forwards requests to.
The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8 |

| | |
|------------|--------------------------------------|
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

src-ip-addr *keyword*

| | |
|------------|--|
| Synopsis | Type of source address to use for DHCP relay |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i> |
| Tree | src-ip-addr |
| Default | auto |
| Options | auto, gi-address |
| Introduced | 16.0.R1 |
| Platforms | All |

trusted *boolean*

| | |
|-------------|---|
| Synopsis | Relay untrusted packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp trusted <i>boolean</i> |
| Tree | trusted |
| Description | <p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

use-arp *boolean*

| | |
|----------|--|
| Synopsis | Use ARP to determine the destination hardware address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 dhcp use-arp <i>boolean</i> |
| Tree | use-arp |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

icmp

| | |
|------------|---|
| Synopsis | Enter the icmp context |
| Context | configure service vprn string interface string ipv4 icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | All |

mask-reply *boolean*

| | |
|------------|---|
| Synopsis | Allow responses to ICMP mask requests on the interface |
| Context | configure service vprn string interface string ipv4 icmp mask-reply <i>boolean</i> |
| Tree | mask-reply |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

param-problem

| | |
|-------------|---|
| Synopsis | Enter the param-problem context |
| Context | configure service vprn string interface string ipv4 icmp param-problem |
| Tree | param-problem |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of sent Parameter Problem messages |
| Context | configure service vprn string interface string ipv4 icmp param-problem admin-state <i>keyword</i> |

| | |
|------------|-----------------------------|
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|---|
| Synopsis | Maximum number of Parameter Problem messages to send |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp param-problem number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Time used to limit number of Parameter Problem messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp param-problem seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

redirects

| | |
|-------------|---|
| Synopsis | Enter the redirects context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp redirects |
| Tree | redirects |
| Description | <p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p> |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of sending ICMP redirect messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|---|
| Synopsis | Maximum number of ICMP redirect messages to send |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Time used to limit the number of ICMP redirect messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ttl-expired

| | |
|-------------|---|
| Synopsis | Enter the ttl-expired context |
| Context | configure service vprn string interface string ipv4 icmp ttl-expired |
| Tree | ttl-expired |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of sending TTL expired messages |
| Context | configure service vprn string interface string ipv4 icmp ttl-expired admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number number

| | |
|------------|---|
| Synopsis | Maximum number of TTL expired messages to send |
| Context | configure service vprn string interface string ipv4 icmp ttl-expired number number |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds number

| | |
|----------|--|
| Synopsis | Time used to limit the number of TTL expired messages |
| Context | configure service vprn string interface string ipv4 icmp ttl-expired seconds number |
| Tree | seconds |
| Range | 1 to 60 |

| | |
|------------|---------|
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

unreachables

| | |
|-------------|--|
| Synopsis | Enter the unreachables context |
| Context | configure service vprn string interface string ipv4 icmp unreachables |
| Tree | unreachables |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending unreachable messages |
| Context | configure service vprn string interface string ipv4 icmp unreachables admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of unreachable messages to send |
| Context | configure service vprn string interface string ipv4 icmp unreachables number number |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Time to limit the number of ICMP unreachable messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 icmp unreachables seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-helper-address *string*

| | |
|------------|--|
| Synopsis | Gateway address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 ip-helper-address <i>string</i> |
| Tree | ip-helper-address |
| Introduced | 16.0.R1 |
| Platforms | All |

local-dhcp-server *reference*

| | |
|------------|---|
| Synopsis | DHCP server for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 local-dhcp-server <i>reference</i> |
| Tree | local-dhcp-server |
| Reference | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|---|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | All |

host-route

| | |
|------------|--|
| Synopsis | Enter the host-route context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route |
| Tree | host-route |
| Introduced | 19.10.R1 |
| Platforms | All |

populate [[route-type](#)] *keyword*

| | |
|------------|--|
| Synopsis | Enter the populate list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> |
| Tree | populate |
| Introduced | 19.10.R1 |
| Platforms | All |

[[route-type](#)] *keyword*

| | |
|------------|--|
| Synopsis | Type of ARP or ND entries that generate host routes |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> |
| Tree | populate |
| Options | static, dynamic, evpn |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Tag value used with the host route from an ARP/ND entry |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery host-route populate <i>keyword</i> route-tag <i>number</i> |

| | |
|-------------|--|
| Tree | route-tag |
| Description | This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies. |
| Range | 1 to 255 |
| Introduced | 19.10.R1 |
| Platforms | All |

learn-unsolicited *boolean*

| | |
|-------------|--|
| Synopsis | Learn new entries from any received NA message |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery learn-unsolicited <i>boolean</i> |
| Tree | learn-unsolicited |
| Description | <p>When configured to true, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to false, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> • If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored. • If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

limit

| | |
|------------|--|
| Synopsis | Enter the limit context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit |
| Tree | limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|------------|--|
| Synopsis | Generate log entries only if limit is reached |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit log-only <i>boolean</i> |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

max-entries *number*

| | |
|------------|--|
| Synopsis | Maximum number of entries learned on an IP interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit max-entries <i>number</i> |
| Tree | max-entries |
| Range | 0 to 524288 |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|--|
| Synopsis | Threshold value that triggers a warning message |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery limit threshold <i>number</i> |
| Tree | threshold |
| Range | 1 to 100 |
| Default | 90 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

local-proxy-arp *boolean*

| | |
|----------|---|
| Synopsis | Enable local proxy ARP on interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i> |

| | |
|-------------|--|
| Tree | local-proxy-arp |
| Description | When configured to true , the router enables local proxy ARP on the interface.
When configured to false , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced | 16.0.R1 |
| Platforms | All |

populate *boolean*

| | |
|------------|---|
| Synopsis | Allow static and dynamic hosts to be populated in system ARP cache |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i> |
| Tree | populate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proactive-refresh *boolean*

| | |
|-------------|--|
| Synopsis | Send a single refresh message before entry timeout |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proactive-refresh <i>boolean</i> |
| Tree | proactive-refresh |
| Description | When configured to true , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries).
When configured to false , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-arp-policy *reference*

| | |
|----------|-----------------------|
| Synopsis | Proxy ARP policy name |
|----------|-----------------------|

| | |
|----------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i> |
| Tree | proxy-arp-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-proxy-arp *boolean*

| | |
|------------|---|
| Synopsis | Enable remote proxy ARP on the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i> |
| Tree | remote-proxy-arp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

retry-timer *number*

| | |
|------------|---|
| Synopsis | ARP retry interval |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery retry-timer <i>number</i> |
| Tree | retry-timer |
| Range | 1 to 300 |
| Default | 50 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor [[ipv4-address](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the static-neighbor list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> |

| | |
|------------|---------------------------------|
| Tree | static-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|---|
| Synopsis | IPv4 address that corresponds to the physical address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|------------|---|
| Synopsis | MAC address for the static neighbor |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor-unnumbered

| | |
|------------|--|
| Synopsis | Enable the static-neighbor-unnumbered context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered |
| Tree | static-neighbor-unnumbered |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|----------|-------------------------------------|
| Synopsis | MAC address for the static neighbor |
|----------|-------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery static-neighbor-unnumbered mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|-------------|---|
| Synopsis | Timeout for an ARP entry learned on the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i> |
| Tree | timeout |
| Description | This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table. |
| Range | 0 to 65535 |
| Default | 14400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

primary

| | |
|------------|--|
| Synopsis | Enable the primary context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 primary |
| Tree | primary |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|----------|--|
| Synopsis | Primary IPv4 address assigned to the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 primary address <i>string</i> |
| Tree | address |
| Notes | This element is mandatory. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast *keyword*

| | |
|------------|--|
| Synopsis | Broadcast address format |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 primary broadcast <i>keyword</i> |
| Tree | broadcast |
| Default | host-ones |
| Options | all-ones, host-ones |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 primary prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

track-srrp *number*

| | |
|------------|--|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 primary track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

qos-route-lookup *keyword*

| | |
|----------|------------------|
| Synopsis | QoS Route lookup |
|----------|------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination, source |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

secondary [**address**] *string*

| | |
|------------|--|
| Synopsis | Enter the secondary list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> |
| Tree | secondary |
| Introduced | 16.0.R1 |
| Platforms | All |

[**address**] *string*

| | |
|------------|--|
| Synopsis | Secondary IPv4 address assigned to the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> |
| Tree | secondary |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast *keyword*

| | |
|------------|--|
| Synopsis | Broadcast address format |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i> |
| Tree | broadcast |
| Default | host-ones |
| Options | all-ones, host-ones |
| Introduced | 16.0.R1 |
| Platforms | All |

igp-inhibit *boolean*

| | |
|-------------|---|
| Synopsis | Disable the running IGP from recognizing secondary IP |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> igp-inhibit <i>boolean</i> |
| Tree | igp-inhibit |
| Description | When configured to true , the running IGP does not recognize the secondary IP address as a local interface. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

track-srrp *number*

| | |
|------------|---|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 secondary <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

tcp-mss *number*

| | |
|----------|--|
| Synopsis | TCP maximum segment size for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 tcp-mss <i>number</i> |
| Tree | tcp-mss |
| Range | 384 to 9746 |

Introduced 16.0.R1
Platforms All

unnumbered

Synopsis Enter the **unnumbered** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) **unnumbered**
Tree [unnumbered](#)
Introduced 16.0.R1
Platforms All

ip-address *string*

Synopsis IP address for the interface
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) **unnumbered** [ip-address](#) *string*
Tree [ip-address](#)
Notes The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced 16.0.R1
Platforms All

ip-int-name *string*

Synopsis IP interface name
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) **unnumbered** [ip-int-name](#) *string*
Tree [ip-int-name](#)
String Length 1 to 32
Notes The following elements are part of a choice: **ip-address** or **ip-int-name**.
Introduced 16.0.R1
Platforms All

urpf-check

Synopsis Enable the **urpf-check** context
Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) **urpf-check**
Tree [urpf-check](#)

Introduced 16.0.R1
Platforms All

ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check
Context **configure** *service vprn string interface string ipv4 urpf-check ignore-default boolean*
Tree [ignore-default](#)
Default false
Introduced 16.0.R1
Platforms All

mode *keyword*

Synopsis Unicast RPF check mode
Context **configure** *service vprn string interface string ipv4 urpf-check mode keyword*
Tree [mode](#)
Default strict
Options strict, loose, strict-no-ecmp
Introduced 16.0.R1
Platforms All

vrrp [*virtual-router-id*] *number*

Synopsis Enter the **vrrp** list instance
Context **configure** *service vprn string interface string ipv4 vrrp number*
Tree [vrrp](#)
Introduced 16.0.R1
Platforms All

[virtual-router-id] *number*

Synopsis Virtual Router Identifier (VRID) for the IP interface
Context **configure** *service vprn string interface string ipv4 vrrp number*
Tree [vrrp](#)

| | |
|------------|-------------------------------------|
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|--|
| Synopsis | Administrative state of VRRP |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the admin-state command within the parent IP interface node which administratively disables the IP interface.</p> |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|-------------|---|
| Synopsis | Password for simple text authentication |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | <p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p> |

| | |
|---------------|---------|
| String Length | 1 to 38 |
| Introduced | 16.0.R1 |
| Platforms | All |

backup string

| | |
|----------------|--|
| Synopsis | Virtual router IP addresses for the interface |
| Context | configure service vprn string interface string ipv4 vrrp number backup string |
| Tree | backup |
| Description | <p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p> |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vprn string interface string ipv4 vrrp number bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |
| Platforms | All |

dest-ip *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Destination IP address to use for BFD session |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness dest-ip <i>string</i> |
| Tree | dest-ip |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Name of the interface running BFD |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness interface-name <i>string</i> |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Administrative service name |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> bfd-liveness service-name <i>string</i> |

| | |
|---------------|------------------------------|
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

init-delay number

| | |
|------------|---|
| Synopsis | VRRP initialization delay timer |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> init-delay <i>number</i> |
| Tree | init-delay |
| Range | 1 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

mac string

| | |
|-------------|--|
| Synopsis | Virtual MAC address to use in ARP responses |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> mac <i>string</i> |
| Tree | mac |
| Description | <p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

master-int-inherit *boolean*

| | |
|-------------|---|
| Synopsis | Allow master instance to dictate the master down timer |
| Context | configure <i>service vprn string interface string ipv4 vrrp number master-int-inherit boolean</i> |
| Tree | master-int-inherit |
| Description | <p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

message-interval *number*

| | |
|-------------|--|
| Synopsis | Interval for sending VRRP advertisement messages |
| Context | configure <i>service vprn string interface string ipv4 vrrp number message-interval number</i> |
| Tree | message-interval |
| Description | <p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none"> • When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as master. • When a non-owner is in the backup state with master-int-inherit disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement. • When a non-owner is in the backup state with master-int-inherit enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message. |
| Range | 1 to 2559 |
| Default | 10 |

| | |
|------------|-------------|
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | VRRP instance to follow a specified operational group |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | All |

ntp-reply *boolean*

| | |
|-------------|--|
| Synopsis | Allow processing of NTP requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ntp-reply <i>boolean</i> |
| Tree | ntp-reply |
| Description | When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.
When configured to false , the router does not process NTP requests. |
| Default | false |
| Introduced | 20.2.R1 |
| Platforms | All |

oper-group *reference*

| | |
|----------|---|
| Synopsis | Operational group name associated with the VRRP |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string interface string ipv4 vrrp number oper-group reference</i> |
| Tree | oper-group |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Designate the virtual router instance as owner |
| Context | configure service vprn <i>string interface string ipv4 vrrp number owner boolean</i> |
| Tree | owner |
| Description | When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to false , this virtual router instance is designated as a non-owner. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

passive *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Suppress the processing of VRRP advertisement messages |
| Context | configure service vprn <i>string interface string ipv4 vrrp number passive boolean</i> |
| Tree | passive |

| | |
|-------------|---|
| Description | <p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ping-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to ICMP echo requests |
| Context | configure <i>service vprn string interface string ipv4 vrrp number ping-reply boolean</i> |
| Tree | ping-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy *reference*

| | |
|-------------|--|
| Synopsis | VRRP priority control policy |
| Context | configure <i>service vprn string interface string ipv4 vrrp number policy reference</i> |
| Tree | policy |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with</p> |

the **priority** command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.

For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.

| | |
|------------|-------------------------------------|
| Reference | configure vrrp policy number |
| Introduced | 16.0.R1 |
| Platforms | All |

preempt boolean

| | |
|-------------|---|
| Synopsis | Allow the VRRP to override an existing non-owner master |
| Context | configure service vprn string interface string ipv4 vrrp number preempt boolean |
| Tree | preempt |
| Description | When configured to true , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.

When configured to false , this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

priority number

| | |
|-------------|--|
| Synopsis | Base priority for the VRRP |
| Context | configure service vprn string interface string ipv4 vrrp number priority number |
| Tree | priority |
| Description | This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis. |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

ssh-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow the non-owner master to reply to SSH requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> ssh-reply <i>boolean</i> |
| Tree | ssh-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to false, SSH requests to non-owner master virtual IP addresses are silently discarded.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

standby-forwarding *boolean*

| | |
|-------------|--|
| Synopsis | Allow standby router to forward traffic |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> standby-forwarding <i>boolean</i> |
| Tree | standby-forwarding |
| Description | <p>When configured to true, the standby router forwards all traffic.</p> <p>When configured to false, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to Telnet requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> telnet-reply <i>boolean</i> |
| Tree | telnet-reply |
| Description | When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). |

When configured to **false**, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

traceroute-reply *boolean*

| | |
|-------------|--|
| Synopsis | Allow non-owner master to reply to traceroute requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv4 vrrp <i>number</i> traceroute-reply <i>boolean</i> |
| Tree | traceroute-reply |
| Description | When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to false , the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address). |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enable the ipv6 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

address [[ipv6-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the address list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-address] *string*

| | |
|------------|--|
| Synopsis | IPv6 address assigned to the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-address-detection *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable Duplicate Address Detection |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> duplicate-address-detection <i>boolean</i> |
| Tree | duplicate-address-detection |
| Description | When configured to true , the router enables Duplicate Address Detection (DAD).
When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

eui-64 *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Form IPv6 address from prefix and 64-bit interface ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> eui-64 <i>boolean</i> |
| Tree | eui-64 |
| Description | When configured to true , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from |

the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv6 address prefix length |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 4 to 128 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

primary-preference *number*

| | |
|-------------|---|
| Synopsis | Index assigned to the IPv6 address of the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> primary-preference <i>number</i> |
| Tree | primary-preference |
| Description | <p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p> |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

track-srrp *number*

| | |
|------------|--|
| Synopsis | SRRP ID whose state is tracked on this IP address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 address <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd |
| Tree | bfd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

echo-receive *number*

| | |
|------------|---|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

receive *number*

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd receive <i>number</i> |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transmit-interval *number*

| | |
|-------------|---|
| Synopsis | BFD transmit interval over this interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 bfd transmit-interval <i>number</i> |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |

| | |
|------------|--------------|
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword*

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure <i>service vprn string interface string ipv6 bfd type keyword</i> |
| Tree | <i>type</i> |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dhcp6

| | |
|------------|---|
| Synopsis | Enter the dhcp6 context |
| Context | configure <i>service vprn string interface string ipv6 dhcp6</i> |
| Tree | <i>dhcp6</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

relay

| | |
|----------|---|
| Synopsis | Enter the relay context |
| Context | configure <i>service vprn string interface string ipv6 dhcp6 relay</i> |

| | |
|------------|-----------------------|
| Tree | relay |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of DHCPv6 Relay |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

lease-populate

| | |
|------------|---|
| Synopsis | Enter the lease-populate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate |
| Tree | lease-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

max-nbr-of-leases *number*

| | |
|----------|---|
| Synopsis | Maximum number of lease states allocated by the DHCPv6 relay function, allowed on interface |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate max-nbr-of-leases <i>number</i> |
| Tree | max-nbr-of-leases |
| Range | 0 to 32767 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

route-populate

| | |
|------------|--|
| Synopsis | Enter the route-populate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate |
| Tree | route-populate |
| Introduced | 16.0.R1 |
| Platforms | All |

na *boolean*

| | |
|------------|--|
| Synopsis | Create route based on IA_NA prefix option in relay-reply message |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate na <i>boolean</i> |
| Tree | na |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pd

| | |
|------------|---|
| Synopsis | Enable the pd context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate pd |
| Tree | pd |
| Introduced | 16.0.R1 |
| Platforms | All |

exclude *boolean*

| | |
|------------|--|
| Synopsis | Create back hole route based on prefix exclude option in relay-reply message |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate pd exclude <i>boolean</i> |
| Tree | exclude |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ta *boolean*

| | |
|------------|--|
| Synopsis | Create route based on IA_TA prefix option in relay-reply message |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay lease-populate route-populate ta <i>boolean</i> |
| Tree | ta |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

link-address *string*

| | |
|------------|---|
| Synopsis | Link address of the DHCPv6 relay messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay link-address <i>string</i> |
| Tree | link-address |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor-resolution *boolean*

| | |
|------------|---|
| Synopsis | Enable neighbor resolution via DHCPv6 relay |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay neighbor-resolution <i>boolean</i> |
| Tree | neighbor-resolution |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

option

| | |
|------------|---|
| Synopsis | Enter the option context |
| Context | configure service vprn string interface string ipv6 dhcp6 relay option |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-id

| | |
|------------|--|
| Synopsis | Enter the interface-id context |
| Context | configure service vprn string interface string ipv6 dhcp6 relay option interface-id |
| Tree | interface-id |
| Introduced | 16.0.R1 |
| Platforms | All |

ascii-tuple

| | |
|------------|--|
| Synopsis | Use ASCII-encoded concatenated tuple |
| Context | configure service vprn string interface string ipv6 dhcp6 relay option interface-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

if-index

| | |
|------------|--|
| Synopsis | Use interface index in interface ID option in DHCPv6 relay packet |
| Context | configure service vprn string interface string ipv6 dhcp6 relay option interface-id if-index |
| Tree | if-index |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-id

| | |
|------------|---|
| Synopsis | Use SAP ID in interface ID option in DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

string *string*

| | |
|---------------|---|
| Synopsis | String for interface ID option in DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option interface-id string <i>string</i> |
| Tree | string |
| String Length | 1 to 80 |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-id *boolean*

| | |
|------------|--|
| Synopsis | Allow remote ID option to be sent in the DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay option remote-id <i>boolean</i> |
| Tree | remote-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

python-policy *reference*

| | |
|------------|---|
| Synopsis | Python policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 relay python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |

Platforms All

server string

Synopsis DHCPv6 server to which the DHCPv6 requests are forwarded
 Context **configure** [service vprn string interface string ipv6 dhcp6 relay server string](#)
 Tree [server](#)
 Max. Instances 8
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms All

source-address string

Synopsis Source IPv6 address of the DHCPv6 relay messages
 Context **configure** [service vprn string interface string ipv6 dhcp6 relay source-address string](#)
 Tree [source-address](#)
 Introduced 16.0.R1
 Platforms All

user-db reference

Synopsis Local user database for authentication
 Context **configure** [service vprn string interface string ipv6 dhcp6 relay user-db reference](#)
 Tree [user-db](#)
 Reference **configure** [subscriber-mgmt local-user-db string](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis Enter the **server** context
 Context **configure** [service vprn string interface string ipv6 dhcp6 server](#)
 Tree [server](#)

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

max-nbr-of-leases *number*

| | |
|------------|---|
| Synopsis | DHCPv6 leases allowed |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server max-nbr-of-leases <i>number</i> |
| Tree | max-nbr-of-leases |
| Range | 0 to 8000 |
| Default | 8000 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-delegation

| | |
|-------------|--|
| Synopsis | Enter the prefix-delegation context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation |
| Tree | prefix-delegation |
| Description | Commands in this context configure the options for delegating a long-lived prefix from a delegating router to a requesting router, where the delegating router does not require knowledge about the link topology in the network to which the prefixes are assigned. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the prefix delegation |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix [ipv6-prefix] *string*

| | |
|-------------|--|
| Synopsis | Enter the prefix list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> |
| Tree | prefix |
| Description | Commands in this context configure the IPv6 prefix that is delegated by the system. |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-prefix] *string*

| | |
|------------|--|
| Synopsis | IPv6 address and prefix |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> |
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

client-id

| | |
|------------|---|
| Synopsis | Enter the client-id context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> client-id |
| Tree | client-id |
| Introduced | 16.0.R1 |
| Platforms | All |

duid *string*

| | |
|---------------|--|
| Synopsis | Requesting router ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 dhcp6 server prefix-delegation prefix <i>string</i> client-id duid <i>string</i> |
| Tree | duid |
| String Length | 1 to 130 |
| Introduced | 16.0.R1 |

Platforms All

iaid *number*

Synopsis IAID from the requesting router to match

Context **configure** **service vprn** *string* **interface** *string* **ipv6 dhcp6 server prefix-delegation** **prefix** *string* **client-id** **iaid** *number*

Tree [iaid](#)

Description This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed.

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

preferred-lifetime (*number* | *keyword*)

Synopsis Preferred lifetime of the prefix

Context **configure** **service vprn** *string* **interface** *string* **ipv6 dhcp6 server prefix-delegation** **prefix** *string* **preferred-lifetime** (*number* | *keyword*)

Tree [preferred-lifetime](#)

Description This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value.

Range 1 to 4294967294

Default 604800

Units seconds

Options infinite

Introduced 16.0.R1

Platforms All

valid-lifetime (*number* | *keyword*)

Synopsis Valid lifetime of the prefix

Context **configure** **service vprn** *string* **interface** *string* **ipv6 dhcp6 server prefix-delegation** **prefix** *string* **valid-lifetime** (*number* | *keyword*)

Tree [valid-lifetime](#)

Range 1 to 4294967294

| | |
|------------|----------|
| Default | 2592000 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-address-detection *boolean*

| | |
|------------|---|
| Synopsis | Enable Duplicate Address Detection per interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 duplicate-address-detection <i>boolean</i> |
| Tree | duplicate-address-detection |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

forward-ipv4-packets *boolean*

| | |
|------------|--|
| Synopsis | Forward unencapsulated IPv4 packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 forward-ipv4-packets <i>boolean</i> |
| Tree | forward-ipv4-packets |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

icmp6

| | |
|------------|--|
| Synopsis | Enter the icmp6 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 |
| Tree | icmp6 |
| Introduced | 16.0.R1 |
| Platforms | All |

packet-too-big

| | |
|----------|---|
| Synopsis | Enter the packet-too-big context |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big |
| Tree | packet-too-big |
| Description | Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Packet Too Big message sends |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Number of Packet Too big Messages issued per time frame |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|----------|---|
| Synopsis | Time used to limit Packet Too Big messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 packet-too-big seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |

Introduced 16.0.R1
 Platforms All

param-problem

Synopsis Enter the **param-problem** context
 Context **configure service vprn string interface string ipv6 icmp6 param-problem**
 Tree [param-problem](#)
 Introduced 16.0.R1
 Platforms All

admin-state keyword

Synopsis Administrative state of Parameter Problem message sends
 Context **configure service vprn string interface string ipv6 icmp6 param-problem admin-state keyword**
 Tree [admin-state](#)
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

number number

Synopsis Number used to limit ICMPv6 Parameter Problem messages
 Context **configure service vprn string interface string ipv6 icmp6 param-problem number number**
 Tree [number](#)
 Range 10 to 1000
 Default 100
 Introduced 16.0.R1
 Platforms All

seconds number

Synopsis Time used to limit ICMPv6 Parameter Problem messages

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 param-problem seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

redirects

| | |
|------------|--|
| Synopsis | Enter the redirects context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects |
| Tree | redirects |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of Redirect message sends |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|---|
| Synopsis | Number to limit ICMPv6 Redirect messages per time frame |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Time used to limit ICMPv6 Redirect messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

time-exceeded

| | |
|------------|--|
| Synopsis | Enter the time-exceeded context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded |
| Tree | time-exceeded |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of Time Exceeded message sends |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|----------|---|
| Synopsis | Number to limit Time Exceeded messages per time frame |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |

| | |
|------------|---------|
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit ICMPv6 Time Exceeded messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 time-exceeded seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

unreachables

| | |
|------------|---|
| Synopsis | Enter the unreachables context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables |
| Tree | unreachables |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Unreachable message sends |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 unreachables admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Number to limit Unreachable messages per time frame |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 unreachable <i>number</i> <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit ICMPv6 Unreachable messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 icmp6 unreachable <i>seconds</i> <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

link-local-address

| | |
|------------|---|
| Synopsis | Enter the link-local-address context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 link-local-address |
| Tree | link-local-address |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|------------|--|
| Synopsis | IPv6 link-local address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 link-local-address <i>address</i> <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

duplicate-address-detection *boolean*

| | |
|-------------|--|
| Synopsis | Enable Duplicate Address Detection |
| Context | configure service vprn string interface string ipv6 link-local-address duplicate-address-detection <i>boolean</i> |
| Tree | duplicate-address-detection |
| Description | When configured to true , the router enables Duplicate Address Detection (DAD) on the interface.

When configured to false , the router disables DAD and sets the address to preferred, even if there is a duplicated address. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

local-dhcp-server *reference*

| | |
|------------|---|
| Synopsis | DHCP server for the interface |
| Context | configure service vprn string interface string ipv6 local-dhcp-server <i>reference</i> |
| Tree | local-dhcp-server |
| Reference | configure service vprn string dhcp-server dhcpv6 <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|---|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service vprn string interface string ipv6 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | All |

host-route

| | |
|----------|--|
| Synopsis | Enter the host-route context |
| Context | configure service vprn string interface string ipv6 neighbor-discovery host-route |
| Tree | host-route |

Introduced 20.2.R1
 Platforms All

populate [*route-type*] *keyword*

Synopsis Enter the **populate** list instance
 Context **configure** *service* *vprn* *string* *interface* *string* *ipv6* *neighbor-discovery* *host-route*
populate *keyword*
 Tree *populate*
 Introduced 20.2.R1
 Platforms All

[route-type] *keyword*

Synopsis Type of ARP or ND entries that generate host routes
 Context **configure** *service* *vprn* *string* *interface* *string* *ipv6* *neighbor-discovery* *host-route*
populate *keyword*
 Tree *populate*
 Options static, dynamic, evpn
 Notes This element is part of a list key.
 Introduced 20.2.R1
 Platforms All

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tag value used with the host route from an ARP/ND entry
 Context **configure** *service* *vprn* *string* *interface* *string* *ipv6* *neighbor-discovery* *host-route*
populate *keyword* *route-tag* *number*
 Tree *route-tag*
 Description This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
 Range 1 to 255
 Introduced 20.2.R1

Platforms All

learn-unsolicited *keyword*

Synopsis Type of entries learned from unsolicited NA messages

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **learn-unsolicited** *keyword*

Tree [learn-unsolicited](#)

Description This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.

When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.

Options global, link-local, both

Introduced 16.0.R1

Platforms All

limit

Synopsis Enter the **limit** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **limit**

Tree [limit](#)

Introduced 16.0.R1

Platforms All

log-only *boolean*

Synopsis Generate log entries when limit is reached

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) **limit** **log-only** *boolean*

Tree [log-only](#)

Description When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.

When configured to **false**, the router does not send the warning message.

Default false

Introduced 16.0.R1

Platforms All

max-entries *number*

Synopsis Maximum number of entries learned on an IP interface

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 neighbor-discovery limit max-entries](#) *number*

Tree [max-entries](#)

Description This command configures the maximum number of entries that can be learned on an IP interface.
When unconfigured, no maximum limit is imposed.

Range 0 to 102400

Introduced 16.0.R1

Platforms All

threshold *number*

Synopsis Threshold percentage that triggers a warning message

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 neighbor-discovery limit threshold](#) *number*

Tree [threshold](#)

Range 1 to 100

Default 90

Units percent

Introduced 16.0.R1

Platforms All

local-proxy-nd *boolean*

Synopsis Enable local proxy neighbor discovery on the interface

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 neighbor-discovery local-proxy-nd](#) *boolean*

Tree [local-proxy-nd](#)

Description When configured to **true**, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.

When configured to **false**, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

proactive-refresh *keyword*

| | |
|-------------|---|
| Synopsis | Proactive refresh of neighbor entries |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proactive-refresh <i>keyword</i> |
| Tree | proactive-refresh |
| Description | This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed. |
| Options | global, link-local, both |
| Introduced | 16.0.R1 |
| Platforms | All |

proxy-nd-policy *reference*

| | |
|----------------|---|
| Synopsis | Proxy Neighbor Discovery policy name for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery proxy-nd-policy <i>reference</i> |
| Tree | proxy-nd-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

reachable-time *number*

| | |
|----------|---------------------------------------|
| Synopsis | Neighbor reachability detection timer |
|----------|---------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery reachable-time <i>number</i> |
| Tree | reachable-time |
| Range | 30 to 3600 |
| Introduced | 16.0.R1 |
| Platforms | All |

secure-nd

| | |
|------------|---|
| Synopsis | Enter the secure-nd context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd |
| Tree | secure-nd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Secure Neighbor Discovery |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-unsecured-msgs *boolean*

| | |
|-------------|---|
| Synopsis | Accept unsecured messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd allow-unsecured-msgs <i>boolean</i> |
| Tree | allow-unsecured-msgs |
| Description | When configured to true , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted.
When configured to false , the router disables the acceptance of unsecured messages. |
| Default | true |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

public-key-min-bits *number*

| | |
|------------|---|
| Synopsis | Minimum acceptable key length for public keys in CGA |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd public-key-min-bits <i>number</i> |
| Tree | public-key-min-bits |
| Range | 512 to 1024 |
| Default | 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

security-parameter *number*

| | |
|------------|--|
| Synopsis | Security parameter used in the generation of a CGA |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery secure-nd security-parameter <i>number</i> |
| Tree | security-parameter |
| Range | 0 to 1 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

stale-time *number*

| | |
|------------|--|
| Synopsis | Time a Neighbor Discovery cache entry remains stale |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery stale-time <i>number</i> |
| Tree | stale-time |
| Range | 60 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor [ipv6-address] *string*

| | |
|------------|---|
| Synopsis | Enter the static-neighbor list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-address] *string*

| | |
|------------|---|
| Synopsis | IPv6 address corresponding to the physical address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|------------|---|
| Synopsis | MAC address for the static neighbor |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

qos-route-lookup *keyword*

| | |
|------------|--|
| Synopsis | QoS Route lookup |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination, source |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-mss *number*

Synopsis TCP maximum segment size for the interface
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [tcp-mss](#) *number*
 Tree [tcp-mss](#)
 Range 1220 to 9726
 Introduced 16.0.R1
 Platforms All

urpf-check

Synopsis Enable the **urpf-check** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [urpf-check](#)
 Tree [urpf-check](#)
 Introduced 16.0.R1
 Platforms All

ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [urpf-check](#) [ignore-default](#) *boolean*
 Tree [ignore-default](#)
 Default false
 Introduced 16.0.R1
 Platforms All

mode *keyword*

Synopsis Unicast RPF check mode
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv6](#) [urpf-check](#) [mode](#) *keyword*
 Tree [mode](#)
 Default strict
 Options strict, loose, strict-no-ecmp

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

vrrp [*virtual-router-id*] *number*

| | |
|----------------|---|
| Synopsis | Enter the vrrp list instance |
| Context | configure <i>service vprn string interface string ipv6 vrrp number</i> |
| Tree | <i>vrrp</i> |
| Max. Instances | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

[*virtual-router-id*] *number*

| | |
|------------|---|
| Synopsis | Virtual Router Identifier (VRID) for the IP interface |
| Context | configure <i>service vprn string interface string ipv6 vrrp number</i> |
| Tree | <i>vrrp</i> |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|---|
| Synopsis | Administrative state of VRRP |
| Context | configure <i>service vprn string interface string ipv6 vrrp number admin-state keyword</i> |
| Tree | <i>admin-state</i> |
| Description | <p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When disabled, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> |

Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.

An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the **admin-state** command within the parent IP interface node which administratively disables the IP interface.

| | |
|------------|-----------------|
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

backup string

| | |
|----------------|--|
| Synopsis | Virtual router IP addresses for the interface |
| Context | configure service vprn string interface string ipv6 vrrp number backup string |
| Tree | backup |
| Description | <p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p> |
| Max. Instances | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-liveness

| | |
|----------|--|
| Synopsis | Enable the bfd-liveness context |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |
| Platforms | All |

dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Destination address for the BFD session |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | dest-ip |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Name of the interface running BFD |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> bfd-liveness interface-name <i>string</i> |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure <i>service vprn string interface string ipv6 vrrp number bfd-liveness service-name string</i> |
| Tree | <i>service-name</i> |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

init-delay *number*

| | |
|------------|---|
| Synopsis | VRRP initialization delay timer |
| Context | configure <i>service vprn string interface string ipv6 vrrp number init-delay number</i> |
| Tree | <i>init-delay</i> |
| Range | 1 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|-------------|--|
| Synopsis | Virtual MAC address to use in ARP responses |
| Context | configure <i>service vprn string interface string ipv6 vrrp number mac string</i> |
| Tree | <i>mac</i> |
| Description | <p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts</p> |

results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

master-int-inherit *boolean*

| | |
|-------------|---|
| Synopsis | Allow master instance to dictate the master down timer |
| Context | configure <i>service vprn string interface string ipv6 vrrp number master-int-inherit boolean</i> |
| Tree | master-int-inherit |
| Description | <p>When configured to true, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to false, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

message-interval *number*

| | |
|-------------|---|
| Synopsis | Interval for sending VRRP advertisement messages |
| Context | configure <i>service vprn string interface string ipv6 vrrp number message-interval number</i> |
| Tree | message-interval |
| Description | <p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the master-int-inherit command:</p> <ul style="list-style-type: none"> When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The master-int-inherit command has no effect when operating as the master. |

- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

| | |
|------------|--------------|
| Range | 10 to 4095 |
| Default | 100 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | VRRP instance to follow a specified operational group |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Description | This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states. |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | All |

ntp-reply *boolean*

| | |
|----------|--|
| Synopsis | Allow processing of NTP requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> ntp-reply <i>boolean</i> |
| Tree | ntp-reply |

| | |
|-------------|--|
| Description | When configured to true , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.
When configured to false , the router does not process NTP requests. |
| Default | false |
| Introduced | 20.2.R1 |
| Platforms | All |

oper-group *reference*

| | |
|-------------|---|
| Synopsis | Operational group name associated with the VRRP |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> oper-group <i>reference</i> |
| Tree | oper-group |
| Description | This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states. |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Designate the virtual router instance as owner |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> owner <i>boolean</i> |
| Tree | owner |
| Description | When configured to true , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

When configured to false , this virtual router instance is designated as a non-owner. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

passive *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Suppress the processing of VRRP advertisement messages |
| Context | configure <i>service vprn string interface string ipv6 vrrp number</i> passive <i>boolean</i> |
| Tree | passive |
| Description | <p>When configured to true, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to false, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ping-reply *boolean*

| | |
|-------------|---|
| Synopsis | Allow non-owner master to reply to ICMP echo requests |
| Context | configure <i>service vprn string interface string ipv6 vrrp number</i> ping-reply <i>boolean</i> |
| Tree | ping-reply |
| Description | <p>When configured to true, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to false, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|-------------|--|
| Synopsis | VRRP priority control policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> policy reference |
| Tree | policy |
| Description | <p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the priority command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p> |
| Reference | configure vrrp policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

preempt boolean

| | |
|-------------|--|
| Synopsis | Allow the VRRP to override an existing non-owner master |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> preempt boolean |
| Tree | preempt |
| Description | <p>When configured to true, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to false, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

priority number

| | |
|----------|---|
| Synopsis | Base priority for the VRRP |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> priority number |
| Tree | priority |

| | |
|-------------|--|
| Description | This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis. |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

standby-forwarding *boolean*

| | |
|-------------|---|
| Synopsis | Allow standby router to forward traffic |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> standby-forwarding <i>boolean</i> |
| Tree | standby-forwarding |
| Description | When configured to true , the standby router forwards all traffic.

When configured to false , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet-reply *boolean*

| | |
|-------------|--|
| Synopsis | Allow non-owner master to reply to Telnet requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> telnet-reply <i>boolean</i> |
| Tree | telnet-reply |
| Description | When configured to true , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).

When configured to false , the router silently discards Telnet requests sent to non-owner master virtual IP addresses. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

traceroute-reply *boolean*

| | |
|-------------|--|
| Synopsis | Allow non-owner master to reply to traceroute requests |
| Context | configure service vprn <i>string</i> interface <i>string</i> ipv6 vrrp <i>number</i> traceroute-reply <i>boolean</i> |
| Tree | traceroute-reply |
| Description | When configured to true , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.

When configured to false , the router silently discards traceroute requests sent to non-owner master virtual IP addresses.

Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address). |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

load-balancing

| | |
|------------|---|
| Synopsis | Enter the load-balancing context |
| Context | configure service vprn <i>string</i> interface <i>string</i> load-balancing |
| Tree | load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-label-load-balancing *boolean*

| | |
|-------------|--|
| Synopsis | Enable flow label load balancing |
| Context | configure service vprn <i>string</i> interface <i>string</i> load-balancing flow-label-load-balancing <i>boolean</i> |
| Tree | flow-label-load-balancing |
| Description | When configured to true , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.

When configured to false , the router disables load balancing in ECMP and LAG. |
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | All |

ip-load-balancing *keyword*

| | |
|-------------|--|
| Synopsis | IP load-balancing algorithm |
| Context | configure service vprn string interface string load-balancing ip-load-balancing <i>keyword</i> |
| Tree | ip-load-balancing |
| Description | This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the I4-load-balancing command is enabled, this command also includes the source or destination port in the hash inputs. |
| Default | both |
| Options | both, destination, source, inner-ip |
| Introduced | 16.0.R3 |
| Platforms | All |

spi-load-balancing *boolean*

| | |
|-------------|---|
| Synopsis | Enable SPI use in hashing |
| Context | configure service vprn string interface string load-balancing spi-load-balancing <i>boolean</i> |
| Tree | spi-load-balancing |
| Description | When configured to true , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

teid-load-balancing *boolean*

| | |
|------------|---|
| Synopsis | Enable use of TEID in hashing |
| Context | configure service vprn string interface string load-balancing teid-load-balancing <i>boolean</i> |
| Tree | teid-load-balancing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

loopback *boolean*

| | |
|------------|---|
| Synopsis | Use interface as a loopback interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> loopback <i>boolean</i> |
| Tree | loopback |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mac *string*

| | |
|------------|---|
| Synopsis | MAC address for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> mac <i>string</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable MAC accounting functionality |
| Context | configure service vprn <i>string</i> interface <i>string</i> mac-accounting <i>boolean</i> |
| Tree | mac-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group *reference*

| | |
|------------|---|
| Synopsis | Operational group to monitor |
| Context | configure service vprn <i>string</i> interface <i>string</i> monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

multi-chassis-shunting-profile *reference*

| | |
|-------------|---|
| Synopsis | Multi-chassis shunting profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> multi-chassis-shunting-profile <i>reference</i> |
| Tree | multi-chassis-shunting-profile |
| Description | This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces. |
| Reference | configure service vprn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> |
| Notes | The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop). |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ping-template

| | |
|------------|---|
| Synopsis | Enable the ping-template context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ping-template |
| Tree | ping-template |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the ping template |
| Context | configure service vprn <i>string</i> interface <i>string</i> ping-template admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

destination-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Ping template destination address |
| Context | configure service vprn <i>string</i> interface <i>string</i> ping-template destination-address <i>string</i> |
| Tree | destination-address |
| Description | <p>This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address. A configuration warning message displays if the primary IPv4 address and the destination are not on the same subnet, INFO: PIP #2092 Ping template misconfiguration - destination-address and primary IP address should fall in the same subnet.</p> <p>Unnumbered interfaces and loopback addresses are not supported.</p> <p>The config service ies vprn interface ping-template must be administratively disabled to remove or change the destination-address ip-address.</p> |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

name reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Ping template name |
| Context | configure service vprn <i>string</i> interface <i>string</i> ping-template name reference |
| Tree | name |
| Description | This command configures the name of the ping template to be assigned to the IP interface. |
| Reference | configure test-oam icmp ping-template <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ptp-hw-assist

| | |
|------------|---|
| Synopsis | Enter the ptp-hw-assist context |
| Context | configure service vprn <i>string</i> interface <i>string</i> ptp-hw-assist |
| Tree | ptp-hw-assist |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the PTP time stamping assist

Context **configure** [service vprn](#) *string* [interface](#) *string* [ptp-hw-assist](#) **admin-state** *keyword*

Tree [admin-state](#)

Description This command controls the administrative state of port-based time stamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.

Only one interface per physical port can have ptp-hw-assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

radius-auth-policy *reference*

Synopsis Authentication policy

Context **configure** [service vprn](#) *string* [interface](#) *string* [radius-auth-policy](#) *reference*

Tree [radius-auth-policy](#)

Reference **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance

Context **configure** [service vprn](#) *string* [interface](#) *string* **sap** *string*

Tree [sap](#)

Max. Instances 1

Introduced 16.0.R1

Platforms All

[sap-id] *string*

| | |
|---------------|---|
| Synopsis | SAP ID |
| Context | configure <i>service vprn string interface string sap string</i> |
| Tree | <i>sap</i> |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aarp

| | |
|------------|--|
| Synopsis | Enable the aarp context |
| Context | configure <i>service vprn string interface string sap string aarp</i> |
| Tree | <i>aarp</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id *reference*

| | |
|------------|---|
| Synopsis | AARP instance ID |
| Context | configure <i>service vprn string interface string sap string aarp id reference</i> |
| Tree | <i>id</i> |
| Reference | configure <i>application-assurance aarp number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|------------|---|
| Synopsis | Role referenced by the AARP |
| Context | configure <i>service vprn string interface string sap string aarp type keyword</i> |
| Tree | <i>type</i> |
| Options | dual-homed, dual-homed-secondary |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Accounting policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SAP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

anti-spoof *keyword*

| | |
|------------|--|
| Synopsis | Anti-spoof filtering |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Options | source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bandwidth *number*

Synopsis SAP bandwidth
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [bandwidth](#) *number*
 Tree [bandwidth](#)
 Range 1 to 6400000000
 Units kilobps
 Introduced 16.0.R1
 Platforms All

calling-station-id *string*

Synopsis Calling station ID
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [calling-station-id](#) *string*
 Tree [calling-station-id](#)
 String Length 1 to 64
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

collect-stats *boolean*

Synopsis Collect accounting statistics
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [collect-stats](#) *boolean*
 Tree [collect-stats](#)
 Default false
 Introduced 16.0.R1
 Platforms All

cpu-protection

Synopsis Enter the **cpu-protection** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [cpu-protection](#)
 Tree [cpu-protection](#)

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm-monitoring

| | |
|------------|--|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service vprn string interface string sap string cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

aggregate

| | |
|------------|--|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service vprn string interface string sap string cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

car

| | |
|------------|--|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
| Context | configure service vprn string interface string sap string cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ip-src-monitoring

| | |
|----------|---|
| Synopsis | Enable IP source monitoring for CPU protection |
| Context | configure service vprn string interface string sap string cpu-protection ip-src-monitoring |

| | |
|------------|--|
| Tree | ip-src-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy-id *reference*

| | |
|------------|---|
| Synopsis | CPM protection policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> cpu-protection policy-id <i>reference</i> |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 160 |
| Introduced | 16.0.R1 |
| Platforms | All |

dist-cpu-protection *reference*

| | |
|------------|--|
| Synopsis | Distributed CPU protection policy for SAP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> dist-cpu-protection <i>reference</i> |
| Tree | dist-cpu-protection |
| Reference | configure system security dist-cpu-protection policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

agg-rate

| | |
|------------|---|
| Synopsis | Enter the agg-rate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate |
| Tree | agg-rate |
| Notes | The following elements are part of a choice: agg-rate or percent-agg-rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule *keyword*

| | |
|------------|--|
| Synopsis | Adaptation rule to compute the operational PIR value when an aggregate shaper is used |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i> |
| Tree | adaptation-rule |
| Default | closest |
| Options | max, min, closest |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|--|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-frame-based-accounting *boolean*

| | |
|------------|--|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rate *number*

| | |
|----------|--|
| Synopsis | Enforced aggregate rate for all queues |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn string interface string sap string egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service vprn string interface string sap string egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service vprn string interface string sap string egress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|---|
| Synopsis | Enter the root context |
| Context | configure service vprn string interface string sap string egress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|----------|-------------------------------------|
| Synopsis | Maximum frame-based bandwidth limit |
|----------|-------------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[priority-level] *number*

Synopsis Priority level

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos policer-control-policy overrides root priority-mbs-thresholds](#) [priority](#) *number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

mbs-contribution (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos policer-control-policy overrides root priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)

Tree [mbs-contribution](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

policy-name *reference*

Synopsis Policer control policy name

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos policer-control-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos policer-control-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

qinq-mark-top-only *boolean*

| | |
|------------|--|
| Synopsis | Mark top Q-tags |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos qinq-mark-top-only <i>boolean</i> |
| Tree | qinq-mark-top-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sap-egress

| | |
|------------|---|
| Synopsis | Enter the sap-egress context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|---|
| Synopsis | Enter the overrides context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

hs-secondary-shaper *string*

| | |
|---------------|---|
| Synopsis | HS Secondary Shaper |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-secondary-shaper <i>string</i> |
| Tree | hs-secondary-shaper |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-group [[group-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the hs-wrr-group list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> |
| Tree | hs-wrr-group |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

[group-id] *reference*

| | |
|------------|---|
| Synopsis | HS WRR group identifier |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> |
| Tree | hs-wrr-group |
| Reference | configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-class-weight *number*

| | |
|------------|---|
| Synopsis | Class weight override of the WRR group |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

percent-rate *decimal-number*

| | |
|----------|--|
| Synopsis | Percent rate override applied to the HS WRR group |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> percent-rate <i>decimal-number</i> |
| Tree | percent-rate |

| | |
|------------|---|
| Range | 0.01 to 100.00 |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

rate (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Scheduling rate override applied to the HS WRR group |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> rate (<i>number</i> <i>keyword</i>) |
| Tree | rate |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policer [[policer-id](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the policer list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[policer-id] *reference*

| | |
|-----------|--|
| Synopsis | Policer unique ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Reference | configure qos sap-egress <i>string</i> policer <i>number</i> |
| Notes | This element is part of a list key. |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|--|
| Synopsis | Packet size modification for policing information |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -64 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides policer reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir decimal-number

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides policer reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir decimal-number

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides policer reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|----------|---|
| Synopsis | Enter the rate context |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides policer reference rate |
| Tree | rate |

| | |
|------------|---|
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|----------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides policer <i>reference</i> stat-mode <i>keyword</i> |
| Tree | stat-mode |

| | |
|------------|--|
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [\[queue-id\]](#) *reference*

| | |
|------------|--|
| Synopsis | Enter the queue list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|--|
| Synopsis | Policer unique ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-egress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|--|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue <i>reference</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule cir <i>keyword</i> |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

pir keyword

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational PIR value |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference adaptation-rule pir <i>keyword</i> |
| Tree | pir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | All |

avg-frame-overhead decimal-number

| | |
|------------|--|
| Synopsis | Average packet-to-frame encapsulation overhead |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference avg-frame-overhead <i>decimal-number</i> |
| Tree | avg-frame-overhead |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

burst-limit (number | keyword)

| | |
|----------|--|
| Synopsis | Explicit shaping burst size for the queue |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |

| | |
|------------|---------|
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

cbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CBS |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-tail

| | |
|------------|---|
| Synopsis | Enter the drop-tail context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail |
| Tree | drop-tail |
| Introduced | 16.0.R1 |
| Platforms | All |

low

| | |
|------------|---|
| Synopsis | Enter the low context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

hs-class-weight *number*

| | |
|------------|---|
| Synopsis | Class weight override for the queue |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wred-queue

| | |
|------------|---|
| Synopsis | Enter the hs-wred-queue context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue |
| Tree | hs-wred-queue |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policy *reference*

| | |
|-----------|--|
| Synopsis | Slope policy applied to the HSQ queue group queue |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue policy reference |
| Tree | policy |
| Reference | configure qos slope-policy <i>string</i> |

Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

hs-wrr-weight *number*

Synopsis Weighted Round Robin (WRR) weight to parent with this queue into the scheduler
Context **configure** [service vprn string](#) [interface string sap string](#) [egress qos sap-egress overrides queue reference](#) **hs-wrr-weight** *number*
Tree [hs-wrr-weight](#)
Range 1 to 127
Default 1
Introduced 16.0.R1
Platforms 7750 SR-7/12/12e

mbs (*number* | *keyword*)

Synopsis MBS
Context **configure** [service vprn string](#) [interface string sap string](#) [egress qos sap-egress overrides queue reference](#) **mbs** (*number* | *keyword*)
Tree [mbs](#)
Range 0 to 1073741824
Units bytes
Options auto
Introduced 16.0.R1
Platforms All

monitor-queue-depth

Synopsis Enable the **monitor-queue-depth** context
Context **configure** [service vprn string](#) [interface string sap string](#) [egress qos sap-egress overrides queue reference](#) **monitor-queue-depth**
Tree [monitor-queue-depth](#)
Introduced 20.10.R1
Platforms All

fast-polling *boolean*

| | |
|-------------|--|
| Synopsis | Enable fast polling of the queue depth |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling boolean |
| Tree | fast-polling |
| Description | When configured to true , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
When configured to false , fast queue polling is not enabled. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

violation-threshold *decimal-number*

| | |
|-------------|---|
| Synopsis | Threshold for queue depth before violation is raised |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold decimal-number |
| Tree | violation-threshold |
| Description | This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered. |
| Range | 0.01 to 99.99 |
| Introduced | 20.10.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service vprn string interface string sap string egress qos sap-egress overrides queue reference parent |
| Tree | parent |
| Introduced | 16.0.R1 |
| Platforms | All |

cir-weight *number*

| | |
|----------|---|
| Synopsis | CIR parameter that overrides parent for queue group |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string interface string sap string egress qos sap-egress overrides queue reference parent cir-weight number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight number

| | |
|------------|--|
| Synopsis | PIR parameter that overrides parent for queue group |
| Context | configure service vprn <i>string interface string sap string egress qos sap-egress overrides queue reference parent weight number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-rate

| | |
|------------|--|
| Synopsis | Enter the percent-rate context |
| Context | configure service vprn <i>string interface string sap string egress qos sap-egress overrides queue reference percent-rate</i> |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir decimal-number

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service vprn <i>string interface string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

pir *decimal-number*

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|----------|----------|
| Synopsis | PIR rate |
|----------|----------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress overrides queue reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

port-redirect-group

| | |
|------------|--|
| Synopsis | Enter the port-redirect-group context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group |
| Tree | port-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|--|
| Synopsis | Name of the queue group redirect list policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos sap-egress port-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates egress queue-group <i>string</i> |
| Introduced | 16.0.R1 |

Platforms All

instance *number*

Synopsis Instance of port queue group

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

scheduler-policy

Synopsis Enter the **scheduler-policy** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#)

Tree [scheduler-policy](#)

Introduced 16.0.R1

Platforms All

overrides

Synopsis Enter the **overrides** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#)

Tree [overrides](#)

Introduced 16.0.R1

Platforms All

scheduler [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*

Tree [scheduler](#)

Introduced 16.0.R1

Platforms All

[scheduler-name] *string*

Synopsis Scheduler name

Context **configure** **service vprn** *string* **interface** *string* **sap** *string* **egress qos scheduler-policy**
overrides scheduler *string*

Tree **scheduler**

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

parent

Synopsis Enter the **parent** context

Context **configure** **service vprn** *string* **interface** *string* **sap** *string* **egress qos scheduler-policy**
overrides scheduler *string* **parent**

Tree **parent**

Introduced 16.0.R1

Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i> |
| Tree | cir-weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|------------|--|
| Synopsis | Relative weight of the scheduler to feed the queue |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i> |
| Tree | weight |
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR at which the queue it to operate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> egress qos scheduler-policy overrides scheduler <i>string</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |

Platforms All

pir (*number* | *keyword*)

Synopsis PIR at which the queue is to operate

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos scheduler-policy overrides scheduler](#) *string* [rate pir](#) (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

policy-name *reference*

Synopsis Scheduler policy name

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress qos scheduler-policy policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos scheduler-policy](#) *string*

Introduced 16.0.R1

Platforms All

queue-group-redirect-list *reference*

Synopsis Assign queue-group redirect list

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [egress queue-group-redirect-list](#) *reference*

Tree [queue-group-redirect-list](#)

Reference **configure** [qos queue-group-redirect-list](#) *string*

Introduced 16.0.R1

Platforms All

eth-cfm

| | |
|------------|---|
| Synopsis | Enter the eth-cfm context |
| Context | configure <i>service vprn string interface string sap string eth-cfm</i> |
| Tree | <i>eth-cfm</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-imm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-imm-fc-stats context |
| Context | configure <i>service vprn string interface string sap string eth-cfm collect-imm-fc-stats</i> |
| Tree | <i>collect-imm-fc-stats</i> |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-imm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure <i>service vprn string interface string sap string eth-cfm collect-imm-fc-stats fc keyword</i> |
| Tree | <i>fc</i> |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-imm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile *keyword*

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the fc command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep md-admin-name reference ma-admin-name reference mep-id number

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name reference

| | |
|------------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name reference

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string association string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id number

| | |
|----------|--|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |

| | |
|------------|--|
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais *boolean*

| | |
|------------|--|
| Synopsis | Enable the generation and the reception of AIS messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i> |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|--|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. |

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm *boolean*

| | |
|----------|--|
| Synopsis | Generate CCM messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i> |
| Tree | ccm |
| Default | false |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority *number*

| | |
|------------|--|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|------------|---|
| Synopsis | Enable the csf context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf |
| Tree | csf |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

multiplier *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition

Context **configure** *service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number*

Tree [multiplier](#)

Range 0.0 | 2.0 to 30.0

Default 3.5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

description *string*

Synopsis Text description

Context **configure** *service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-test

Synopsis Enable the **eth-test** context

Context **configure** *service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test*

Tree [eth-test](#)

Description Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

bit-error-threshold *number*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|---|
| Synopsis | Enter the test-pattern context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|--|
| Synopsis | Generate a CRC checksum |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|----------|---------------------------------------|
| Synopsis | Test pattern for Ethernet Test frames |
|----------|---------------------------------------|

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern <i>pattern</i> <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|------------|---|
| Synopsis | Fault propagation for the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|--|
| Synopsis | Enter the grace context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|----------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed |

| | |
|-------------|--|
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|------------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *number*

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-ed priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed *boolean*

| | |
|------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-vsm-grace

| | |
|-------------|---|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-vsm-grace *boolean*

| | |
|-------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | <p>When configured to true, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to false, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|----------|--|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |

| | |
|------------|--|
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|-------------|--|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i> |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. | 8 |
| Instances | |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fwd-wholesale

| | |
|------------|---|
| Synopsis | Enter the fwd-wholesale context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale |
| Tree | fwd-wholesale |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-service *reference*

| | |
|----------|--------------------|
| Synopsis | PPPoE service name |
|----------|--------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i> |
| Tree | pppoe-service |
| Reference | configure service epipe <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the hosts |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i> |
| Tree | host-admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-lockout-policy *reference*

| | |
|------------|---|
| Synopsis | Host lockout policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i> |
| Tree | host-lockout-policy |
| Reference | configure subscriber-mgmt host-lockout-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

match-qinq-dot1p keyword

| | |
|------------|---|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i> |
| Tree | match-qinq-dot1p |
| Options | top, bottom |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-control-policy

| | |
|------------|--|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enable the overrides context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

root

| | |
|------------|---|
| Synopsis | Enter the root context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum frame-based bandwidth limit |
| Context | configure service vprn string interface string sap string ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 6400000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure service vprn string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of separation buffer space |
| Context | configure service vprn string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

priority [[priority-level](#)] *number*

| | |
|----------|--|
| Synopsis | Enter the priority list instance |
| Context | configure service vprn string interface string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |

| | |
|------------|--|
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

[priority-level] *number*

| | |
|------------|--|
| Synopsis | Priority level |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum amount of cumulative buffer space allowed |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policer control policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 16.0.R1

Platforms All

fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

group-name *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

instance *number*

Synopsis Queue group instance

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1
 Platforms All

overrides

Synopsis Enter the **overrides** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#)
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms All

ip-criteria

Synopsis Enter the **ip-criteria** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ip-criteria](#)
 Tree [ip-criteria](#)
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv4 criteria
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ip-criteria](#) [activate-entry-tag](#) *number*
 Tree [activate-entry-tag](#)
 Range 1 to 255
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-criteria

Synopsis Enter the **ipv6-criteria** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ipv6-criteria](#)
 Tree [ipv6-criteria](#)

Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

activate-entry-tag *number*

Synopsis Tag ID activated for IPv6 criteria
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [ipv6-criteria](#) **activate-entry-tag** *number*
 Tree [activate-entry-tag](#)
 Range 1 to 255
 Introduced 20.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

policer [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#) *reference*
 Tree [policer](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

[[policer-id](#)] *reference*

Synopsis Policer unique ID
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#) *reference*
 Tree [policer](#)
 Reference **configure** [qos](#) [sap-ingress](#) *string* [policer](#) *number*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

cbs (*number* | *keyword*)

Synopsis CBS

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet size modification for policing information |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -32 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

percent-rate

| | |
|----------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate |

| | |
|------------|---|
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir *decimal-number*

| | |
|------------|---|
| Synopsis | CIR percent rate |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate cir <i>decimal-number</i> |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir *decimal-number*

| | |
|------------|---|
| Synopsis | PIR percent rate |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> percent-rate pir <i>decimal-number</i> |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Mode of statistics collected by the policer |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

queue [[queue-id](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress
overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | All |

[queue-id] *reference*

| | |
|------------|---|
| Synopsis | Policer unique ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress
overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

adaptation-rule

| | |
|------------|---|
| Synopsis | Enter the adaptation-rule context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress
overrides queue <i>reference</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | All |

cir *keyword*

| | |
|------------|--|
| Synopsis | Constraint used when deriving the operational CIR value |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress
overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i> |
| Tree | cir |
| Options | max, min, closest |
| Introduced | 16.0.R1 |

Platforms All

pir *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference adaptation-rule](#) [pir](#) *keyword*

Tree [pir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

cbs (*number* | *keyword*)

Synopsis CBS

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference cbs](#) (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 1048576

Units kilobytes

Options auto

Introduced 16.0.R1

Platforms All

drop-tail

Synopsis Enter the **drop-tail** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides queue](#) [reference drop-tail](#)

Tree [drop-tail](#)

Introduced 16.0.R1

Platforms All

low

Synopsis Enter the **low** context

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low |
| Tree | low |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-reduction-from-mbs (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Percentage reduction from the MBS for a queue drop tail |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs (<i>number</i> <i>keyword</i>) |
| Tree | percent-reduction-from-mbs |
| Range | 0 to 100 |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-queue-depth

| | |
|------------|--|
| Synopsis | Enable the monitor-queue-depth context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> monitor-queue-depth |
| Tree | monitor-queue-depth |
| Introduced | 21.7.R1 |

Platforms All

fast-polling *boolean*

Synopsis Enable fast polling of the queue depth

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [monitor-queue-depth](#) [fast-polling](#) *boolean*

Tree [fast-polling](#)

Default false

Introduced 21.7.R1

Platforms All

parent

Synopsis Enter the **parent** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#)

Tree [parent](#)

Introduced 16.0.R1

Platforms All

cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) [weight](#) *number*

Tree [weight](#)

| | |
|------------|----------|
| Range | 0 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

percent-rate

| | |
|------------|---|
| Synopsis | Enter the percent-rate context |
| Context | configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate |
| Tree | percent-rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir decimal-number

| | |
|------------|--|
| Synopsis | CIR percent rate |
| Context | configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number |
| Tree | cir |
| Range | 0.00 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

pir decimal-number

| | |
|------------|--|
| Synopsis | PIR percent rate |
| Context | configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number |
| Tree | pir |
| Range | 0.01 to 100.00 |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate |
| Tree | rate |
| Notes | The following elements are part of a choice: percent-rate or rate . |
| Introduced | 16.0.R1 |
| Platforms | All |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR rate |
| Context | configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate |
| Context | configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|----------|-----------|
| Synopsis | Policy ID |
|----------|-----------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

queuing-type *keyword*

| | |
|------------|---|
| Synopsis | Queuing type |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|---|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | All |

scheduler [[scheduler-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the scheduler list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | All |

[scheduler-name] *string*

| | |
|---------------|--|
| Synopsis | Scheduler name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> |
| Tree | scheduler |
| Description | <p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error will occur, the command will not execute, and the context will not change.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

parent

| | |
|------------|---|
| Synopsis | Enter the parent context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> parent |
| Tree | parent |
| Introduced | 16.0.R1 |

Platforms All

cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent cir-weight](#) *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [parent weight](#) *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

rate

Synopsis Enter the **rate** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms All

cir (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos scheduler-policy overrides scheduler](#) *string* [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

| | |
|------------|-----------------|
| Range | 0 to 6400000000 |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | All |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR at which the queue is to operate |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy overrides scheduler <i>string</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

queue-group-redirect-list *reference*

| | |
|------------|--|
| Synopsis | Queue group redirect list |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ingress queue-group-redirect-list <i>reference</i> |
| Tree | queue-group-redirect-list |
| Reference | configure qos queue-group-redirect-list <i>string</i> |
| Introduced | 16.0.R1 |

Platforms All

ip-tunnel [tunnel-name] *string*

Synopsis Enter the **ip-tunnel** list instance

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ip-tunnel](#) *string*

Tree [ip-tunnel](#)

Max. Instances 1

Introduced 16.0.R1

Platforms All

[tunnel-name] *string*

Synopsis IP tunnel name

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ip-tunnel](#) *string*

Tree [ip-tunnel](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the IP tunnel

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ip-tunnel](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

backup-remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Backup remote IP address that is applied to this tunnel |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> backup-remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | backup-remote-ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Clear the Do-not-Fragment bit |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> clear-df-bit <i>boolean</i> |
| Tree | clear-df-bit |
| Description | When configured to true , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.
When configured to false , clearing of the DF bit is disabled. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

delivery-service *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Service to originate and terminate GRE packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> delivery-service <i>string</i> |

| | |
|---------------|---|
| Tree | delivery-service |
| Description | This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.
The GRE tunnel does not come up until a valid delivery service is configured. |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

dest-ip [[dest-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Add a list entry for dest-ip |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | dest-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[dest-ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------|--|
| Synopsis | IP address of the remote IP tunnel endpoint |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | dest-ip |

| | |
|-------------|---|
| Description | This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dscp keyword



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Differentiated Services Code Point (DSCP) name |
| Context | configure service vprn string interface string sap string ip-tunnel string dscp keyword |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encapsulated-ip-mtu number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum size of the encapsulated tunnel packet |
| Context | configure service vprn string interface string sap string ip-tunnel string encapsulated-ip-mtu number |
| Tree | encapsulated-ip-mtu |
| Description | This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre-header



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **gre-header** context

Context **configure** *service vprn string interface string sap string ip-tunnel string gre-header*

Tree [gre-header](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of the GRE header in the tunnel

Context **configure** *service vprn string interface string sap string ip-tunnel string gre-header admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms All

key



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **key** context

Context **configure** *service vprn string interface string sap string ip-tunnel string gre-header key*

Tree [key](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of the keys in the GRE header |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

receive number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Receive key of the GRE header |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key receive <i>number</i> |
| Tree | receive |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

send number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Send key of the GRE header |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> gre-header key send <i>number</i> |
| Tree | send |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the icmp-generation context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation |
| Tree | icmp-generation |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the frag-required context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required |
| Tree | frag-required |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Send fragmentation required messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Maximum interval that the ICMP messages can be sent |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i> |
| Tree | interval |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

message-count *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Maximum number of ICMP messages sent |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp-generation frag-required message-count <i>number</i> |

| | |
|-------------|--|
| Tree | message-count |
| Description | This command configures the maximum number of ICMP messages that can be sent during the period specified by the interval command. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp6-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the icmp6-generation context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation |
| Tree | icmp6-generation |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

packet-too-big



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the packet-too-big context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big |
| Tree | packet-too-big |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of sending Packet Too Big messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

number *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum number of PTB ICMPv6 messages that can be sent |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big number <i>number</i> |
| Tree | number |
| Description | This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

seconds *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Maximum interval when PTB messages can be sent |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> icmp6-generation packet-too-big <i>seconds</i> <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | IP MTU for the interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Description | <p>This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.</p> <p>When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.</p> |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipsec-transport-mode-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | IPsec transport mode profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> ipsec-transport-mode-profile <i>reference</i> |
| Tree | ipsec-transport-mode-profile |

| | |
|------------|---|
| Reference | configure ipsec ipsec-transport-mode-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Local IP address of this tunnel |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> local-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-ip-address |
| Description | This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).

When this command specifies an IPv6 address, it must be a global unicast address. |
| Introduced | 16.0.R1 |
| Platforms | All |

pmtu-discovery-aging *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Time to age out the learned path MTU |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> pmtu-discovery-aging <i>number</i> |
| Tree | pmtu-discovery-aging |
| Description | This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation. |
| Range | 900 to 3600 |
| Default | 900 |
| Units | seconds |

| | |
|------------|--|
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

private-tcp-mss-adjust *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | TCP Maximum Segment Size (MSS) on the private side |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i> |
| Tree | private-tcp-mss-adjust |
| Description | This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable propagation of the path MTU to IPv4 hosts |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i> |
| Tree | propagate-pmtu-v4 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

propagate-pmtu-v6 *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable propagation of path MTU to IPv6 hosts |
| Context | configure <i>service vprn string interface string sap string ip-tunnel string propagate-pmtu-v6 boolean</i> |
| Tree | propagate-pmtu-v6 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

public-tcp-mss-adjust (*number | keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | TCP Maximum Segment Size (MSS) on the public side |
| Context | configure <i>service vprn string interface string sap string ip-tunnel string public-tcp-mss-adjust (number keyword)</i> |
| Tree | public-tcp-mss-adjust |
| Description | This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reassemble (*number | keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|------------------------------|
| Synopsis | Maximum reassembly wait time |
|----------|------------------------------|

| | |
|-------------|--|
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> reassemble (<i>number</i> <i>keyword</i>) |
| Tree | reassemble |
| Description | This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly. |
| Range | 1 to 5000 |
| Units | milliseconds |
| Options | use-tunnel-group-setting, none |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Remote IP address of the tunnel |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ip-tunnel <i>string</i> remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | remote-ip-address |
| Introduced | 16.0.R1 |
| Platforms | All |

ipsec-gateway [**name**] *string*

| | |
|----------------|---|
| Synopsis | Enter the ipsec-gateway list instance |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> |
| Tree | ipsec-gateway |
| Max. Instances | 1 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|----------|--------------------|
| Synopsis | IPsec gateway name |
|----------|--------------------|

| | |
|---------------|---|
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> |
| Tree | ipsec-gateway |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the IPsec gateway |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cert

| | |
|------------|---|
| Synopsis | Enter the cert context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert |
| Tree | cert |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cert-profile *reference*

| | |
|------------|--|
| Synopsis | Certificate profile name |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert cert-profile <i>reference</i> |
| Tree | cert-profile |
| Reference | configure ipsec cert-profile <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

status-verify

| | |
|-------------|--|
| Synopsis | Enter the status-verify context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify |
| Tree | status-verify |
| Description | Commands in this context configure certificate revocation status verification. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-result *keyword*

| | |
|-------------|--|
| Synopsis | Default result of Certificate Status Verification (CSV) |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify default-result <i>keyword</i> |
| Tree | default-result |
| Description | This command specifies the default result when both the primary and secondary methods fail to provide an answer. |
| Default | revoked |
| Options | revoked, good |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

primary *keyword*

| | |
|------------|---|
| Synopsis | Primary method of CSV to verify the revocation status |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify primary <i>keyword</i> |
| Tree | primary |
| Default | crI |
| Options | crI, ocsp |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

secondary *keyword*

| | |
|------------|---|
| Synopsis | Secondary method of CSV to verify the revocation status |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert status-verify secondary <i>keyword</i> |
| Tree | secondary |
| Default | none |
| Options | none, <i>crl</i> , <i>ocsp</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

trust-anchor-profile *reference*

| | |
|------------|---|
| Synopsis | Trust anchor profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> cert trust-anchor-profile <i>reference</i> |
| Tree | trust-anchor-profile |
| Reference | configure ipsec trust-anchor-profile <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

client-db

| | |
|-------------|---|
| Synopsis | Enable the client-db context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db |
| Tree | client-db |
| Description | Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fallback *boolean*

| | |
|----------|--|
| Synopsis | Fall back to the default authentication policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db fallback <i>boolean</i> |
| Tree | fallback |

| | |
|-------------|--|
| Description | When configured to true , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.

When configured to false and the client database lookup fails to return a matched result, the system fails the tunnel setup. |
| Default | true |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name reference

| | |
|------------|--|
| Synopsis | Client database name |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> client-db <i>name reference</i> |
| Tree | name |
| Reference | configure ipsec client-db <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-secure-service

| | |
|------------|---|
| Synopsis | Enable the default-secure-service context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service |
| Tree | default-secure-service |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interface string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Private IPsec tunnel interface name |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service interface <i>string</i> |

| | |
|---------------|--|
| Tree | interface |
| String Length | 1 to 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Default security service name |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-secure-service service-name <i>string</i> |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-tunnel-template *reference*

| | |
|------------|---|
| Synopsis | Default tunnel policy template for the gateway |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> default-tunnel-template <i>reference</i> |
| Tree | default-tunnel-template |
| Reference | configure ipsec tunnel-template <i>number</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-address-assignment

| | |
|------------|--|
| Synopsis | Enter the dhcp-address-assignment context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment |
| Tree | dhcp-address-assignment |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcpv4

| | |
|------------|--|
| Synopsis | Enable the dhcpv4 context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 |
| Tree | dhcpv4 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the IPsec DHCPv4 server |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gi-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Gateway IP address of DHCPv4 packets sent by the system |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 gi-address <i>string</i> |
| Tree | gi-address |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

send-release *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Send DHCPv4 release message when IPsec tunnel removed |
| Context | configure <i>service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 send-release boolean</i> |
| Tree | <i>send-release</i> |
| Default | true |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

server**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the server context |
| Context | configure <i>service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 server</i> |
| Tree | <i>server</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | DHCPv4 server addresses |
| Context | configure <i>service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv4 server address string</i> |
| Tree | <i>address</i> |
| Description | This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen. |

| | |
|----------------|--|
| Max. Instances | 8 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Router instance used to reach the DHCPv4 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv4 server router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcpv6

| | |
|------------|--|
| Synopsis | Enable the dhcpv6 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 |
| Tree | dhcpv6 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCPv6 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Link address of the relayed DHCPv6 packets

Context **configure** *service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 link-address string*

Tree [link-address](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

send-release *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send DHCPv6 release message when IPsec tunnel removed

Context **configure** *service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 send-release boolean*

Tree [send-release](#)

Default true

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

server



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **server** context

Context **configure** *service vprn string interface string sap string ipsec-gateway string dhcp-address-assignment dhcpv6 server*

Tree [server](#)

| | |
|------------|--|
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|---|
| Synopsis | DHCPv6 server addresses |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server address <i>string</i> |
| Tree | address |
| Description | This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen. |
| Max. Instances | 8 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Router instance to reach the DHCPv6 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> dhcp-address-assignment dhcpv6 server router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ike-policy *reference*

| | |
|----------|---------------|
| Synopsis | IKE policy ID |
|----------|---------------|

| | |
|------------|--|
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ike-policy <i>reference</i> |
| Tree | ike-policy |
| Reference | configure ipsec ike-policy <i>number</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local

| | |
|------------|--|
| Synopsis | Enter the local context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local |
| Tree | local |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address-assignment

| | |
|------------|--|
| Synopsis | Enable the address-assignment context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment |
| Tree | address-assignment |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of local address assignments |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable the ipv4 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 |
| Tree | ipv4 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Local DHCPv4 server name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 dhcp-server <i>string</i> |
| Tree | dhcp-server |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Name of the pool defined in the specified DHCPv4 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 pool <i>string</i> |
| Tree | pool |
| String Length | 1 to 32 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Router instance ID for the local DHCPv4 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

secondary-pool *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Name of the secondary pool defined in the DHCPv4 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv4 secondary-pool <i>string</i> |
| Tree | secondary-pool |
| String Length | 1 to 32 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable the ipv6 context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 |
| Tree | ipv6 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Local DHCPv6 server name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 dhcp-server <i>string</i> |
| Tree | dhcp-server |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Secondary pool name defined in the DHCPv6 server |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 pool <i>string</i> |
| Tree | pool |
| String Length | 1 to 32 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Router instance ID hosting the DHCPv6 connection |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local address-assignment ipv6 router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Local gateway address of the IPsec gateway |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | gateway-address |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id

| | |
|----------|--|
| Synopsis | Enter the id context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id |
| Tree | id |

| | |
|-------------|--|
| Description | Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

auto



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Select ID based on authentication method in IKE policy |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id auto |
| Tree | auto |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fqdn string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | FQDN as the local ID type |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> local id fqdn <i>string</i> |
| Tree | fqdn |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4 string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv4 address as the local ID type |
| Context | configure service vprn string interface string sap string ipsec-gateway string local id ipv4 string |
| Tree | ipv4 |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IPv6 address as the local ID type |
| Context | configure service vprn string interface string sap string ipsec-gateway string local id ipv6 (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ipv6 |
| Notes | The following elements are part of a choice: auto , fqdn , ipv4 , or ipv6 . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-history-key-records

| | |
|------------|---|
| Synopsis | Enter the max-history-key-records context |
| Context | configure service vprn string interface string sap string ipsec-gateway string max-history-key-records |
| Tree | max-history-key-records |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

esp number

| | |
|------------|--|
| Synopsis | Maximum number of recent records |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> max-history-key-records esp <i>number</i> |
| Tree | esp |
| Range | 1 to 48 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ike number

| | |
|------------|--|
| Synopsis | Maximum number of historical IKE keys recorded |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> max-history-key-records ike <i>number</i> |
| Tree | ike |
| Range | 1 to 3 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pre-shared-key string

| | |
|---------------|---|
| Synopsis | Pre-shared key for the IPsec gateway |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> pre-shared-key <i>string</i> |
| Tree | pre-shared-key |
| String Length | 1 to 115 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

radius

| | |
|------------|---|
| Synopsis | Enter the radius context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius |
| Tree | radius |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | RADIUS accounting policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure ipsec radius accounting-policy <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication-policy *reference*

| | |
|------------|---|
| Synopsis | RADIUS authentication policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> radius authentication-policy <i>reference</i> |
| Tree | authentication-policy |
| Reference | configure ipsec radius authentication-policy <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ts-list *reference*

| | |
|------------|--|
| Synopsis | TS list used for IKEv2 TS negotiation |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-gateway <i>string</i> ts-list <i>reference</i> |
| Tree | ts-list |
| Reference | configure ipsec ts-list <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipsec-tunnel [[name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the ipsec-tunnel list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> |
| Tree | ipsec-tunnel |
| Introduced | 19.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis IPsec tunnel name

Context **configure** *service vpn string interface string sap string ipsec-tunnel string*

Tree [ipsec-tunnel](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the IPsec tunnel

Context **configure** *service vpn string interface string sap string ipsec-tunnel string admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bfd** context

Context **configure** *service vpn string interface string sap string ipsec-tunnel string bfd*

Tree [bfd](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bfd-designate *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Designate IPsec tunnel to carry BFD traffic |
| Context | configure <i>service vprn string interface string sap string ipsec-tunnel string bfd bfd-designate boolean</i> |
| Tree | bfd-designate |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bfd-liveness**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure <i>service vprn string interface string sap string ipsec-tunnel string bfd bfd-liveness</i> |
| Tree | bfd-liveness |
| Description | <p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dest-ip *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Destination address used for the BFD session |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> bfd bfd-liveness dest-ip <i>string</i> |
| Tree | dest-ip |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interface *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Name of the interface used by the BFD session |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> bfd bfd-liveness interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> bfd bfd-liveness service-name <i>string</i> |
| Tree | service-name |
| Description | This command configures the name of the service where BFD traffic is forwarded to. |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

clear-df-bit *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Reset the DF bit to 0 in all payload IP packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> clear-df-bit <i>boolean</i> |
| Tree | clear-df-bit |
| Description | When configured to true , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs. |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

copy-traffic-class-upon-decapsulation *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enable traffic class copy upon decapsulation |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> copy-traffic-class-upon-decapsulation <i>boolean</i> |
| Tree | copy-traffic-class-upon-decapsulation |
| Description | When configured to true , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private). |
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> description <i>string</i> |

| | |
|---------------|--|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dest-ip [[address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|----------------|--|
| Synopsis | Add a list entry for dest-ip |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | dest-ip |
| Max. Instances | 16 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Private IP address of the remote IP tunnel endpoint |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> dest-ip (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | dest-ip |
| Notes | This element is part of a list key. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encapsulated-ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Maximum size of the encapsulated tunnel packet |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> encapsulated-ip-mtu <i>number</i> |
| Tree | encapsulated-ip-mtu |
| Description | This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If |

the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.

| | |
|------------|--|
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp-generation



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the icmp-generation context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation |
| Tree | icmp-generation |
| Description | Commands in this context configure settings for ICMPv4 message generation. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

frag-required



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the frag-required context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required |
| Tree | frag-required |
| Description | Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Administrative state of sending ICMP messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size. |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Interval for sending ICMP messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp-generation frag-required interval <i>number</i> |
| Tree | interval |
| Description | This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4). |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum number of ICMP messages that can be sent |
| Context | configure <i>service vprn string interface string sap string ipsec-tunnel string icmp-generation frag-required message-count number</i> |
| Tree | <i>message-count</i> |
| Description | This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp6-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the icmp6-generation context |
| Context | configure <i>service vprn string interface string sap string ipsec-tunnel string icmp6-generation</i> |
| Tree | <i>icmp6-generation</i> |
| Description | Commands in this context configure settings for ICMPv6 message generation. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

packet-too-big

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Enter the packet-too-big context |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big |
| Tree | packet-too-big |
| Description | <p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the configure router interface ipsec ipsec-tunnel ip-mtu command for the interface.</p> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Administrative state of Packet Too Big message sends |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Interval for sending Packet Too Big messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big interval <i>number</i> |
| Tree | interval |
| Range | 1 to 60 |

| | |
|------------|--|
| Default | 10 |
| Units | seconds |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

message-count *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Maximum number of ICMPv6 PTB messages that can be sent |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> icmp6-generation packet-too-big message-count <i>number</i> |
| Tree | message-count |
| Description | This command configures the maximum number of PTB messages that can be sent during the configured interval. |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Private MTU of the IPsec tunnel |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> ip-mtu <i>number</i> |
| Tree | ip-mtu |
| Description | This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 19.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

key-exchange



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **key-exchange** context

Context **configure service vpn** *string* **interface** *string* **sap** *string* **ipsec-tunnel** *string* **key-exchange**

Tree **key-exchange**

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dynamic



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **dynamic** context

Context **configure service vpn** *string* **interface** *string* **sap** *string* **ipsec-tunnel** *string* **key-exchange dynamic**

Tree **dynamic**

Notes The following elements are part of a choice: **dynamic** or **manual**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

auto-establish *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Attempt to establish a phase 1 exchange automatically

Context **configure service vpn** *string* **interface** *string* **sap** *string* **ipsec-tunnel** *string* **key-exchange dynamic auto-establish** *boolean*

| | |
|------------|--|
| Tree | auto-establish |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cert



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the cert context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert |
| Tree | cert |
| Description | Commands in this context configure the attributes of the dynamic keying certificate. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cert-profile *reference*

| | |
|------------|--|
| Synopsis | Certificate profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert cert-profile <i>reference</i> |
| Tree | cert-profile |
| Reference | configure ipsec cert-profile <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

status-verify



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enter the status-verify context |
|----------|--|

| | |
|-------------|---|
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify |
| Tree | status-verify |
| Description | Commands in this context configure attributes of Certificate Status Verification (CSV). |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-result *keyword*

| | |
|-------------|---|
| Synopsis | Default result for Certificate Status Verification |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify default-result <i>keyword</i> |
| Tree | default-result |
| Description | This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result. |
| Default | revoked |
| Options | revoked, good |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

primary *keyword*

| | |
|-------------|--|
| Synopsis | Primary method of CSV to verify the revocation status |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify primary <i>keyword</i> |
| Tree | primary |
| Description | This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer. |
| Default | crI |
| Options | crI, ocsp |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

secondary *keyword*

| | |
|----------|--|
| Synopsis | Secondary method used to verify certificate revocation |
|----------|--|

| | |
|-------------|--|
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert status-verify secondary <i>keyword</i> |
| Tree | secondary |
| Description | This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate. |
| Default | none |
| Options | none, crl, ocsp |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

trust-anchor-profile *reference*

| | |
|------------|---|
| Synopsis | Trust anchor profile name |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic cert trust-anchor-profile <i>reference</i> |
| Tree | trust-anchor-profile |
| Reference | configure ipsec trust-anchor-profile <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the id context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic id |
| Tree | id |
| Description | Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> • Psk: local tunnel IP address • Cert-auth: subject of the local certificate |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fqdn string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | FQDN used as the local ID IKE type |
| Context | configure service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic id fqdn string |
| Tree | fqdn |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4 string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv4 as the local ID type |
| Context | configure service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic id ipv4 string |
| Tree | ipv4 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | IPv6 used as the local IKE ID type |
| Context | configure service vprn string interface string sap string ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone ipv6-address-no-zone) |

| | |
|------------|---|
| Tree | ipv6 |
| Notes | The following elements are part of a choice: fqdn , ipv4 , or ipv6 . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ike-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | IKE policy ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange <i>dynamic</i> ike-policy <i>reference</i> |
| Tree | ike-policy |
| Description | This command specifies the ID of the IKE policy used for IKE negotiation.
The ipsec-transport-mode-profile configuration only supports IKEv2. |
| Reference | configure ipsec ike-policy <i>number</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipsec-transform *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|---|
| Synopsis | IPsec transform IDs used by the dynamic key |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange <i>dynamic</i> ipsec-transform <i>reference</i> |
| Tree | ipsec-transform |
| Description | This command specifies IPsec transform IDs used for CHILD_SA negotiation. |
| Reference | configure ipsec ipsec-transform <i>number</i> |
| Max. Instances | 4 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Pre-shared key for authentication |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange dynamic pre-shared-key <i>string</i> |
| Tree | pre-shared-key |
| String Length | 1 to 115 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

manual

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the manual context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual |
| Tree | manual |
| Notes | The following elements are part of a choice: dynamic or manual . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

keys [**security-association**] *number direction keyword*

| | |
|-------------|--|
| Synopsis | Enter the keys list instance |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number direction keyword</i> |
| Tree | keys |
| Description | Commands in this context configure the security association list for the tunnel. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[security-association] number

| | |
|------------|---|
| Synopsis | SA entry ID |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> |
| Tree | keys |
| Range | 1 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

direction keyword

| | |
|------------|---|
| Synopsis | Direction of the IPsec tunnel |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> |
| Tree | keys |
| Options | inbound, outbound |
| Notes | This element is part of a list key. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication-key string**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Key used for the authentication algorithm |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 130 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Key used for the encryption algorithm |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> encryption-key <i>string</i> |
| Tree | encryption-key |
| String Length | 1 to 66 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipsec-transform *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Transform entry used by manual SAs |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> ipsec-transform <i>reference</i> |
| Tree | ipsec-transform |
| Reference | configure ipsec ipsec-transform <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

spi *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | SPI of inbound and outbound packets |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> key-exchange manual keys <i>number</i> direction <i>keyword</i> spi <i>number</i> |
| Tree | spi |

| | |
|-------------|--|
| Description | This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.

The remote node can use the SPI to look up the instruction to verify and decrypt the packet. |
| Range | 256 to 16383 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-history-key-records



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enter the max-history-key-records context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> max-history-key-records |
| Tree | max-history-key-records |
| Description | Commands in this context configure the settings for recording historical IPsec keys. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

esp number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Maximum number of recent records |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> max-history-key-records esp <i>number</i> |
| Tree | esp |
| Range | 1 to 48 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ike number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Maximum number of historical IKE key records |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> max-history-key-records ike <i>number</i> |
| Tree | ike |
| Range | 1 to 3 |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pmtu-discovery-aging number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Aging out time of the learned path MTU |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> pmtu-discovery-aging <i>number</i> |
| Tree | pmtu-discovery-aging |
| Description | This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation. |
| Range | 900 to 3600 |
| Default | 900 |
| Units | seconds |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

private-tcp-mss-adjust number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | TCP maximum segment size (MSS) adjustment |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> private-tcp-mss-adjust <i>number</i> |
| Tree | private-tcp-mss-adjust |
| Description | This command specifies the TCP MSS to adjust for the tunnel on the private side.
When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side. |
| Range | 512 to 9000 |
| Units | bytes |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

propagate-pmtu-v4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Enable propagation of the path MTU to IPv4 hosts |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> propagate-pmtu-v4 <i>boolean</i> |
| Tree | propagate-pmtu-v4 |
| Description | When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts). |
| Default | true |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

propagate-pmtu-v6 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enable propagation of the path MTU to IPv6 hosts |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> propagate-pmtu-v6 <i>boolean</i> |
| Tree | propagate-pmtu-v6 |

| | |
|-------------|--|
| Description | When configured to true , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts). |
| Default | true |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

public-tcp-mss-adjust (*number* | *keyword*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | TCP maximum segment size (MSS) on the public network |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> public-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | public-tcp-mss-adjust |
| Description | This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet. |
| Range | 512 to 9000 |
| Units | bytes |
| Options | auto |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

replay-window *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Anti-replay window size |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> replay-window <i>number</i> |
| Tree | replay-window |
| Description | This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled. |
| Range | 32 64 128 256 512 |

| | |
|------------|--|
| Units | packets |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

security-policy



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the security-policy context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> security-policy |
| Tree | security-policy |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IPsec security policy ID |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> security-policy <i>id reference</i> |
| Tree | id |
| Reference | configure service vpn <i>string</i> ipsec security-policy <i>number</i> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

strict-match *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Enable strict match of the security policy entry |
|----------|--|

| | |
|-------------|---|
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> security-policy strict-match <i>boolean</i> |
| Tree | strict-match |
| Description | <p>When configured to true, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p> |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel-endpoint



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enable the tunnel-endpoint context |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint |
| Tree | tunnel-endpoint |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

delivery-service *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Delivery service name |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint delivery-service <i>string</i> |

| | |
|---------------|--|
| Tree | delivery-service |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Address used for tunnel of the remote security gateway |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint local-gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-gateway-address |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Remote IP address of this tunnel. |
| Context | configure service vpn <i>string</i> interface <i>string</i> sap <i>string</i> ipsec-tunnel <i>string</i> tunnel-endpoint remote-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | remote-ip-address |
| Notes | This element is mandatory. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lag

| | |
|----------|------------------------------|
| Synopsis | Enter the lag context |
|----------|------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 16.0.R1 |
| Platforms | All |

link-map-profile *number*

| | |
|-------------|---|
| Synopsis | LAG link map profile for a SAP or network interface |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i> |
| Tree | link-map-profile |
| Description | <p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p> |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

per-link-hash

| | |
|------------|--|
| Synopsis | Enter the per-link-hash context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag per-link-hash |
| Tree | per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | All |

class *number*

| | |
|------------|--|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i> |
| Tree | class |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |

Platforms All

weight *number*

Synopsis Weight used on LAG egress using weighted per-link-hash

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [lag](#) [per-link-hash](#) [weight](#) *number*

Tree [weight](#)

Range 1 to 1024

Default 1

Introduced 16.0.R1

Platforms All

multi-service-site *reference*

Synopsis Multi service site name

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [multi-service-site](#) [reference](#)

Tree [multi-service-site](#)

Reference **configure** [service](#) [customer](#) *string* [multi-service-site](#) *string*

Introduced 16.0.R1

Platforms All

static-host

Synopsis Enter the **static-host** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#)

Tree [static-host](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4 [[ip](#)] *string* [mac](#) *string*

Synopsis Enter the **ipv4** list instance

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string*

Tree [ipv4](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ip] *string*

Synopsis IP address

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string*

Tree [ipv4](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac *string*

Synopsis MAC address

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string*

Tree [ipv4](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the static host

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anccp-string *string*

Synopsis ANCP string

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [static-host](#) [ipv4](#) *string* [mac](#) *string* [anccp-string](#) *string*

| | |
|---------------|---|
| Tree | ancp-string |
| String Length | 1 to 63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile

| | |
|------------|---|
| Synopsis | Enter the app-profile context |
| Context | configure service vprn string interface string sap string static-host ipv4 string mac string app-profile |
| Tree | app-profile |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

profile reference

| | |
|------------|---|
| Synopsis | Application profile used by the static host |
| Context | configure service vprn string interface string sap string static-host ipv4 string mac string app-profile profile reference |
| Tree | profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id string

| | |
|---------------|--|
| Synopsis | Intermediate destination ID |
| Context | configure service vprn string interface string sap string static-host ipv4 string mac string int-dest-id string |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | SLA profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Sub-profile name |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | Subscriber identification |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id <i>string</i> <i>string</i> |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: string or use-sap-id . |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-sap-id

| | |
|------------|---|
| Synopsis | Use the SAP id as subscriber ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id use-sap-id |
| Tree | use-sap-id |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transit-policy

| | |
|------------|--|
| Synopsis | Enable the transit-policy context |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP transit policy ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> transit-policy ip reference |
| Tree | ip |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-ip-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP prefix policy ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> sap <i>string</i> transit-policy prefix <i>reference</i> |
| Tree | prefix |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> transit-prefix-policy <i>number</i> |
| Notes | The following elements are part of a mandatory choice: ip or prefix . |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy-ipv4 reference

| | |
|------------|---|
| Synopsis | Host connectivity IPv4 policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> shcv-policy-ipv4 <i>reference</i> |
| Tree | shcv-policy-ipv4 |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

spoke-sdp [[sdp-bind-id](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[[sdp-bind-id](#)] *string*

| | |
|----------|----------------|
| Synopsis | SDP binding ID |
|----------|----------------|

| | |
|---------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

aarp

| | |
|------------|---|
| Synopsis | Enable the aarp context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> aarp |
| Tree | aarp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id reference

| | |
|------------|--|
| Synopsis | AARP instance ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> aarp id reference |
| Tree | id |
| Reference | configure application-assurance aarp <i>number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|--|
| Synopsis | Role referenced by the AARP |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> aarp type keyword |
| Tree | type |
| Options | dual-homed, dual-homed-secondary |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|--|
| Synopsis | Policy to collect accounting statistics |
| Context | configure service vprn string interface string spoke-sdp string accounting-policy reference |
| Tree | accounting-policy |
| Reference | configure log accounting-policy number |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SDP binding to the service |
| Context | configure service vprn string interface string spoke-sdp string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Application profile name for this SDP |
| Context | configure service vprn string interface string spoke-sdp string app-profile reference |
| Tree | app-profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service vprn string interface string spoke-sdp string bfd |
| Tree | bfd |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vprn string interface string spoke-sdp string bfd bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 21.2.R1 |
| Platforms | All |

encap *keyword*

| | |
|------------|---|
| Synopsis | BFD encapsulation used on the SDP binding |
| Context | configure service vprn string interface string spoke-sdp string bfd bfd-liveness encap keyword |
| Tree | encap |
| Default | ipv4 |
| Options | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-template *reference*

| | |
|-------------|---|
| Synopsis | BFD template associated with the SDP binding |
| Context | configure service vprn string interface string spoke-sdp string bfd bfd-template reference |
| Tree | bfd-template |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Reference | configure bfd bfd-template string |
| Introduced | 21.2.R1 |
| Platforms | All |

failure-action *keyword*

| | |
|----------|--|
| Synopsis | VCCV BFD action taken on the SDP binding |
|----------|--|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd failure-action <i>keyword</i> |
| Tree | failure-action |
| Description | This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the configure router bfd context. |
| Default | none |
| Options | none, down |
| Introduced | 21.2.R1 |
| Platforms | All |

wait-for-up-timer *number*

| | |
|-------------|--|
| Synopsis | Time waited for BFD up status |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> bfd wait-for-up-timer <i>number</i> |
| Tree | wait-for-up-timer |
| Description | This command configures the time interval that is used to wait for a BFD session to come up.

This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP. |
| Range | 1 to 60 |
| Units | seconds |
| Introduced | 21.2.R1 |
| Platforms | All |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Allow agent to collect accounting statistics |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

control-word *boolean*

| | |
|------------|---|
| Synopsis | Use the control word as preferred |
| Context | configure service vpn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cpu-protection

| | |
|------------|--|
| Synopsis | Enter the cpu-protection context |
| Context | configure service vpn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm-monitoring

| | |
|------------|---|
| Synopsis | Enable the eth-cfm-monitoring context |
| Context | configure service vpn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring |
| Tree | eth-cfm-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

aggregate

| | |
|------------|---|
| Synopsis | Apply rate limit to the sum of the per peer packet rates |
| Context | configure service vpn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring aggregate |
| Tree | aggregate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

car

| | |
|------------|---|
| Synopsis | Ignore Ethernet CFM packets when enforcing overall rate |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection eth-cfm-monitoring car |
| Tree | car |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ip-src-monitoring

| | |
|------------|--|
| Synopsis | Enable IP source monitoring for CPU protection |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection ip-src-monitoring |
| Tree | ip-src-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mac-monitoring

| | |
|------------|---|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy-id *reference*

| | |
|----------|--|
| Synopsis | CPM protection policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> cpu-protection policy-id reference |
| Tree | policy-id |

| | |
|------------|---|
| Reference | configure system security cpu-protection policy number |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string interface string spoke-sdp string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service vprn string interface string spoke-sdp string egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn string interface string spoke-sdp string egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|-----------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn string interface string spoke-sdp string egress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter string |

Introduced 16.0.R1
 Platforms All

ipv6 *reference*

Synopsis IPv6 filter policy name
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [filter](#) [ipv6](#) *reference*
 Tree [ipv6](#)
 Reference **configure** [filter](#) [ipv6-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

qos

Synopsis Enter the **qos** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#)
 Tree [qos](#)
 Introduced 16.0.R1
 Platforms All

network

Synopsis Enter the **network** context
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#)
 Tree [network](#)
 Introduced 16.0.R1
 Platforms All

policy-name *reference*

Synopsis Network policy ID
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos](#) [network](#) *string*

Introduced 16.0.R1
Platforms All

port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 16.0.R1

Platforms All

group-name *reference*

Synopsis Name of the egress port queue group

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

instance *number*

Synopsis Queue-group instance ID

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

vc-label *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

entropy-label

| | |
|------------|---|
| Synopsis | Enable the use of entropy labels for spoke SDPs |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> entropy-label |
| Tree | entropy-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|---|
| Synopsis | Enter the eth-cfm context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-fc-stats

| | |
|----------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |

| | |
|-------------|--|
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fc-in-profile keyword

| | |
|-------------|---|
| Synopsis | Forwarding class name for profile-aware counter |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-fc-stats fc-in-profile <i>keyword</i> |
| Tree | fc-in-profile |
| Description | <p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> |

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

| | |
|----------------|--|
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

collect-lmm-stats *boolean*

| | |
|-------------|--|
| Synopsis | Collect statistics for loss measurement message tests |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm collect-lmm-stats <i>boolean</i> |
| Tree | collect-lmm-stats |
| Description | <p>When configured to true, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The show eth-cfm collect-lmm-stats command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to false, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*

| | |
|------------|---|
| Synopsis | Enter the mep list instance |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-admin-name *reference*

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string association string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mep-id *number*

| | |
|------------|--|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---------------------------------|
| Synopsis | Administrative state of the MEP |
|----------|---------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ais *boolean*

| | |
|------------|---|
| Synopsis | Enable the generation and the reception of AIS messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i> |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alarm-notification

| | |
|-------------|---|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | <p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-alarm-time *number*

| | |
|----------|--|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |

| | |
|------------|--|
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fng-reset-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm *boolean*

| | |
|------------|--|
| Synopsis | Generate CCM messages |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i> |
| Tree | ccm |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-ltm-priority *number*

| | |
|----------|--|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

csf

| | |
|------------|---|
| Synopsis | Enable the csf context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf |
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *decimal-number*

| | |
|----------|--|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-test

| | |
|-------------|--|
| Synopsis | Enable the eth-test context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bit-error-threshold *number*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

test-pattern

| | |
|-------------|--|
| Synopsis | Enter the test-pattern context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

crc-tlv *boolean*

| | |
|------------|---|
| Synopsis | Generate a CRC checksum |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pattern *keyword*

| | |
|-------------|---|
| Synopsis | Test pattern for Ethernet Test frames |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern pattern <i>keyword</i> |
| Tree | pattern |
| Description | This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver. |
| Default | all-zeros |
| Options | all-zeros, all-ones |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fault-propagation *keyword*

| | |
|------------|--|
| Synopsis | Fault propagation for the MEP |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation <i>keyword</i> |
| Tree | fault-propagation |
| Options | use-if-status-tlv, suspend-ccm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace

| | |
|-------------|---|
| Synopsis | Enter the grace context |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace |
| Tree | grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eth-ed

| | |
|-------------|---|
| Synopsis | Enter the eth-ed context |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed |
| Tree | eth-ed |
| Description | Commands in this context configure the ITU-T Y.1731 ETH-ED function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-rx-defect-window *number*

| | |
|----------|---|
| Synopsis | Maximum received ETH-ED expected defect window duration |
| Context | configure service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window <i>number</i> |
| Tree | max-rx-defect-window |

| | |
|------------|--|
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|------------|---|
| Synopsis | Transmission priority for ETH-ED PDUs |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed priority <i>number</i> |
| Tree | priority |
| Range | 0 to 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rx-eth-ed boolean

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-eth-ed boolean

| | |
|------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-vsm-grace](#)

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-vsm-grace rx-eth-vsm-grace](#) *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-vsm-grace tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

| | |
|------------|--|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

low-priority-defect *keyword*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i> |
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

one-way-delay-threshold *number*

| | |
|------------|---|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

squelch-ingress-levels *number*

| | |
|----------|---|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
|----------|---|

| | |
|----------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> eth-cfm squelch-ingress-levels <i>number</i> |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

hash-label

| | |
|------------|---|
| Synopsis | Enable the hash-label context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label |
| Tree | hash-label |
| Notes | The following elements are part of a choice: entropy-label or hash-label . |
| Introduced | 16.0.R1 |
| Platforms | All |

signal-capability

| | |
|------------|---|
| Synopsis | Enable the signaling of the hash label between PE nodes |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> hash-label signal-capability |
| Tree | signal-capability |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|----------|----------------------------------|
| Synopsis | Enter the ingress context |
|----------|----------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string interface string spoke-sdp string ingress</i> |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string interface string spoke-sdp string ingress filter</i> |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string interface string spoke-sdp string ingress filter ip reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string interface string spoke-sdp string ingress filter ipv6 reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|----------|------------------------------|
| Synopsis | Enter the qos context |
|----------|------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

network

| | |
|------------|---|
| Synopsis | Enter the network context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | All |

fp-redirect-group

| | |
|------------|---|
| Synopsis | Enter the fp-redirect-group context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group |
| Tree | fp-redirect-group |
| Introduced | 16.0.R1 |
| Platforms | All |

group-name *reference*

| | |
|------------|---|
| Synopsis | Name of the forwarding plane queue group template |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

instance *number*

| | |
|----------|---|
| Synopsis | Instance of the forwarding-plane ingress Queue Group for this SDP binding |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network fp-redirect-group <i>instance number</i> |
| Tree | instance |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Network policy ID |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress qos network policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Ingress MPLS VC label to send packets to the far end |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> ingress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 1 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-policy

| | |
|------------|---|
| Synopsis | Enable the transit-policy context |
| Context | configure service vprn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> transit-policy |
| Tree | transit-policy |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP transit policy ID

Context **configure** *service vprn string interface string spoke-sdp string transit-policy ip reference*

Tree *ip*

Reference **configure** *application-assurance group number partition number transit-ip-policy number*

Notes The following elements are part of a mandatory choice: **ip** or **prefix**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

prefix reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP prefix policy ID

Context **configure** *service vprn string interface string spoke-sdp string transit-policy prefix reference*

Tree *prefix*

Reference **configure** *application-assurance group number partition number transit-prefix-policy number*

Notes The following elements are part of a mandatory choice: **ip** or **prefix**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vc-type keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Type of virtual circuit (VC) associated with the SDP binding |
| Context | configure service vpn <i>string</i> interface <i>string</i> spoke-sdp <i>string</i> vc-type <i>keyword</i> |
| Tree | vc-type |
| Default | ether |
| Options | ether, ipipe |
| Introduced | 16.0.R1 |
| Platforms | All |

static-tunnel-redundant-nexthop string

| | |
|-------------|---|
| Synopsis | Address for the static ISA tunnel redundant next-hop |
| Context | configure service vpn <i>string</i> interface <i>string</i> static-tunnel-redundant-nexthop <i>string</i> |
| Tree | static-tunnel-redundant-nexthop |
| Description | This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel.
The next-hop address is resolved in the routing table of the corresponding service. |
| Notes | The following elements are part of a choice: multi-chassis-shunting-profile or (dynamic-tunnel-redundant-nexthop and static-tunnel-redundant-nexthop). |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tos-marking-state keyword

| | |
|------------|---|
| Synopsis | TOS marking state |
| Context | configure service vpn <i>string</i> interface <i>string</i> tos-marking-state <i>keyword</i> |
| Tree | tos-marking-state |
| Default | trusted |
| Options | trusted, untrusted |
| Introduced | 16.0.R1 |
| Platforms | All |

tunnel *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable/disable tunnel interface |
| Context | configure <i>service</i> <i>vpn</i> <i>string</i> <i>interface</i> <i>string</i> tunnel <i>boolean</i> |
| Tree | tunnel |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

vas-if-type *keyword*

| | |
|------------|---|
| Synopsis | VAS interface type |
| Context | configure <i>service</i> <i>vpn</i> <i>string</i> <i>interface</i> <i>string</i> vas-if-type <i>keyword</i> |
| Tree | vas-if-type |
| Options | to-from-access, to-from-network, to-from-both |
| Introduced | 16.0.R1 |
| Platforms | All |

vpls [*vpls-name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the vpls list instance |
| Context | configure <i>service</i> <i>vpn</i> <i>string</i> <i>interface</i> <i>string</i> vpls <i>string</i> |
| Tree | vpls |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[vpls-name] *string*

| | |
|----------|---|
| Synopsis | VPLS service |
| Context | configure <i>service</i> <i>vpn</i> <i>string</i> <i>interface</i> <i>string</i> vpls <i>string</i> |

| | |
|---------------|-------------------------------------|
| Tree | vpls |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | All |

reclassify-using-qos *reference*

| | |
|------------|---|
| Synopsis | Egress QoS policy |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> egress reclassify-using-qos <i>reference</i> |
| Tree | reclassify-using-qos |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

routed-override-filter

| | |
|------------|--|
| Synopsis | Enter the routed-override-filter context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> egress routed-override-filter |
| Tree | routed-override-filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip *reference*

| | |
|----------|-------------------------|
| Synopsis | IPv4 filter policy name |
|----------|-------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> egress routed-override-filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> egress routed-override-filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

evpn

| | |
|------------|---|
| Synopsis | Enter the evpn context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn |
| Tree | evpn |
| Introduced | 19.10.R1 |
| Platforms | All |

arp

| | |
|------------|---|
| Synopsis | Enter the arp context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp |
| Tree | arp |
| Introduced | 19.10.R1 |
| Platforms | All |

advertise [[route-type](#)] *keyword*

| | |
|----------|--|
| Synopsis | Enter the advertise list instance |
|----------|--|

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp advertise <i>keyword</i> |
| Tree | advertise |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.
The learn-dynamic command must be set to false when using this functionality. |
| Introduced | 19.10.R1 |
| Platforms | All |

[route-type] *keyword*

| | |
|-------------|---|
| Synopsis | Type of ARP or ND entries that generate host routes |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp advertise <i>keyword</i> |
| Tree | advertise |
| Description | This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes. |
| Options | static, dynamic |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

route-tag *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Tag value used with the host route from an ARP/ND entry |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp advertise <i>keyword</i> route-tag <i>number</i> |
| Tree | route-tag |
| Description | This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies. |
| Range | 0 to 255 |
| Introduced | 19.10.R1 |
| Platforms | All |

flood-garp-and-unknown-req *boolean*

| | |
|-------------|---|
| Synopsis | Allow CPM originated ARP frames to flood R-VPLS service |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp flood-garp-and-unknown-req <i>boolean</i> |
| Tree | flood-garp-and-unknown-req |
| Description | When configured to true , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command.
When configured to false , CPM-originated ARP flooding is suppressed. |
| Default | true |
| Introduced | 19.10.R1 |
| Platforms | All |

learn-dynamic *boolean*

| | |
|-------------|---|
| Synopsis | Process ARP or ND messages on EVPN tunnels |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn arp learn-dynamic <i>boolean</i> |
| Tree | learn-dynamic |
| Description | When configured to true , the system processes ARP or ND messages that arrive on EVPN tunnels.
When configured to false , learning is disabled and table entries are not created for these messages. |
| Default | true |
| Introduced | 19.10.R1 |
| Platforms | All |

nd

| | |
|------------|---|
| Synopsis | Enter the nd context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn nd |
| Tree | nd |
| Introduced | 20.5.R1 |
| Platforms | All |

advertise [*route-type*] *keyword*

| | |
|-------------|--|
| Synopsis | Enter the advertise list instance |
| Context | configure <i>service vprn string interface string vpls string evpn nd advertise keyword</i> |
| Tree | <i>advertise</i> |
| Description | Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.
The learn-dynamic command must be set to false when using this functionality. |
| Introduced | 20.5.R1 |
| Platforms | All |

[route-type] *keyword*

| | |
|-------------|---|
| Synopsis | Type of ARP or ND entries that generate host routes |
| Context | configure <i>service vprn string interface string vpls string evpn nd advertise keyword</i> |
| Tree | <i>advertise</i> |
| Description | This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes. |
| Options | static, dynamic |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

route-tag *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Tag value used with the host route from an ARP/ND entry |
| Context | configure <i>service vprn string interface string vpls string evpn nd advertise keyword route-tag number</i> |
| Tree | <i>route-tag</i> |
| Description | This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies. |
| Range | 0 to 255 |
| Introduced | 20.5.R1 |

Platforms All

learn-dynamic *boolean*

Synopsis Process ARP or ND messages on EVPN tunnels

Context **configure** *service vprn string interface string vpls string evpn nd learn-dynamic boolean*

Tree [learn-dynamic](#)

Description When configured to **true**, the system processes ARP or ND messages that arrive on EVPN tunnels.
When configured to **false**, learning is disabled and table entries are not created for these messages.

Default true

Introduced 20.5.R1

Platforms All

evpn-tunnel

Synopsis Enable the **evpn-tunnel** context

Context **configure** *service vprn string interface string vpls string evpn-tunnel*

Tree [evpn-tunnel](#)

Introduced 16.0.R1

Platforms All

allow-bfd *boolean*

Synopsis Allow BFD on the EVPN tunnel

Context **configure** *service vprn string interface string vpls string evpn-tunnel allow-bfd boolean*

Tree [allow-bfd](#)

Default false

Introduced 22.5.R1

Platforms All

ipv6-gateway-address *keyword*

Synopsis Type of IPv6 gateway address

| | |
|------------|---|
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn-tunnel ipv6-gateway-address <i>keyword</i> |
| Tree | ipv6-gateway-address |
| Default | ip |
| Options | ip, mac |
| Introduced | 16.0.R4 |
| Platforms | All |

supplementary-broadcast-domain *boolean*

| | |
|-------------|--|
| Synopsis | Use the EVPN tunnel as a Supplementary Broadcast Domain |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> evpn-tunnel supplementary-broadcast-domain <i>boolean</i> |
| Tree | supplementary-broadcast-domain |
| Description | <p>When configured to true, this command allows the EVPN tunnel to be used as a Supplementary Broadcast Domain (SBD). The SBD is used in EVPN OISM to advertise the SMET routes and to receive the multicast traffic on egress PEs that are not attached to the source R-VPLS service.</p> <p>When configured to false, this command disables EVPN tunnel use as an SBD.</p> |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

routed-override-filter

| | |
|------------|--|
| Synopsis | Enter the routed-override-filter context |
| Context | configure service vprn <i>string</i> interface <i>string</i> vpls <i>string</i> ingress routed-override-filter |
| Tree | routed-override-filter |
| Introduced | 16.0.R1 |

Platforms All

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [ingress](#) [routed-override-filter ip reference](#)

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *string*

Introduced 16.0.R1

Platforms All

ipv6 reference

Synopsis IPv6 filter policy name

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [ingress](#) [routed-override-filter ipv6 reference](#)

Tree [ipv6](#)

Reference **configure** [filter ipv6-filter](#) *string*

Introduced 16.0.R1

Platforms All

ip-mirror-interface [\[interface-name\]](#) *string*

Synopsis Enter the **ip-mirror-interface** list instance

Context **configure** [service vprn](#) *string* [ip-mirror-interface](#) *string*

Tree [ip-mirror-interface](#)

Introduced 16.0.R1

Platforms All

[interface-name] *string*

Synopsis Interface name

Context **configure** [service vprn](#) *string* [ip-mirror-interface](#) *string*

Tree [ip-mirror-interface](#)

String Length 1 to 32

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the interface |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

spoke-sdp [**sdp-bind-id**] *string*

| | |
|----------------|---|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-bind-id] *string*

| | |
|---------------|---|
| Synopsis | SDP binding ID |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SDP binding to the service |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|----------|--|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> ip-mirror-interface <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |

Introduced 16.0.R1
 Platforms All

filter

Synopsis Enter the **filter** context
 Context **configure** [service](#) [vprn](#) *string* [ip-mirror-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)
 Tree [filter](#)
 Introduced 16.0.R1
 Platforms All

ip reference

Synopsis IPv4 filter policy name
 Context **configure** [service](#) [vprn](#) *string* [ip-mirror-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) [reference](#)
 Tree [ip](#)
 Reference **configure** [filter](#) [ip-filter](#) *string*
 Introduced 16.0.R1
 Platforms All

vc-label *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Spoke SDP ingress VC label
 Context **configure** [service](#) [vprn](#) *string* [ip-mirror-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) [number](#)
 Tree [vc-label](#)
 Range 1 to 1048575
 Introduced 16.0.R1
 Platforms All

ipsec

| | |
|------------|--|
| Synopsis | Enter the ipsec context |
| Context | configure service vprn string ipsec |
| Tree | ipsec |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

allow-reverse-route-override-type keyword

| | |
|-------------|---|
| Synopsis | System behavior for new reverse route |
| Context | configure service vprn string ipsec allow-reverse-route-override-type keyword |
| Tree | allow-reverse-route-override-type |
| Description | This command specifies the system behavior when a new reverse route overlaps with an existing reverse route.

When unconfigured, the system does not allow a new dynamic LAN-to-LAN tunnel that terminates in the private VPRN service to be created with an overlapping reverse route. |
| Options | same-idi, any-idi |
| Introduced | 20.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multi-chassis-shunt-interface [name] reference

| | |
|------------|--|
| Synopsis | Enter the multi-chassis-shunt-interface list instance |
| Context | configure service vprn string ipsec multi-chassis-shunt-interface reference |
| Tree | multi-chassis-shunt-interface |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] reference

| | |
|-----------|--|
| Synopsis | Multi-chassis shunt interface name |
| Context | configure service vprn string ipsec multi-chassis-shunt-interface reference |
| Tree | multi-chassis-shunt-interface |
| Reference | configure service vprn string interface string |
| Notes | This element is part of a list key. |

Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

next-hop

Synopsis Enter the **next-hop** context
 Context **configure service vprn string ipsec multi-chassis-shunt-interface reference next-hop**
 Tree [next-hop](#)
 Description Commands in this context configure the next hop for shunting over the interface.
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Next hop address
 Context **configure service vprn string ipsec multi-chassis-shunt-interface reference next-hop address (*ipv4-address-no-zone | ipv6-address-no-zone*)**
 Tree [address](#)
 Description This command configures the next-hop address for the shunting interface.
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-chassis-shunting-profile [*name*] *string*

Synopsis Enter the **multi-chassis-shunting-profile** list instance
 Context **configure service vprn string ipsec multi-chassis-shunting-profile string**
 Tree [multi-chassis-shunting-profile](#)
 Max. Instances 64
 Introduced 22.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*name*] *string*

Synopsis Multi-chassis shunting profile name
 Context **configure service vprn string ipsec multi-chassis-shunting-profile string**

| | |
|---------------|--|
| Tree | multi-chassis-shunting-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

peer [[ip-address](#)] *reference*

| | |
|----------------|--|
| Synopsis | Enter the peer list instance |
| Context | configure service vprn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i> |
| Tree | peer |
| Max. Instances | 3 |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[ip-address] *reference*

| | |
|------------|--|
| Synopsis | Peer address |
| Context | configure service vprn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i> |
| Tree | peer |
| Reference | configure redundancy multi-chassis peer (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Notes | This element is part of a list key. |
| Introduced | 22.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multi-chassis-shunt-interface *reference*

| | |
|------------|---|
| Synopsis | Multi-chassis shunt interface |
| Context | configure service vprn <i>string</i> ipsec multi-chassis-shunting-profile <i>string</i> peer <i>reference</i> multi-chassis-shunt-interface <i>reference</i> |
| Tree | multi-chassis-shunt-interface |
| Reference | configure service vprn <i>string</i> ipsec multi-chassis-shunt-interface <i>reference</i> |
| Introduced | 22.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

security-policy [*id*] *number*

Synopsis Enter the **security-policy** list instance
 Context **configure service vpn** *string ipsec security-policy number*
 Tree [security-policy](#)
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *number*

Synopsis IPsec security policy ID
 Context **configure service vpn** *string ipsec security-policy number*
 Tree [security-policy](#)
 Range 1 to 32768
 Notes This element is part of a list key.
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

entry [*entry-id*] *number*

Synopsis Enter the **entry** list instance
 Context **configure service vpn** *string ipsec security-policy number entry number*
 Tree [entry](#)
 Introduced 19.7.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[entry-id] *number*

Synopsis IPsec security policy entry ID
 Context **configure service vpn** *string ipsec security-policy number entry number*
 Tree [entry](#)
 Range 1 to 16
 Notes This element is part of a list key.

| | |
|------------|--|
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-ip

| | |
|-------------|--|
| Synopsis | Enter the local-ip context |
| Context | configure service vpn string ipsec security-policy number entry number local-ip |
| Tree | local-ip |
| Description | <p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address string

| | |
|------------|---|
| Synopsis | Destination IPv4 address of the aggregate route |
| Context | configure service vpn string ipsec security-policy number entry number local-ip address string |
| Tree | address |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

any boolean

| | |
|------------|--|
| Synopsis | Use any IP address |
| Context | configure service vpn string ipsec security-policy number entry number local-ip any boolean |
| Tree | any |
| Default | false |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-ipv6

| | |
|-------------|--|
| Synopsis | Enter the local-ipv6 context |
| Context | configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 |
| Tree | local-ipv6 |
| Description | <p>Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address *string*

| | |
|------------|---|
| Synopsis | Destination IPv6 address of the aggregate route |
| Context | configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 address <i>string</i> |
| Tree | address |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

any *boolean*

| | |
|------------|--|
| Synopsis | Use any IP address |
| Context | configure service vpn <i>string</i> ipsec security-policy <i>number</i> entry <i>number</i> local-ipv6 any <i>boolean</i> |
| Tree | any |
| Default | false |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-ip

| | |
|-------------|--|
| Synopsis | Enter the remote-ip context |
| Context | configure service vpn string ipsec security-policy number entry number remote-ip |
| Tree | remote-ip |
| Description | <p>Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.</p> <p>The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.</p> |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address string

| | |
|------------|--|
| Synopsis | Destination IPv4 address of the aggregate route |
| Context | configure service vpn string ipsec security-policy number entry number remote-ip address string |
| Tree | address |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

any boolean

| | |
|------------|---|
| Synopsis | Use any IP address |
| Context | configure service vpn string ipsec security-policy number entry number remote-ip any boolean |
| Tree | any |
| Default | false |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-ipv6

| | |
|----------|---|
| Synopsis | Enter the remote-ipv6 context |
| Context | configure service vpn string ipsec security-policy number entry number remote-ipv6 |

| | |
|-------------|--|
| Tree | remote-ipv6 |
| Description | Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry.

The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public. |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address string

| | |
|------------|---|
| Synopsis | Destination IPv6 address of the aggregate route |
| Context | configure service vprn string ipsec security-policy number entry number remote-ipv6 address string |
| Tree | address |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

any boolean

| | |
|------------|--|
| Synopsis | Use any IP address |
| Context | configure service vprn string ipsec security-policy number entry number remote-ipv6 any boolean |
| Tree | any |
| Default | false |
| Notes | The following elements are part of a choice: address or any . |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|---|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn string ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor-discovery

| | |
|------------|--|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service vprn string ipv6 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | All |

reachable-time *number*

| | |
|------------|--|
| Synopsis | Neighbor reachability detection timer |
| Context | configure service vprn string ipv6 neighbor-discovery reachable-time number |
| Tree | reachable-time |
| Range | 30 to 3600 |
| Default | 30 |
| Introduced | 16.0.R1 |
| Platforms | All |

stale-time *number*

| | |
|------------|--|
| Synopsis | Neighbor discovery cache entry stale time |
| Context | configure service vprn string ipv6 neighbor-discovery stale-time number |
| Tree | stale-time |
| Range | 60 to 65535 |
| Default | 14400 |
| Introduced | 16.0.R1 |
| Platforms | All |

router-advertisement

| | |
|------------|--|
| Synopsis | Enter the router-advertisement context |
| Context | configure service vprn string ipv6 router-advertisement |
| Tree | router-advertisement |
| Introduced | 16.0.R1 |
| Platforms | All |

dns-options

| | |
|------------|--|
| Synopsis | Enable the dns-options context |
| Context | configure service vprn string ipv6 router-advertisement dns-options |
| Tree | dns-options |
| Introduced | 16.0.R1 |
| Platforms | All |

rdnss-lifetime (*keyword | number*)

| | |
|-------------|---|
| Synopsis | Maximum time over which the RDNSS address is valid |
| Context | configure service vprn string ipv6 router-advertisement dns-options rdnss-lifetime (<i>keyword number</i>) |
| Tree | rdnss-lifetime |
| Description | This command specifies the maximum time that the RDNSS address is used for name resolution by the client. |
| Range | 0 4 to 3600 |
| Default | infinite |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

server *string*

| | |
|----------------|---|
| Synopsis | RAs that are forwarded to IPv6 DNS servers |
| Context | configure service vprn string ipv6 router-advertisement dns-options server <i>string</i> |
| Tree | server |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [ip-int-name] *reference*

| | |
|------------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-int-name] *reference*

| | |
|------------|---|
| Synopsis | VPRN interface name |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> |
| Tree | interface |
| Reference | configure service vprn <i>string</i> interface <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of router advertisement |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

current-hop-limit *number*

| | |
|----------|--|
| Synopsis | Hop limit advertised in RA messages |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> current-hop-limit <i>number</i> |
| Tree | current-hop-limit |
| Range | 0 to 255 |

| | |
|------------|---------|
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

dns-options

| | |
|------------|--|
| Synopsis | Enable the dns-options context |
| Context | configure service vprn string ipv6 router-advertisement interface reference dns-options |
| Tree | dns-options |
| Introduced | 16.0.R1 |
| Platforms | All |

include-rdnss *boolean*

| | |
|------------|--|
| Synopsis | Include the RDNSS option in the RA |
| Context | configure service vprn string ipv6 router-advertisement interface reference dns-options include-rdnss boolean |
| Tree | include-rdnss |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

rdnss-lifetime (*number | keyword*)

| | |
|------------|--|
| Synopsis | Maximum time over which the RDNSS address 25 is valid |
| Context | configure service vprn string ipv6 router-advertisement interface reference dns-options rdnss-lifetime (number keyword) |
| Tree | rdnss-lifetime |
| Range | 0 4 to 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

server string

| | |
|----------------|--|
| Synopsis | RAs that are forwarded to IPv6 DNS servers |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> dns-options server string |
| Tree | server |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

managed-configuration boolean

| | |
|------------|--|
| Synopsis | Set the managed address configuration flag |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> managed-configuration boolean |
| Tree | managed-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

max-advertisement-interval number

| | |
|------------|--|
| Synopsis | Maximum time between sending advertisement messages |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> max-advertisement-interval number |
| Tree | max-advertisement-interval |
| Range | 4 to 1800 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

min-advertisement-interval number

| | |
|----------|--|
| Synopsis | Minimum interval between router advertisement messages |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> min-advertisement-interval <i>number</i> |
| Tree | min-advertisement-interval |
| Range | 3 to 1350 |
| Default | 200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

mtu *number*

| | |
|------------|--|
| Synopsis | MTU for sending packets to the router |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> mtu <i>number</i> |
| Tree | mtu |
| Range | 1280 to 9800 |
| Introduced | 16.0.R1 |
| Platforms | All |

other-stateful-configuration *boolean*

| | |
|------------|--|
| Synopsis | Set the other configuration flag |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> other-stateful-configuration <i>boolean</i> |
| Tree | other-stateful-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix [[ipv6-prefix](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> prefix <i>string</i> |
| Tree | prefix |
| Max. Instances | 254 |
| Introduced | 16.0.R1 |

Platforms All

[ipv6-prefix] *string*

Synopsis IPv6 address prefix

Context **configure** [service](#) [vpn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) [reference](#) [prefix](#) *string*

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

autonomous *boolean*

Synopsis Set the autonomous flag value

Context **configure** [service](#) [vpn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) [reference](#) [prefix](#) *string*
[autonomous](#) *boolean*

Tree [autonomous](#)

Default true

Introduced 16.0.R1

Platforms All

on-link *boolean*

Synopsis Use prefix for on-link determination

Context **configure** [service](#) [vpn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) [reference](#) [prefix](#) *string*
[on-link](#) *boolean*

Tree [on-link](#)

Default true

Introduced 16.0.R1

Platforms All

preferred-lifetime (*keyword* | *number*)

Synopsis Remaining time that the prefix remains preferred

Context **configure** [service](#) [vpn](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) [reference](#) [prefix](#) *string*
[preferred-lifetime](#) (*keyword* | *number*)

| | |
|------------|------------------------------------|
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 604800 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

valid-lifetime (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Remaining time in which the prefix is still valid |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> prefix <i>string</i> valid-lifetime (<i>keyword</i> <i>number</i>) |
| Tree | valid-lifetime |
| Range | 0 to 4294967294 |
| Default | 2592000 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

reachable-time *number*

| | |
|------------|---|
| Synopsis | Time the router is reachable by other hosts or nodes |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface <i>reference</i> reachable-time <i>number</i> |
| Tree | reachable-time |
| Range | 0 to 3600000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

retransmit-time *number*

| | |
|----------|---|
| Synopsis | Time to advertise neighbor advertisement messages |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface reference retransmit-time <i>number</i> |
| Tree | retransmit-time |
| Range | 0 to 1800000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

router-lifetime *number*

| | |
|------------|--|
| Synopsis | Lifetime value in neighbor advertisement messages |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface reference router-lifetime <i>number</i> |
| Tree | router-lifetime |
| Range | 0 4 to 9000 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

use-virtual-mac *boolean*

| | |
|------------|---|
| Synopsis | Use VRRP virtual MAC address for advertisement message |
| Context | configure service vprn <i>string</i> ipv6 router-advertisement interface reference use-virtual-mac <i>boolean</i> |
| Tree | use-virtual-mac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

isis [**isis-instance**] *number*

| | |
|----------|---|
| Synopsis | Enter the isis list instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> |
| Tree | isis |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

[isis-instance] *number*

| | |
|------------|---|
| Synopsis | Instance ID for the IS-IS instance |
| Context | configure service vprn <i>string isis number</i> |
| Tree | isis |
| Range | 0 to 127 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the IS-IS instance |
| Context | configure service vprn <i>string isis number admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-passive-only *boolean*

| | |
|------------|--|
| Synopsis | Advertise prefixes that belong to passive interfaces |
| Context | configure service vprn <i>string isis number advertise-passive-only boolean</i> |
| Tree | advertise-passive-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-router-capability *keyword*

| | |
|----------|--|
| Synopsis | Router capabilities advertisement to neighbors |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn string isis number advertise-router-capability keyword |
| Tree | advertise-router-capability |
| Options | area, as |
| Introduced | 16.0.R1 |
| Platforms | All |

all-l1isis string

| | |
|------------|--|
| Synopsis | Destination MAC address for all L1 IS-IS routers |
| Context | configure service vprn string isis number all-l1isis string |
| Tree | all-l1isis |
| Default | 01:80:C2:00:00:14 |
| Introduced | 16.0.R1 |
| Platforms | All |

all-l2isis string

| | |
|------------|--|
| Synopsis | Destination MAC address for all L2 IS-IS routers |
| Context | configure service vprn string isis number all-l2isis string |
| Tree | all-l2isis |
| Default | 01:80:C2:00:00:15 |
| Introduced | 16.0.R1 |
| Platforms | All |

area-address string

| | |
|----------------|--|
| Synopsis | Area address portion of the NSAP address |
| Context | configure service vprn string isis number area-address string |
| Tree | area-address |
| String Length | 2 to 38 |
| Max. Instances | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-check *boolean*

| | |
|------------|--|
| Synopsis | Perform authentication check to reject mismatch PDUs |
| Context | configure service vprn <i>string isis number authentication-check boolean</i> |
| Tree | authentication-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication key to verify PDUs sent from neighbors |
| Context | configure service vprn <i>string isis number authentication-key string</i> |
| Tree | authentication-key |
| String Length | 1 to 366 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|------------|---|
| Synopsis | Keychain used to sign and authenticate |
| Context | configure service vprn <i>string isis number authentication-keychain reference</i> |
| Tree | authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

authentication-type *keyword*

| | |
|------------|---|
| Synopsis | Authentication type |
| Context | configure service vprn <i>string isis number authentication-type keyword</i> |
| Tree | authentication-type |
| Options | password, message-digest |
| Introduced | 16.0.R1 |
| Platforms | All |

csnp-authentication *boolean*

| | |
|------------|---|
| Synopsis | Authenticate individual IS-IS packets of the CSNP type |
| Context | configure service vprn <i>string isis number csnp-authentication boolean</i> |
| Tree | csnp-authentication |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

default-route-tag *number*

| | |
|------------|--|
| Synopsis | Route tag for the default route |
| Context | configure service vprn <i>string isis number default-route-tag number</i> |
| Tree | default-route-tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

export-limit

| | |
|------------|--|
| Synopsis | Enable the export-limit context |
| Context | configure service vprn <i>string isis number export-limit</i> |
| Tree | export-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-percent *number*

| | |
|------------|---|
| Synopsis | Export limit before warning and SNMP notification sent |
| Context | configure service vprn <i>string isis number export-limit log-percent number</i> |
| Tree | log-percent |
| Range | 1 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Maximum routes or prefixes exported from route table |
| Context | configure service vprn <i>string</i> isis <i>number</i> export-limit number <i>number</i> |
| Tree | number |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|--|
| Synopsis | Export policies that determine exported routes |
| Context | configure service vprn <i>string</i> isis <i>number</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Description | <p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p> |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-restart

| | |
|----------|---|
| Synopsis | Enable the graceful-restart context |
| Context | configure service vprn <i>string</i> isis <i>number</i> graceful-restart |
| Tree | graceful-restart |

Introduced 16.0.R1
 Platforms All

helper-mode *boolean*

Synopsis Enable the Graceful Restart helper for IS-IS
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [graceful-restart](#) [helper-mode](#) *boolean*
 Tree [helper-mode](#)
 Default true
 Introduced 16.0.R1
 Platforms All

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [hello-authentication](#) *boolean*
 Tree [hello-authentication](#)
 Default true
 Introduced 16.0.R1
 Platforms All

hello-padding *keyword*

Synopsis IS-IS Hello message padding
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [hello-padding](#) *keyword*
 Tree [hello-padding](#)
 Options adaptive, loose, strict, none
 Introduced 16.0.R1
 Platforms All

ignore-attached-bit *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [ignore-attached-bit](#) *boolean*
 Tree [ignore-attached-bit](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-lsp-errors *boolean*

| | |
|------------|---|
| Synopsis | Ignore LSP packets with errors |
| Context | configure service vprn <i>string</i> isis <i>number</i> ignore-lsp-errors <i>boolean</i> |
| Tree | ignore-lsp-errors |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-narrow-metric *boolean*

| | |
|------------|--|
| Synopsis | Ignore links with narrow metrics |
| Context | configure service vprn <i>string</i> isis <i>number</i> ignore-narrow-metric <i>boolean</i> |
| Tree | ignore-narrow-metric |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

iid-tlv *boolean*

| | |
|------------|---|
| Synopsis | Use IID TLVs with IS-IS multi-instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> iid-tlv <i>boolean</i> |
| Tree | iid-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------|---|
| Synopsis | Import policy names for routes from IGP to route table |
| Context | configure service vprn <i>string</i> isis <i>number</i> import-policy <i>reference</i> |

| | |
|----------------|--|
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vpn <i>string</i> isis <i>number</i> interface <i>string</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|---------------|---|
| Synopsis | IP interface name |
| Context | configure service vpn <i>string</i> isis <i>number</i> interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the IS-IS interface |
| Context | configure service vpn <i>string</i> isis <i>number</i> interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-liveness

| | |
|-------------|---|
| Synopsis | Enter the bfd-liveness context |
| Context | configure service vprn string isis number interface string bfd-liveness |
| Tree | bfd-liveness |
| Description | Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|---|
| Synopsis | Enable the ipv4 context |
| Context | configure service vprn string isis number interface string bfd-liveness ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

include-bfd-tlv *boolean*

| | |
|------------|--|
| Synopsis | Enable IS-IS BFD TLVs on the interface |
| Context | configure service vprn string isis number interface string bfd-liveness ipv4 include-bfd-tlv <i>boolean</i> |
| Tree | include-bfd-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|---|
| Synopsis | Enable the ipv6 context |
| Context | configure service vprn string isis number interface string bfd-liveness ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |

Platforms All

include-bfd-tlv *boolean*

Synopsis Enable IS-IS BFD TLVs on the interface

Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* [bfd-liveness](#) [ipv6](#) **include-bfd-tlv** *boolean*

Tree [include-bfd-tlv](#)

Default false

Introduced 16.0.R1

Platforms All

csnp-interval *number*

Synopsis Time interval between successive CSN PDUs sent

Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **csnp-interval** *number*

Tree [csnp-interval](#)

Range 1 to 65535

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

default-instance *boolean*

Synopsis Allow non-MI capable router to establish an adjacency

Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **default-instance** *boolean*

Tree [default-instance](#)

Default false

Introduced 16.0.R1

Platforms All

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets

Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* **hello-authentication** *boolean*

| | |
|------------|--------------------------------------|
| Tree | hello-authentication |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication key or hash string for Hello PDUs |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-key <i>string</i> |
| Tree | hello-authentication-key |
| String Length | 1 to 366 |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-authentication-keychain *reference*

| | |
|------------|---|
| Synopsis | Authentication keychain to use for the session |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-keychain <i>reference</i> |
| Tree | hello-authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

hello-authentication-type *keyword*

| | |
|------------|---|
| Synopsis | Hello authentication type |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> hello-authentication-type <i>keyword</i> |
| Tree | hello-authentication-type |
| Options | password, message-digest |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-padding *keyword*

| | |
|------------|--|
| Synopsis | Padding on IS-IS Hello packets |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> hello-padding <i>keyword</i> |
| Tree | hello-padding |
| Options | adaptive, loose, strict, none |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-type *keyword*

| | |
|------------|---|
| Synopsis | Interface type to broadcast, point-to-point, or to be default |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> interface-type <i>keyword</i> |
| Tree | interface-type |
| Options | point-to-point, broadcast |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4-multicast *boolean*

| | |
|------------|---|
| Synopsis | Enable IPv4 multicast routing for the interface |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> ipv4-multicast <i>boolean</i> |
| Tree | ipv4-multicast |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6-unicast *boolean*

| | |
|------------|---|
| Synopsis | Enable IPv6 unicast routing for the interface |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> ipv6-unicast <i>boolean</i> |
| Tree | ipv6-unicast |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

level [[level-number](#)] *keyword*

| | |
|----------------|---|
| Synopsis | Enter the level list instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> |
| Tree | level |
| Max. Instances | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

[level-number] *keyword*

| | |
|------------|---|
| Synopsis | ISIS protocol level number |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> |
| Tree | level |
| Options | 1, 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication key for Hello PDUs |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-authentication-key <i>string</i> |
| Tree | hello-authentication-key |
| Description | This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.

If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs. |
| String Length | 1 to 366 |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-authentication-keychain *reference*

| | |
|------------|--|
| Synopsis | Authentication keychain to use for the session |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-authentication-keychain <i>reference</i> |
| Tree | hello-authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

hello-authentication-type *keyword*

| | |
|-------------|--|
| Synopsis | Hello authentication enabled on the context |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-authentication-type <i>keyword</i> |
| Tree | hello-authentication-type |
| Description | This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello authentication-key statement must also be included. |
| Options | password, message-digest |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-interval *number*

| | |
|------------|--|
| Synopsis | Interval between Hello messages sent on this level |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-interval <i>number</i> |
| Tree | hello-interval |
| Range | 1 to 20000 |
| Default | 9 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-multiplier *number*

| | |
|------------|--|
| Synopsis | Hello messages missed from neighbor before router declares adjacency down |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-multiplier <i>number</i> |
| Tree | hello-multiplier |
| Range | 2 to 100 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-padding *keyword*

| | |
|------------|--|
| Synopsis | Padding on IS-IS Hello packets |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> hello-padding <i>keyword</i> |
| Tree | hello-padding |
| Options | adaptive, loose, strict, none |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4-multicast-metric *number*

| | |
|------------|---|
| Synopsis | IS-IS interface metric applied for IPv4 multicast |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv4-multicast-metric <i>number</i> |
| Tree | ipv4-multicast-metric |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6-unicast-metric *number*

| | |
|----------|---|
| Synopsis | IS-IS interface metric applied for IPv6 unicast |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> ipv6-unicast-metric <i>number</i> |
| Tree | ipv6-unicast-metric |

| | |
|------------|---------------|
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

metric number

| | |
|------------|--|
| Synopsis | IS-IS interface metric applied for IPv4 unicast |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> metric <i>number</i> |
| Tree | metric |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

passive boolean

| | |
|------------|--|
| Synopsis | Passive interface |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> passive <i>boolean</i> |
| Tree | passive |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

priority number

| | |
|------------|--|
| Synopsis | Router to become the designated router on a multi-access network |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> level <i>keyword</i> priority <i>number</i> |
| Tree | priority |
| Range | 0 to 127 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

sd-offset number

| | |
|----------|------------------------------------|
| Synopsis | Value of the signal degrade offset |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string isis number interface string level keyword sd-offset number</i> |
| Tree | sd-offset |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

sf-offset *number*

| | |
|------------|---|
| Synopsis | Value of the signal fail offset |
| Context | configure service vprn <i>string isis number interface string level keyword sf-offset number</i> |
| Tree | sf-offset |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

level-capability *keyword*

| | |
|------------|---|
| Synopsis | IS-IS levels for this interface |
| Context | configure service vprn <i>string isis number interface string level-capability keyword</i> |
| Tree | level-capability |
| Default | 1/2 |
| Options | 1, 2, 1/2 |
| Introduced | 16.0.R1 |
| Platforms | All |

load-balancing-weight *number*

| | |
|------------|---|
| Synopsis | Load balancing weight |
| Context | configure service vprn <i>string isis number interface string load-balancing-weight number</i> |
| Tree | load-balancing-weight |
| Max. Range | 0 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

loopfree-alternate

| | |
|------------|---|
| Synopsis | Enter the loopfree-alternate context |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate |
| Tree | loopfree-alternate |
| Introduced | 16.0.R3 |
| Platforms | All |

exclude *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable Loopfree Alternative at interface level. |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i> |
| Tree | exclude |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

policy-map

| | |
|------------|--|
| Synopsis | Enable the policy-map context |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate policy-map |
| Tree | policy-map |
| Introduced | 16.0.R3 |
| Platforms | All |

route-nh-template *reference*

| | |
|------------|---|
| Synopsis | Route next hop policy template that is applied to interface |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i> |
| Tree | route-nh-template |
| Reference | configure routing-options route-next-hop-policy template <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R3 |
| Platforms | All |

lsp-pacing-interval *number*

| | |
|------------|--|
| Synopsis | Interval for sending LSPs from interface |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> lsp-pacing-interval <i>number</i> |
| Tree | lsp-pacing-interval |
| Range | 0 to 65535 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

mesh-group

| | |
|------------|---|
| Synopsis | Enable the mesh-group context |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group |
| Tree | mesh-group |
| Introduced | 16.0.R1 |
| Platforms | All |

blocked

| | |
|------------|--|
| Synopsis | Prevent the interface from flooding LSPs |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group blocked |
| Tree | blocked |
| Notes | The following elements are part of a choice: blocked or value . |
| Introduced | 16.0.R1 |
| Platforms | All |

value *number*

| | |
|----------|--|
| Synopsis | Mesh group for the interface |
| Context | configure service vprn <i>string</i> isis <i>number</i> interface <i>string</i> mesh-group value <i>number</i> |
| Tree | value |
| Range | 1 to 2000000000 |
| Notes | The following elements are part of a choice: blocked or value . |

Introduced 16.0.R1
Platforms All

passive *boolean*

Synopsis Passive interface
Context **configure** *service vprn string isis number interface string* **passive** *boolean*
Tree **passive**
Default false
Introduced 16.0.R1
Platforms All

retransmit-interval *number*

Synopsis Minimum time between LSP PDU retransmissions on point-to-point interface
Context **configure** *service vprn string isis number interface string* **retransmit-interval** *number*
Tree **retransmit-interval**
Range 1 to 65535
Default 5
Units seconds
Introduced 16.0.R1
Platforms All

tag *number*

Synopsis Route tag for IP address of interface
Context **configure** *service vprn string isis number interface string* **tag** *number*
Tree **tag**
Range 1 to 4294967295
Introduced 16.0.R1
Platforms All

ipv4-multicast-routing *keyword*

Synopsis IS-IS topology for IPv4 multicast routing

| | |
|------------|--|
| Context | configure service vprn <i>string isis number ipv4-multicast-routing keyword</i> |
| Tree | ipv4-multicast-routing |
| Default | native |
| Options | false, native, mt |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4-routing *boolean*

| | |
|------------|--|
| Synopsis | Support IPv4 routing for IS-IS instance |
| Context | configure service vprn <i>string isis number ipv4-routing boolean</i> |
| Tree | ipv4-routing |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6-routing *keyword*

| | |
|------------|--|
| Synopsis | Routing topology for IPv6 |
| Context | configure service vprn <i>string isis number ipv6-routing keyword</i> |
| Tree | ipv6-routing |
| Default | false |
| Options | false, native, mt |
| Introduced | 16.0.R1 |
| Platforms | All |

level [[level-number](#)] *keyword*

| | |
|----------------|---|
| Synopsis | Enter the level list instance |
| Context | configure service vprn <i>string isis number level keyword</i> |
| Tree | level |
| Max. Instances | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

[level-number] *keyword*

| | |
|------------|---|
| Synopsis | ISIS protocol level number |
| Context | configure service vprn <i>string isis number level keyword</i> |
| Tree | level |
| Options | 1, 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-router-capability *boolean*

| | |
|------------|---|
| Synopsis | Allow router advertisement capabilities |
| Context | configure service vprn <i>string isis number level keyword advertise-router-capability boolean</i> |
| Tree | advertise-router-capability |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication key to verify PDUs sent on the interface |
| Context | configure service vprn <i>string isis number level keyword authentication-key string</i> |
| Tree | authentication-key |
| Description | This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.

Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The authentication-type command must also be included. |
| String Length | 1 to 366 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|------------|---|
| Synopsis | Keychain used to sign and authenticate |
| Context | configure service vpn <i>string</i> isis <i>number</i> level <i>keyword</i> authentication-keychain <i>reference</i> |
| Tree | authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

authentication-type *keyword*

| | |
|------------|---|
| Synopsis | Authentication type to be used |
| Context | configure service vpn <i>string</i> isis <i>number</i> level <i>keyword</i> authentication-type <i>keyword</i> |
| Tree | authentication-type |
| Options | password, message-digest |
| Introduced | 16.0.R1 |
| Platforms | All |

csnp-authentication *boolean*

| | |
|------------|---|
| Synopsis | Enable authentication of CSNP IS-IS protocol packets |
| Context | configure service vpn <i>string</i> isis <i>number</i> level <i>keyword</i> csnp-authentication <i>boolean</i> |
| Tree | csnp-authentication |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

default-ipv4-multicast-metric *number*

| | |
|----------|--|
| Synopsis | Default metric for IPv4 unicast |
| Context | configure service vpn <i>string</i> isis <i>number</i> level <i>keyword</i> default-ipv4-multicast-metric <i>number</i> |
| Tree | default-ipv4-multicast-metric |
| Range | 1 to 16777215 |
| Default | 10 |

Introduced 16.0.R1
Platforms All

default-ipv6-unicast-metric *number*

Synopsis Default metric for IPv6 unicast
Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [default-ipv6-unicast-metric](#) *number*
Tree [default-ipv6-unicast-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

default-metric *number*

Synopsis Default metric
Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [default-metric](#) *number*
Tree [default-metric](#)
Range 1 to 16777215
Default 10
Introduced 16.0.R1
Platforms All

external-preference *number*

Synopsis External route preference for IS-IS level
Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [external-preference](#) *number*
Tree [external-preference](#)
Range 1 to 255
Introduced 16.0.R1
Platforms All

hello-authentication *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets

| | |
|------------|---|
| Context | configure service vprn string isis number level keyword hello-authentication boolean |
| Tree | hello-authentication |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-padding *keyword*

| | |
|------------|--|
| Synopsis | Padding on IS-IS Hello packets |
| Context | configure service vprn string isis number level keyword hello-padding keyword |
| Tree | hello-padding |
| Options | adaptive, loose, strict, none |
| Introduced | 16.0.R1 |
| Platforms | All |

loopfree-alternate-exclude *boolean*

| | |
|------------|---|
| Synopsis | Exclude interface participating in specific IS-IS level in SPF LFA computation |
| Context | configure service vprn string isis number level keyword loopfree-alternate-exclude boolean |
| Tree | loopfree-alternate-exclude |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

lsp-mtu-size *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

| | |
|----------|--|
| Synopsis | LSP MTU size |
| Context | configure service vprn string isis number level keyword lsp-mtu-size number |
| Tree | lsp-mtu-size |
| Range | 490 to 9778 |
| Default | 1492 |

| | |
|------------|---------|
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | External route preference at level |
| Context | configure service vprn <i>string</i> isis <i>number</i> level <i>keyword</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

psnp-authentication *boolean*

| | |
|------------|--|
| Synopsis | Enable authentication on PSNP IS-IS protocol packets |
| Context | configure service vprn <i>string</i> isis <i>number</i> level <i>keyword</i> psnp-authentication <i>boolean</i> |
| Tree | psnp-authentication |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

wide-metrics-only *boolean*

| | |
|------------|--|
| Synopsis | Use wide metrics advertisements in the LSPs |
| Context | configure service vprn <i>string</i> isis <i>number</i> level <i>keyword</i> wide-metrics-only <i>boolean</i> |
| Tree | wide-metrics-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

level-capability *keyword*

| | |
|----------|--|
| Synopsis | Routing level for instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> level-capability <i>keyword</i> |

| | |
|------------|----------------------------------|
| Tree | level-capability |
| Default | 1/2 |
| Options | 1, 2, 1/2 |
| Introduced | 16.0.R1 |
| Platforms | All |

link-group [[link-group-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the link-group list instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> |
| Tree | link-group |
| Introduced | 16.0.R1 |
| Platforms | All |

[link-group-name] *string*

| | |
|---------------|---|
| Synopsis | Link group name for the IS-IS protocol |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> |
| Tree | link-group |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

level [[level-number](#)] *keyword*

| | |
|----------------|--|
| Synopsis | Enter the level list instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> |
| Tree | level |
| Max. Instances | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

[level-number] *keyword*

| | |
|------------|--|
| Synopsis | ISIS protocol level number |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> |
| Tree | level |
| Options | 1, 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4-multicast-metric-offset *number*

| | |
|------------|---|
| Synopsis | Offset value for the IPv4 multicast address family |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> ipv4-multicast-metric-offset <i>number</i> |
| Tree | ipv4-multicast-metric-offset |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4-unicast-metric-offset *number*

| | |
|----------|---|
| Synopsis | Offset value for the IPv4 unicast address family |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> ipv4-unicast-metric-offset <i>number</i> |
| Tree | ipv4-unicast-metric-offset |
| Range | 1 to 16777215 |

Introduced 16.0.R1
 Platforms All

ipv6-unicast-metric-offset *number*

Synopsis Offset value for the IPv6 unicast address family
 Context **configure** **service** **vprn** *string* **isis** *number* **link-group** *string* **level** *keyword* **ipv6-unicast-metric-offset** *number*
 Tree [ipv6-unicast-metric-offset](#)
 Range 1 to 16777215
 Introduced 16.0.R1
 Platforms All

member [[interface-name](#)] *reference*

Synopsis Add a list entry for **member**
 Context **configure** **service** **vprn** *string* **isis** *number* **link-group** *string* **level** *keyword* **member** *reference*
 Tree [member](#)
 Max. Instances 8
 Introduced 16.0.R1
 Platforms All

[interface-name] *reference*

Synopsis Interface name for the associated link group
 Context **configure** **service** **vprn** *string* **isis** *number* **link-group** *string* **level** *keyword* **member** *reference*
 Tree [member](#)
 Reference **configure** **service** **vprn** *string* **isis** *number* **interface** *string*
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

oper-members *number*

| | |
|------------|---|
| Synopsis | Minimum number of operational links |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> oper-members <i>number</i> |
| Tree | oper-members |
| Range | 1 to 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

revert-members *number*

| | |
|------------|---|
| Synopsis | Minimum number of operational links to return link group to normal state and remove offsets |
| Context | configure service vprn <i>string</i> isis <i>number</i> link-group <i>string</i> level <i>keyword</i> revert-members <i>number</i> |
| Tree | revert-members |
| Range | 1 to 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

loopfree-alternate

| | |
|------------|---|
| Synopsis | Enable the loopfree-alternate context |
| Context | configure service vprn <i>string</i> isis <i>number</i> loopfree-alternate |
| Tree | loopfree-alternate |
| Introduced | 16.0.R1 |
| Platforms | All |

exclude

| | |
|------------|---|
| Synopsis | Enter the exclude context |
| Context | configure service vprn <i>string</i> isis <i>number</i> loopfree-alternate exclude |
| Tree | exclude |
| Introduced | 16.0.R3 |
| Platforms | All |

prefix-policy *reference*

| | |
|----------------|--|
| Synopsis | Policy to exclude prefixes from LFA SPF calculation |
| Context | configure service vprn string isis number loopfree-alternate exclude prefix-policy reference |
| Tree | prefix-policy |
| Description | This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.

An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF. |
| Reference | configure policy-options policy-statement string |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R3 |
| Platforms | All |

lsp-lifetime *number***WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

| | |
|------------|--|
| Synopsis | Amount of time during which an LSP is considered valid |
| Context | configure service vprn string isis number lsp-lifetime number |
| Tree | lsp-lifetime |
| Range | 350 to 65535 |
| Default | 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

lsp-minimum-remaining-lifetime *number*

| | |
|----------|--|
| Synopsis | Minimum value for the Remaining Lifetime of an LSP |
| Context | configure service vprn string isis number lsp-minimum-remaining-lifetime number |
| Tree | lsp-minimum-remaining-lifetime |

| | |
|------------|--------------|
| Range | 350 to 65535 |
| Units | seconds |
| Introduced | 19.7.R1 |
| Platforms | All |

lsp-mtu-size *number*



WARNING:

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

| | |
|------------|--|
| Synopsis | LSP MTU size |
| Context | configure service vprn <i>string isis number</i> lsp-mtu-size <i>number</i> |
| Tree | lsp-mtu-size |
| Range | 490 to 9778 |
| Default | 1492 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

lsp-refresh

| | |
|------------|---|
| Synopsis | Enter the lsp-refresh context |
| Context | configure service vprn <i>string isis number</i> lsp-refresh |
| Tree | lsp-refresh |
| Introduced | 16.0.R1 |
| Platforms | All |

half-lifetime *boolean*

| | |
|------------|--|
| Synopsis | Set the refresh interval to always be half the LSP lifetime |
| Context | configure service vprn <i>string isis number</i> lsp-refresh half-lifetime <i>boolean</i> |
| Tree | half-lifetime |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|------------|---|
| Synopsis | Refresh timer interval |
| Context | configure service vprn <i>string</i> isis <i>number</i> lsp-refresh interval <i>number</i> |
| Tree | interval |
| Range | 150 to 65535 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

mru-mismatch-detection *boolean*

| | |
|-------------|--|
| Synopsis | Enable detection of MRU mismatch |
| Context | configure service vprn <i>string</i> isis <i>number</i> mru-mismatch-detection <i>boolean</i> |
| Tree | mru-mismatch-detection |
| Description | <p>When configured to true, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to false, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p> |
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multi-topology

| | |
|------------|---|
| Synopsis | Enable the multi-topology context |
| Context | configure service vprn <i>string</i> isis <i>number</i> multi-topology |
| Tree | multi-topology |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4-multicast *boolean*

| | |
|------------|--|
| Synopsis | Support IPv4 topology (MT3) |
| Context | configure service vprn <i>string isis number multi-topology</i> ipv4-multicast <i>boolean</i> |
| Tree | ipv4-multicast |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6-unicast *boolean*

| | |
|------------|--|
| Synopsis | Support multi-topology TLVs |
| Context | configure service vprn <i>string isis number multi-topology</i> ipv6-unicast <i>boolean</i> |
| Tree | ipv6-unicast |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast-import

| | |
|------------|--|
| Synopsis | Enter the multicast-import context |
| Context | configure service vprn <i>string isis number</i> multicast-import |
| Tree | multicast-import |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|--|
| Synopsis | Submit IPv4 routes into the multicast RPF of the RTM |
| Context | configure service vprn <i>string isis number multicast-import</i> ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload

| | |
|------------|---|
| Synopsis | Enable the overload context |
| Context | configure service vprn string isis number overload |
| Tree | overload |
| Introduced | 16.0.R1 |
| Platforms | All |

max-metric *boolean*

| | |
|------------|--|
| Synopsis | Advertise transit links with maximum metric instead of setting overload bit |
| Context | configure service vprn string isis number overload max-metric boolean |
| Tree | max-metric |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-export-external *boolean*

| | |
|------------|---|
| Synopsis | Advertise the external routes when router is in overloaded |
| Context | configure service vprn string isis number overload-export-external boolean |
| Tree | overload-export-external |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-export-interlevel *boolean*

| | |
|------------|---|
| Synopsis | Advertise the inter-level routes when router is overloaded |
| Context | configure service vprn string isis number overload-export-interlevel boolean |
| Tree | overload-export-interlevel |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-on-boot

| | |
|------------|---|
| Synopsis | Enable the overload-on-boot context |
| Context | configure service vprn string isis number overload-on-boot |
| Tree | overload-on-boot |
| Introduced | 16.0.R1 |
| Platforms | All |

max-metric *boolean*

| | |
|------------|--|
| Synopsis | Advertise transit links with maximum metric instead of setting overload bit |
| Context | configure service vprn string isis number overload-on-boot max-metric boolean |
| Tree | max-metric |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|--|
| Synopsis | Time during which the router operates in overload state after reboot |
| Context | configure service vprn string isis number overload-on-boot timeout number |
| Tree | timeout |
| Range | 60 to 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

poi-tlv *boolean*

| | |
|------------|--|
| Synopsis | Purge Originator Identification TLV |
| Context | configure service vprn string isis number poi-tlv boolean |
| Tree | poi-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-attributes-tlv *boolean*

| | |
|------------|---|
| Synopsis | Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information |
| Context | configure service vprn <i>string</i> isis <i>number</i> prefix-attributes-tlv <i>boolean</i> |
| Tree | prefix-attributes-tlv |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-limit

| | |
|------------|---|
| Synopsis | Enable the prefix-limit context |
| Context | configure service vprn <i>string</i> isis <i>number</i> prefix-limit |
| Tree | prefix-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

limit *number*

| | |
|------------|---|
| Synopsis | Maximum number of prefixes for IS-IS instance |
| Context | configure service vprn <i>string</i> isis <i>number</i> prefix-limit limit <i>number</i> |
| Tree | limit |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|------------|---|
| Synopsis | Send warning message when the prefix limit is reached |
| Context | configure service vprn <i>string</i> isis <i>number</i> prefix-limit log-only <i>boolean</i> |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |

Platforms All

overload-timeout (*number* | *keyword*)

Synopsis Time router remains in overload after prefix limit is exceeded before restarting

Context **configure service vprn** *string isis number prefix-limit overload-timeout* (*number* | *keyword*)

Tree [overload-timeout](#)

Range 1 to 1800

Default forever

Units seconds

Options forever

Introduced 16.0.R1

Platforms All

warning-threshold *number*

Synopsis Threshold value to trigger a warning message to be sent

Context **configure service vprn** *string isis number prefix-limit warning-threshold* *number*

Tree [warning-threshold](#)

Range 0 to 100

Default 0

Units percent

Introduced 16.0.R1

Platforms All

psnp-authentication *boolean*

Synopsis Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type

Context **configure service vprn** *string isis number psnp-authentication* *boolean*

Tree [psnp-authentication](#)

Default true

Introduced 16.0.R1

Platforms All

reference-bandwidth *number*

| | |
|------------|--|
| Synopsis | Reference bandwidth for bandwidth relative costing |
| Context | configure service vprn <i>string</i> isis <i>number</i> reference-bandwidth <i>number</i> |
| Tree | reference-bandwidth |
| Range | 1 to 18446744073709551615 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

rib-priority

| | |
|------------|---|
| Synopsis | Enter the rib-priority context |
| Context | configure service vprn <i>string</i> isis <i>number</i> rib-priority |
| Tree | rib-priority |
| Introduced | 16.0.R1 |
| Platforms | All |

high

| | |
|------------|--|
| Synopsis | Enter the high context |
| Context | configure service vprn <i>string</i> isis <i>number</i> rib-priority high |
| Tree | high |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-list *reference*

| | |
|------------|---|
| Synopsis | List used to select routes processed at higher priority through OSPF route calculation process |
| Context | configure service vprn <i>string</i> isis <i>number</i> rib-priority high prefix-list <i>reference</i> |
| Tree | prefix-list |
| Reference | configure policy-options prefix-list <i>string</i> |
| Notes | The following elements are part of a choice: prefix-list or tag . |
| Introduced | 16.0.R1 |

Platforms All

tag *number*

Synopsis Tag value that is used to match IS-IS routes

Context **configure** *service vprn string isis number rib-priority high tag number*

Tree [tag](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **prefix-list** or **tag**.

Introduced 16.0.R1

Platforms All

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Unique router ID for the ISIS instance

Context **configure** *service vprn string isis number router-id string*

Tree [router-id](#)

Introduced 16.0.R1

Platforms All

standard-multi-instance *boolean*

Synopsis Enable RFC standards compliant multi-instance behavior

Context **configure** *service vprn string isis number standard-multi-instance boolean*

Tree [standard-multi-instance](#)

Default false

Introduced 16.0.R1

Platforms All

strict-adjacency-check *boolean*

Synopsis Enable strict checking of address families for IS-IS adjacencies

| | |
|------------|--|
| Context | configure service vprn <i>string isis number strict-adjacency-check boolean</i> |
| Tree | strict-adjacency-check |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

summary-address [[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Enter the summary-address list instance |
| Context | configure service vprn <i>string isis number summary-address (ipv4-prefix ipv6-prefix)</i> |
| Tree | summary-address |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix | ipv6-prefix*)

| | |
|------------|---|
| Synopsis | IP prefix for the summary address |
| Context | configure service vprn <i>string isis number summary-address (ipv4-prefix ipv6-prefix)</i> |
| Tree | summary-address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

level-capability *keyword*

| | |
|------------|--|
| Synopsis | IS-IS level for the summary address |
| Context | configure service vprn <i>string isis number summary-address (ipv4-prefix ipv6-prefix) level-capability keyword</i> |
| Tree | level-capability |
| Default | 1/2 |
| Options | 1, 2, 1/2 |
| Introduced | 16.0.R1 |
| Platforms | All |

route-tag *number*

| | |
|------------|--|
| Synopsis | Route tag assigned to the summary address |
| Context | configure service vprn <i>string isis number summary-address (ipv4-prefix ipv6-prefix)</i>
route-tag <i>number</i> |
| Tree | route-tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

suppress-attached-bit *boolean*

| | |
|------------|--|
| Synopsis | Allow IS-IS to suppress setting attached bit on LSPs |
| Context | configure service vprn <i>string isis number suppress-attached-bit boolean</i> |
| Tree | suppress-attached-bit |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

system-id *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

| | |
|---------------|---|
| Synopsis | System ID |
| Context | configure service vprn <i>string isis number system-id string</i> |
| Tree | system-id |
| String Length | 14 |
| Default | 0000.0000.0000 |
| Introduced | 16.0.R1 |
| Platforms | All |

timers

| | |
|------------|---|
| Synopsis | Enter the timers context |
| Context | configure service vprn string isis number timers |
| Tree | timers |
| Introduced | 16.0.R1 |
| Platforms | All |

Isp-wait

| | |
|------------|--|
| Synopsis | Enter the Isp-wait context |
| Context | configure service vprn string isis number timers Isp-wait |
| Tree | Isp-wait |
| Introduced | 16.0.R1 |
| Platforms | All |

Isp-initial-wait *number*

| | |
|------------|---|
| Synopsis | Initial LSP generation delay |
| Context | configure service vprn string isis number timers Isp-wait Isp-initial-wait <i>number</i> |
| Tree | Isp-initial-wait |
| Range | 10 to 100000 |
| Default | 10 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

Isp-max-wait *number*

| | |
|------------|---|
| Synopsis | Maximum time between two consecutive LSP occurrences |
| Context | configure service vprn string isis number timers Isp-wait Isp-max-wait <i>number</i> |
| Tree | Isp-max-wait |
| Range | 10 to 120000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |

Platforms All

lsp-second-wait *number*

Synopsis Delay between first and second LSP generation

Context **configure** [service vprn](#) *string* [isis](#) *number* [timers](#) [lsp-wait](#) [lsp-second-wait](#) *number*

Tree [lsp-second-wait](#)

Range 10 to 100000

Default 1000

Units milliseconds

Introduced 16.0.R1

Platforms All

spf-wait

Synopsis Enter the **spf-wait** context

Context **configure** [service vprn](#) *string* [isis](#) *number* [timers](#) [spf-wait](#)

Tree [spf-wait](#)

Introduced 16.0.R1

Platforms All

spf-initial-wait *number*

Synopsis Initial SPF calculation delay after topology change

Context **configure** [service vprn](#) *string* [isis](#) *number* [timers](#) [spf-wait](#) [spf-initial-wait](#) *number*

Tree [spf-initial-wait](#)

Range 10 to 100000

Default 1000

Units milliseconds

Introduced 16.0.R1

Platforms All

spf-max-wait *number*

Synopsis Maximum interval amid two consecutive SPF calculations

| | |
|------------|---|
| Context | configure service vprn <i>string isis number timers spf-wait spf-max-wait number</i> |
| Tree | spf-max-wait |
| Range | 10 to 120000 |
| Default | 10000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-second-wait *number*

| | |
|------------|--|
| Synopsis | Hold time between first and second SPF calculations |
| Context | configure service vprn <i>string isis number timers spf-wait spf-second-wait number</i> |
| Tree | spf-second-wait |
| Range | 10 to 100000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

unicast-import

| | |
|------------|--|
| Synopsis | Enter the unicast-import context |
| Context | configure service vprn <i>string isis number unicast-import</i> |
| Tree | unicast-import |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Submit IPv4 routes into unicast RTM |
| Context | configure service vprn <i>string isis number unicast-import ipv4 boolean</i> |
| Tree | ipv4 |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 *boolean*

| | |
|------------|---|
| Synopsis | Submit IPv6 routes into unicast RTM |
| Context | configure service vprn <i>string isis number unicast-import ipv6 boolean</i> |
| Tree | ipv6 |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

l2tp

| | |
|------------|---|
| Synopsis | Enable the l2tp context |
| Context | configure service vprn <i>string l2tp</i> |
| Tree | l2tp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of L2TP |
| Context | configure service vprn <i>string l2tp admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

avp-hiding *keyword*

| | |
|------------|---|
| Synopsis | Attribute of the Value Pair (AVP) hiding algorithm |
| Context | configure service vprn <i>string l2tp avp-hiding keyword</i> |
| Tree | avp-hiding |
| Options | sensitive, always |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

challenge *boolean*

| | |
|------------|---|
| Synopsis | Use challenge-response authentication |
| Context | configure service vprn <i>string</i> l2tp challenge <i>boolean</i> |
| Tree | challenge |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destruct-timeout *number*

| | |
|------------|---|
| Synopsis | Destruction timeout |
| Context | configure service vprn <i>string</i> l2tp destruct-timeout <i>number</i> |
| Tree | destruct-timeout |
| Range | 60 to 86400 |
| Default | 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ethernet-tunnel

| | |
|------------|--|
| Synopsis | Enter the ethernet-tunnel context |
| Context | configure service vprn <i>string</i> l2tp ethernet-tunnel |
| Tree | ethernet-tunnel |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reconnect-timeout (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Timeout for a session setup retry |
| Context | configure service vprn <i>string</i> l2tp ethernet-tunnel reconnect-timeout (<i>number</i> <i>keyword</i>) |
| Tree | reconnect-timeout |
| Range | 10 to 3600 |
| Default | infinite |

| | |
|------------|---|
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

exclude-avps

| | |
|------------|---|
| Synopsis | Enter the exclude-avps context |
| Context | configure service vprn string l2tp exclude-avps |
| Tree | exclude-avps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

calling-number *boolean*

| | |
|------------|--|
| Synopsis | Calling Number AVP to exclude |
| Context | configure service vprn string l2tp exclude-avps calling-number <i>boolean</i> |
| Tree | calling-number |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

initial-rx-lcp-conf-req *boolean*

| | |
|------------|---|
| Synopsis | Exclude the Initial Received LCP CONFREQ AVP |
| Context | configure service vprn string l2tp exclude-avps initial-rx-lcp-conf-req <i>boolean</i> |
| Tree | initial-rx-lcp-conf-req |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover

| | |
|----------|--|
| Synopsis | Enter the failover context |
| Context | configure service vprn string l2tp failover |

| | |
|------------|---|
| Tree | failover |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

recovery-max-session-lifetime *number*

| | |
|------------|---|
| Synopsis | Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase |
| Context | configure service vprn <i>string</i> l2tp failover recovery-max-session-lifetime <i>number</i> |
| Tree | recovery-max-session-lifetime |
| Range | 2 to 4294967295 |
| Default | 2 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

recovery-method *keyword*

| | |
|------------|--|
| Synopsis | Recovery method of the sequence numbers after failover |
| Context | configure service vprn <i>string</i> l2tp failover recovery-method <i>keyword</i> |
| Tree | recovery-method |
| Default | mcs |
| Options | mcs, recovery-tunnel |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

recovery-time *number*

| | |
|------------|---|
| Synopsis | Time requested from the L2TP peer before assuming failover as failed |
| Context | configure service vprn <i>string</i> l2tp failover recovery-time <i>number</i> |
| Tree | recovery-time |
| Range | 0 to 900 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-srrp [*id*] *reference*

Synopsis Enter the **track-srrp** list instance

Context **configure** [service vprn](#) *string* [l2tp failover track-srrp](#) *reference*

Tree [track-srrp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis SRRP instance ID for multi-chassis redundancy failover

Context **configure** [service vprn](#) *string* [l2tp failover track-srrp](#) *reference*

Tree [track-srrp](#)

Reference **configure** [redundancy multi-chassis peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [sync track-srrp](#) *number*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *reference*

Synopsis Multi-chassis peer address

Context **configure** [service vprn](#) *string* [l2tp failover track-srrp](#) *reference* [peer](#) *reference*

Tree [peer](#)

Reference **configure** [redundancy multi-chassis peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sync-tag *string*

Synopsis Synchronization tag on the multi-chassis peer

| | |
|---------------|---|
| Context | configure service vpn <i>string</i> l2tp failover track-srrp <i>reference</i> sync-tag <i>string</i> |
| Tree | sync-tag |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group [**tunnel-group-name**] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[tunnel-group-name] *string*

| | |
|---------------|--|
| Synopsis | Tunnel group name |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> |
| Tree | group |
| String Length | 1 to 63 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the L2TP tunnel group |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

avp-hiding *keyword*

| | |
|------------|--|
| Synopsis | The AVP hiding algorithm |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> avp-hiding <i>keyword</i> |
| Tree | avp-hiding |
| Options | never, sensitive, always |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

challenge *keyword*

| | |
|------------|---|
| Synopsis | Enable use of challenge-response authentication |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> challenge <i>keyword</i> |
| Tree | challenge |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destruct-timeout *number*

| | |
|------------|---|
| Synopsis | Destruction timeout |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> destruct-timeout <i>number</i> |
| Tree | destruct-timeout |
| Range | 60 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ethernet-tunnel

Synopsis Enter the **ethernet-tunnel** context

Context **configure service vprn string l2tp group string ethernet-tunnel**

Tree [ethernet-tunnel](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reconnect-timeout (*number | keyword*)

Synopsis Timeout for a session setup retry at group level

Context **configure service vprn string l2tp group string ethernet-tunnel reconnect-timeout (*number | keyword*)**

Tree [reconnect-timeout](#)

Range 10 to 3600

Units seconds

Options infinite

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover

Synopsis Enter the **failover** context

Context **configure service vprn string l2tp group string failover**

Tree [failover](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

recovery-method *keyword*

Synopsis Recovery method of the sequence numbers after failover

Context **configure service vprn string l2tp group string failover recovery-method *keyword***

Tree [recovery-method](#)

Options mcs, recovery-tunnel

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

recovery-time *number*

| | |
|------------|---|
| Synopsis | Time requested from the L2TP peer before assuming failover as failed |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> failover recovery-time <i>number</i> |
| Tree | recovery-time |
| Range | 0 to 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hello-interval (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Hello interval |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> hello-interval (<i>number</i> <i>keyword</i>) |
| Tree | hello-interval |
| Range | 10 to 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

idle-timeout (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Idle timeout |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>) |
| Tree | idle-timeout |
| Range | 0 to 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

I2tpv3

| | |
|------------|---|
| Synopsis | Enter the I2tpv3 context |
| Context | configure service vprn <i>string</i> I2tp group <i>string</i> I2tpv3 |
| Tree | I2tpv3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cookie-length (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Cookie field length |
| Context | configure service vprn <i>string</i> I2tp group <i>string</i> I2tpv3 cookie-length (<i>number</i> <i>keyword</i>) |
| Tree | cookie-length |
| Range | 4 8 |
| Options | disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

digest-type *keyword*

| | |
|------------|--|
| Synopsis | Hashing algorithm that calculates the message digest |
| Context | configure service vprn <i>string</i> I2tp group <i>string</i> I2tpv3 digest-type <i>keyword</i> |
| Tree | digest-type |
| Options | none, md5, sha1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nonce-length *number*

| | |
|------------|--|
| Synopsis | Length for the local L2TPv3 nonce (random number) |
| Context | configure service vprn <i>string</i> I2tp group <i>string</i> I2tpv3 nonce-length <i>number</i> |
| Tree | nonce-length |
| Range | 0 16 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

password *string*

| | |
|---------------|--|
| Synopsis | L2TPv3 password |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 password <i>string</i> |
| Tree | password |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

private-tcp-mss-adjust (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | TCP maximum segment size (MSS) on private network |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 private-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | private-tcp-mss-adjust |
| Range | 512 to 9000 |
| Units | octets |
| Options | disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

public-tcp-mss-adjust (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | TCP Maximum Segment Size (MSS) on public network |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | public-tcp-mss-adjust |
| Range | 512 to 9000 |
| Units | octets |
| Options | disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pw-cap-list

| | |
|----------|--------------------------------------|
| Synopsis | Enter the pw-cap-list context |
|----------|--------------------------------------|

| | |
|------------|--|
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list |
| Tree | pw-cap-list |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ethernet *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Advertise Ethernet pseudowire type |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list ethernet <i>boolean</i> |
| Tree | ethernet |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ethernet-vlan *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Advertise Ethernet VLAN pseudowire type |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> l2tpv3 pw-cap-list ethernet-vlan <i>boolean</i> |
| Tree | ethernet-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rem-router-id *string*

| | |
|----------|--|
| Synopsis | Filter on remote router ID |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> l2tpv3 rem-router-id <i>string</i> |
| Tree | rem-router-id |
| Default | 0.0.0.0 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-password-change *boolean*

Synopsis Enable tracking of password changes
 Context **configure** [service vprn](#) [string l2tp group](#) [string l2tpv3](#) **track-password-change** *boolean*
 Tree [track-password-change](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac

Synopsis Enter the **lac** context
 Context **configure** [service vprn](#) [string l2tp group](#) [string lac](#)
 Tree [lac](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

df-bit *keyword*

Synopsis DF (do not fragment) bit in data traffic transmitted as LAC
 Context **configure** [service vprn](#) [string l2tp group](#) [string lac](#) **df-bit** *keyword*
 Tree [df-bit](#)
 Options false, true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lns

Synopsis Enter the **lns** context
 Context **configure** [service vprn](#) [string l2tp group](#) [string lns](#)
 Tree [lns](#)
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

Ins-group *reference*

Synopsis ISA LNS group
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [Ins](#) [Ins-group](#) *reference*
 Tree [Ins-group](#)
 Reference **configure** [isa](#) [Ins-group](#) *number*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

load-balance-method *keyword*

Synopsis New sessions for L2TP ISA MDA
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [Ins](#) [load-balance-method](#) *keyword*
 Tree [load-balance-method](#)
 Default per-session
 Options per-session, per-tunnel
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mlppp

Synopsis Enter the **mlppp** context
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [Ins](#) [mlppp](#)
 Tree [mlppp](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

admin-state *keyword*

Synopsis Administrative state of MLPPP in the L2TP tunnel group
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [Ins](#) [mlppp](#) [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable

| | |
|------------|---|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

endpoint

| | |
|------------|---|
| Synopsis | Enter the endpoint context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp endpoint |
| Tree | endpoint |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

ip (*ipv4-address* | *keyword*)

| | |
|------------|---|
| Synopsis | Endpoint ID as an IP address |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>) |
| Tree | ip |
| Options | system |
| Notes | The following elements are part of a choice: ip or mac . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

mac (*mac-address* | *keyword*)

| | |
|------------|---|
| Synopsis | Endpoint ID as a MAC address |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>) |
| Tree | mac |
| Options | system |
| Notes | The following elements are part of a choice: ip or mac . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

interleave *boolean*

| | |
|------------|---|
| Synopsis | Enable link fragmentation and interleaving |
| Context | configure service vprn string l2tp group string lns mlppp interleave <i>boolean</i> |
| Tree | interleave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

max-fragment-delay (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum fragment delay caused by transmission on a link |
| Context | configure service vprn string l2tp group string lns mlppp max-fragment-delay (<i>number</i> <i>keyword</i>) |
| Tree | max-fragment-delay |
| Range | 5 to 1000 |
| Default | no-fragmentation |
| Units | milliseconds |
| Options | no-fragmentation |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

max-links *number*

| | |
|------------|---|
| Synopsis | Maximum MLPPP links |
| Context | configure service vprn string l2tp group string lns mlppp max-links <i>number</i> |
| Tree | max-links |
| Range | 1 to 8 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

reassemble-timeout *number*

| | |
|----------|--|
| Synopsis | Reassembly timeout |
| Context | configure service vprn string l2tp group string lns mlppp reassemble-timeout <i>number</i> |

| | |
|------------|---|
| Tree | reassembly-timeout |
| Range | 100 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

short-sequence-numbers *boolean*

| | |
|------------|---|
| Synopsis | Request a peer to send short sequence numbers |
| Context | configure service vprn string l2tp group string lns mlppp short-sequence-numbers boolean |
| Tree | short-sequence-numbers |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

ppp

| | |
|------------|--|
| Synopsis | Enter the ppp context |
| Context | configure service vprn string l2tp group string lns ppp |
| Tree | ppp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication *keyword*

| | |
|------------|---|
| Synopsis | PPP authentication protocol to negotiate |
| Context | configure service vprn string l2tp group string lns ppp authentication keyword |
| Tree | authentication |
| Default | pref-chap |
| Options | pap, chap, pref-chap, pref-pap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication-policy *string*

| | |
|---------------|---|
| Synopsis | Authentication policy when a DHCP message is received |
| Context | configure service vprn string l2tp group string lns ppp authentication-policy string |
| Tree | authentication-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

chap-challenge-length

| | |
|------------|--|
| Synopsis | Enter the chap-challenge-length context |
| Context | configure service vprn string l2tp group string lns ppp chap-challenge-length |
| Tree | chap-challenge-length |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

end *number*

| | |
|------------|---|
| Synopsis | Upper bound of the PPP CHAP challenge length |
| Context | configure service vprn string l2tp group string lns ppp chap-challenge-length end number |
| Tree | end |
| Range | 8 to 64 |
| Default | 64 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

start *number*

| | |
|----------|---|
| Synopsis | Lower bound of the PPP CHAP challenge length |
| Context | configure service vprn string l2tp group string lns ppp chap-challenge-length start number |
| Tree | start |
| Range | 8 to 64 |

| | |
|------------|--|
| Default | 32 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-group-interface

| | |
|------------|--|
| Synopsis | Enter the default-group-interface context |
| Context | configure service vprn string l2tp group string lns ppp default-group-interface |
| Tree | default-group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interface *string*

| | |
|---------------|---|
| Synopsis | Group interface |
| Context | configure service vprn string l2tp group string lns ppp default-group-interface interface string |
| Tree | interface |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service-name *string*

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service vprn string l2tp group string lns ppp default-group-interface service-name string |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipcp-subnet-negotiation *boolean*

| | |
|----------|---|
| Synopsis | Allow IPCP subnet negotiation for PPPoE hosts |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp ipcp-subnet-negotiation <i>boolean</i> |
| Tree | ipcp-subnet-negotiation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

keepalive

| | |
|------------|--|
| Synopsis | Enter the keepalive context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp keepalive |
| Tree | keepalive |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | PPP keepalive interval |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp keepalive interval <i>number</i> |
| Tree | interval |
| Range | 10 to 300 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multiplier *number*

| | |
|------------|---|
| Synopsis | PPP keepalive multiplier |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp keepalive multiplier <i>number</i> |
| Tree | multiplier |
| Range | 1 to 5 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lcp-force-ack-accm *boolean*

| | |
|------------|--|
| Synopsis | Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp lcp-force-ack-accm <i>boolean</i> |
| Tree | lcp-force-ack-accm |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lcp-ignore-magic-numbers *boolean*

| | |
|------------|--|
| Synopsis | Check magic number in echo request and reply messages |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp lcp-ignore-magic-numbers <i>boolean</i> |
| Tree | lcp-ignore-magic-numbers |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mtu *number*

| | |
|------------|--|
| Synopsis | Maximum PPP MTU size |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp mtu <i>number</i> |
| Tree | mtu |
| Range | 512 to 9212 |
| Default | 1500 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

proxy-authentication *boolean*

| | |
|----------|--|
| Synopsis | Use authentication AVPs that are received from LAC |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp proxy-authentication <i>boolean</i> |
| Tree | proxy-authentication |

| | |
|------------|--|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

proxy-lcp *boolean*

| | |
|------------|---|
| Synopsis | Proxy LCP AVPs that are received from LAC |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp proxy-lcp <i>boolean</i> |
| Tree | proxy-lcp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reject-disabled-ncp *boolean*

| | |
|------------|---|
| Synopsis | Force LCP Protocol Reject for IPv6CP Configure Request |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp reject-disabled-ncp <i>boolean</i> |
| Tree | reject-disabled-ncp |
| Default | false |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

user-db *string*

| | |
|---------------|--|
| Synopsis | Local user database for PPP PAP and CHAP authentication |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> lns ppp user-db <i>string</i> |
| Tree | user-db |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-address *string*

| | |
|----------|--|
| Synopsis | Local address |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> local-address <i>string</i> |

Tree [local-address](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis Local host name used to distinguish tunnels
 Context **configure** [service vpn](#) *string* [l2tp group](#) *string* [local-name](#) *string*
 Tree [local-name](#)
 String Length 1 to 64
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis Maximum retries for established tunnels
 Context **configure** [service vpn](#) *string* [l2tp group](#) *string* [max-retries-estab](#) *number*
 Tree [max-retries-estab](#)
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
 Context **configure** [service vpn](#) *string* [l2tp group](#) *string* [max-retries-not-estab](#) *number*
 Tree [max-retries-not-estab](#)
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS
 Context **configure** [service vpn](#) *string* [l2tp group](#) *string* [password](#) *string*

| | |
|---------------|---|
| Tree | password |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

protocol *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Protocol version |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> protocol <i>keyword</i> |
| Tree | protocol |
| Default | v2 |
| Options | v2, v3, v3draft |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-accounting-policy *reference*

| | |
|------------|--|
| Synopsis | RADIUS accounting policy |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> radius-accounting-policy <i>reference</i> |
| Tree | radius-accounting-policy |
| Reference | configure aaa radius l2tp-accounting-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

receive-window-size *number*

| | |
|------------|--|
| Synopsis | L2TP receive window size |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> receive-window-size <i>number</i> |
| Tree | receive-window-size |
| Range | 4 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-assign-method *keyword*

| | |
|------------|---|
| Synopsis | Session assignment method |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> session-assign-method <i>keyword</i> |
| Tree | session-assign-method |
| Options | existing-first, weighted, weighted-random |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Session limit |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> session-limit (<i>number</i> <i>keyword</i>) |
| Tree | session-limit |
| Range | 1 to 250000 |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tunnel [[tunnel-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the tunnel list instance |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> |
| Tree | tunnel |
| Max. Instances | 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[tunnel-name] *string*

| | |
|---------------|---|
| Synopsis | Tunnel name |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> |
| Tree | tunnel |
| String Length | 1 to 32 |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the L2TP tunnel |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-establish *boolean*

| | |
|------------|---|
| Synopsis | Allow the tunnel to be automatically set up by the system |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> auto-establish <i>boolean</i> |
| Tree | auto-establish |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

avp-hiding *keyword*

| | |
|------------|---|
| Synopsis | The AVP hiding algorithm |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> avp-hiding <i>keyword</i> |
| Tree | avp-hiding |
| Options | never, sensitive, always |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

challenge *keyword*

| | |
|----------|---|
| Synopsis | Enable use of challenge-response authentication |
|----------|---|

| | |
|------------|--|
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> challenge <i>keyword</i> |
| Tree | challenge |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destruct-timeout *number*

| | |
|------------|--|
| Synopsis | Destruction timeout |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> destruct-timeout <i>number</i> |
| Tree | destruct-timeout |
| Range | 60 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover

| | |
|------------|--|
| Synopsis | Enter the failover context |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover |
| Tree | failover |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

recovery-method *keyword*

| | |
|------------|---|
| Synopsis | Recovery method of the sequence numbers after failover |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover recovery-method <i>keyword</i> |
| Tree | recovery-method |
| Options | mcs, recovery-tunnel |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

recovery-time *number*

| | |
|------------|--|
| Synopsis | Time requested from the L2TP peer before assuming failover as failed |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> failover recovery-time <i>number</i> |
| Tree | recovery-time |
| Range | 0 to 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hello-interval (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Hello interval |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> hello-interval (<i>number</i> <i>keyword</i>) |
| Tree | hello-interval |
| Range | 10 to 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

idle-timeout (*number* | *keyword*)

| | |
|----------|--------------|
| Synopsis | Idle timeout |
|----------|--------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> idle-timeout (<i>number</i> <i>keyword</i>) |
| Tree | idle-timeout |
| Range | 0 to 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

l2tpv3

| | |
|------------|---|
| Synopsis | Enter the l2tpv3 context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> l2tpv3 |
| Tree | l2tpv3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

private-tcp-mss-adjust (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | TCP maximum segment size (MSS) on private network |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> l2tpv3 private-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | private-tcp-mss-adjust |
| Range | 512 to 9000 |
| Units | octets |
| Options | disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

public-tcp-mss-adjust (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | TCP maximum segment size (MSS) on public network |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> l2tpv3 public-tcp-mss-adjust (<i>number</i> <i>keyword</i>) |
| Tree | public-tcp-mss-adjust |
| Range | 512 to 9000 |

| | |
|------------|---|
| Units | octets |
| Options | disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lac

| | |
|------------|---|
| Synopsis | Enter the lac context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lac |
| Tree | lac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

df-bit *keyword*

| | |
|------------|--|
| Synopsis | DF (do not fragment) bit in data traffic transmitted as LAC |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lac df-bit <i>keyword</i> |
| Tree | df-bit |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lns

| | |
|------------|---|
| Synopsis | Enter the lns context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns |
| Tree | lns |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lns-group *reference*

| | |
|----------|---|
| Synopsis | ISA LNS group |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns lns-group <i>reference</i> |
| Tree | lns-group |

| | |
|------------|--|
| Reference | configure isa lns-group <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

load-balance-method *keyword*

| | |
|------------|--|
| Synopsis | New sessions for L2TP ISA MDA |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns load-balance-method <i>keyword</i> |
| Tree | load-balance-method |
| Options | per-session, per-tunnel |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mlppp

| | |
|------------|---|
| Synopsis | Enter the mlppp context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp |
| Tree | mlppp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of MLPPP in the L2TP tunnel |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

endpoint

| | |
|----------|--|
| Synopsis | Enter the endpoint context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint |

| | |
|------------|---|
| Tree | endpoint |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

ip (*ipv4-address* | *keyword*)

| | |
|------------|---|
| Synopsis | Endpoint ID as an IP address |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>) |
| Tree | ip |
| Options | system |
| Notes | The following elements are part of a choice: ip or mac . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

mac (*mac-address* | *keyword*)

| | |
|------------|---|
| Synopsis | Endpoint ID as a MAC address |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>) |
| Tree | mac |
| Options | system |
| Notes | The following elements are part of a choice: ip or mac . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

interleave *keyword*

| | |
|------------|--|
| Synopsis | Use of Link fragmentation and interleaving |
| Context | configure service vpn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp interleave <i>keyword</i> |
| Tree | interleave |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

max-fragment-delay *number*

| | |
|------------|--|
| Synopsis | Maximum fragment delay caused by transmission on a link |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp max-fragment-delay <i>number</i> |
| Tree | max-fragment-delay |
| Range | 5 to 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

max-links *number*

| | |
|------------|---|
| Synopsis | Maximum MLPPP links |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp max-links <i>number</i> |
| Tree | max-links |
| Range | 1 to 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

reassemble-timeout *number*

| | |
|------------|--|
| Synopsis | Reassembly timeout |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp reassemble-timeout <i>number</i> |
| Tree | reassemble-timeout |
| Range | 100 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

short-sequence-numbers *keyword*

| | |
|----------|---|
| Synopsis | Request a peer to send short sequence numbers |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns mlppp short-sequence-numbers <i>keyword</i> |

| | |
|------------|---|
| Tree | short-sequence-numbers |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s |

ppp

| | |
|------------|---|
| Synopsis | Enter the ppp context |
| Context | configure service vprn string l2tp group string tunnel string lns ppp |
| Tree | ppp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication *keyword*

| | |
|------------|---|
| Synopsis | PPP authentication protocol to negotiate |
| Context | configure service vprn string l2tp group string tunnel string lns ppp authentication <i>keyword</i> |
| Tree | authentication |
| Options | pap, chap, pref-chap, pref-pap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication-policy *string*

| | |
|---------------|---|
| Synopsis | Authentication policy when a DHCP message is received |
| Context | configure service vprn string l2tp group string tunnel string lns ppp authentication-policy <i>string</i> |
| Tree | authentication-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

chap-challenge-length

| | |
|----------|--|
| Synopsis | Enter the chap-challenge-length context |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length |
| Tree | chap-challenge-length |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the PPP CHAP challenge length |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length end <i>number</i> |
| Tree | end |
| Range | 8 to 64 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the PPP CHAP challenge length |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp chap-challenge-length start <i>number</i> |
| Tree | start |
| Range | 8 to 64 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-group-interface

| | |
|------------|--|
| Synopsis | Enter the default-group-interface context |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp default-group-interface |
| Tree | default-group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interface string

| | |
|---------------|---|
| Synopsis | Group interface |
| Context | configure service vprn string l2tp group string tunnel string lns ppp default-group-interface interface string |
| Tree | interface |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service-name string

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure service vprn string l2tp group string tunnel string lns ppp default-group-interface service-name string |
| Tree | service-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipcp-subnet-negotiation keyword

| | |
|------------|--|
| Synopsis | Use of IPCP subnet negotiation for PPPoE hosts |
| Context | configure service vprn string l2tp group string tunnel string lns ppp ipcp-subnet-negotiation keyword |
| Tree | ipcp-subnet-negotiation |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

keepalive

| | |
|------------|--|
| Synopsis | Enter the keepalive context |
| Context | configure service vprn string l2tp group string tunnel string lns ppp keepalive |
| Tree | keepalive |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interval *number*

Synopsis PPP keepalive interval

Context **configure** *service vprn string l2tp group string tunnel string lns ppp keepalive interval number*

Tree [interval](#)

Range 10 to 300

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multiplier *number*

Synopsis PPP keepalive multiplier

Context **configure** *service vprn string l2tp group string tunnel string lns ppp keepalive multiplier number*

Tree [multiplier](#)

Range 1 to 5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-force-ack-accm *keyword*

Synopsis Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option

Context **configure** *service vprn string l2tp group string tunnel string lns ppp lcp-force-ack-accm keyword*

Tree [lcp-force-ack-accm](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lcp-ignore-magic-numbers *keyword*

| | |
|------------|--|
| Synopsis | Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp lcp-ignore-magic-numbers <i>keyword</i> |
| Tree | lcp-ignore-magic-numbers |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mtu *number*

| | |
|------------|--|
| Synopsis | Maximum PPP MTU size |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp mtu <i>number</i> |
| Tree | mtu |
| Range | 512 to 9212 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

proxy-authentication *keyword*

| | |
|------------|--|
| Synopsis | Authentication AVPs that are received from LAC |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp proxy-authentication <i>keyword</i> |
| Tree | proxy-authentication |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

proxy-lcp *keyword*

| | |
|----------|---|
| Synopsis | Use the Proxy LCP AVPs that are received from the LAC |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> lns ppp proxy-lcp <i>keyword</i> |
| Tree | proxy-lcp |
| Options | false, true |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

reject-disabled-ncp *keyword*

Synopsis Force LCP Project Reject for IPv6CP Configure Request
 Context **configure** [service](#) [vprn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) **reject-disabled-ncp** *keyword*
 Tree [reject-disabled-ncp](#)
 Options false, true
 Introduced 16.0.R6
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis Local user database for PPP PAP and CHAP authentication
 Context **configure** [service](#) [vprn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) **user-db** *string*
 Tree [user-db](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address *string*

Synopsis Local address
 Context **configure** [service](#) [vprn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* **local-address** *string*
 Tree [local-address](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-name *string*

Synopsis Local host name used to distinguish tunnels
 Context **configure** [service](#) [vprn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* **local-name** *string*
 Tree [local-name](#)
 String Length 1 to 64

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-estab *number*

Synopsis Maximum retries for established tunnels
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [max-retries-estab](#) *number*
 Tree [max-retries-estab](#)
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-retries-not-estab *number*

Synopsis Maximum retries for unestablished tunnels
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [max-retries-not-estab](#) *number*
 Tree [max-retries-not-estab](#)
 Range 2 to 7
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis Password between L2TP LAC and LNS
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [password](#) *string*
 Tree [password](#)
 String Length 1 to 115
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer *string*

Synopsis Peer address
 Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* [peer](#) *string*
 Tree [peer](#)

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference *number*

Synopsis Tunnel preference number with its group
 Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [preference](#) *number*
 Tree [preference](#)
 Range 0 to 16777215
 Default 50
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis RADIUS accounting policy
 Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [radius-accounting-policy](#) *reference*
 Tree [radius-accounting-policy](#)
 Reference **configure** [aaa](#) [radius](#) [l2tp-accounting-policy](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis L2TP receive window size
 Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [receive-window-size](#) *number*
 Tree [receive-window-size](#)
 Range 4 to 1024
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-name *string*

Synopsis Remote tunnel host name

| | |
|---------------|--|
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> remote-name <i>string</i> |
| Tree | remote-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | L2TP session limit for each tunnel of this router |
| Context | configure service vprn <i>string</i> l2tp group <i>string</i> tunnel <i>string</i> session-limit (<i>number</i> <i>keyword</i>) |
| Tree | session-limit |
| Range | 1 to 65534 |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-session-limit *number*

| | |
|------------|---|
| Synopsis | L2TP session limit for each group of this router |
| Context | configure service vprn <i>string</i> l2tp group-session-limit <i>number</i> |
| Tree | group-session-limit |
| Range | 1 to 250000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hello-interval (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Hello interval |
| Context | configure service vprn <i>string</i> l2tp hello-interval (<i>number</i> <i>keyword</i>) |
| Tree | hello-interval |
| Range | 10 to 3600 |
| Default | 300 |
| Units | seconds |
| Options | infinite |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

idle-timeout (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Idle timeout |
| Context | configure service vprn <i>string</i> l2tp idle-timeout (<i>number</i> <i>keyword</i>) |
| Tree | idle-timeout |
| Range | 0 to 3600 |
| Default | infinite |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-avps

| | |
|------------|---|
| Synopsis | Enter the ignore-avps context |
| Context | configure service vprn <i>string</i> l2tp ignore-avps |
| Tree | ignore-avps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sequencing-required *boolean*

| | |
|------------|--|
| Synopsis | Ignore Sequencing Required AVP |
| Context | configure service vprn <i>string</i> l2tp ignore-avps sequencing-required <i>boolean</i> |
| Tree | sequencing-required |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

l2tpv3

| | |
|----------|---------------------------------|
| Synopsis | Enter the l2tpv3 context |
|----------|---------------------------------|

| | |
|------------|---|
| Context | configure service vprn string l2tp l2tpv3 |
| Tree | l2tpv3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cookie-length *number*

| | |
|------------|---|
| Synopsis | Cookie field length |
| Context | configure service vprn string l2tp l2tpv3 cookie-length number |
| Tree | cookie-length |
| Range | 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

digest-type *keyword*

| | |
|------------|--|
| Synopsis | Hashing algorithm that calculates the message digest |
| Context | configure service vprn string l2tp l2tpv3 digest-type keyword |
| Tree | digest-type |
| Options | md5, sha1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nonce-length *number*

| | |
|------------|--|
| Synopsis | Length of the local L2TPv3 nonce (random number) |
| Context | configure service vprn string l2tp l2tpv3 nonce-length number |
| Tree | nonce-length |
| Range | 0 16 to 64 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

password *string*

| | |
|---------------|--|
| Synopsis | L2TPv3 password |
| Context | configure service vprn <i>string</i> l2tp l2tpv3 password <i>string</i> |
| Tree | password |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

private-tcp-mss-adjust *number*

| | |
|------------|--|
| Synopsis | TCP maximum segment size (MSS) on private network |
| Context | configure service vprn <i>string</i> l2tp l2tpv3 private-tcp-mss-adjust <i>number</i> |
| Tree | private-tcp-mss-adjust |
| Range | 512 to 9000 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

public-tcp-mss-adjust *number*

| | |
|------------|---|
| Synopsis | TCP maximum segment size (MSS) on public network |
| Context | configure service vprn <i>string</i> l2tp l2tpv3 public-tcp-mss-adjust <i>number</i> |
| Tree | public-tcp-mss-adjust |
| Range | 512 to 9000 |
| Units | octets |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transport-type

| | |
|------------|--|
| Synopsis | Enter the transport-type context |
| Context | configure service vprn <i>string</i> l2tp l2tpv3 transport-type |
| Tree | transport-type |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip *boolean*

| | |
|------------|---|
| Synopsis | Use IP as the transport type for the L2TPv3 tunnel |
| Context | configure service vprn <i>string</i> l2tp l2tpv3 transport-type ip <i>boolean</i> |
| Tree | ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lac

| | |
|------------|---|
| Synopsis | Enter the lac context |
| Context | configure service vprn <i>string</i> l2tp lac |
| Tree | lac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

calling-number-format *string*

| | |
|---------------|---|
| Synopsis | Calling Number AVP for L2TP control messages |
| Context | configure service vprn <i>string</i> l2tp lac calling-number-format <i>string</i> |
| Tree | calling-number-format |
| String Length | 1 to 255 |
| Default | %S %s |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cisco-nas-port

| | |
|------------|--|
| Synopsis | Enter the cisco-nas-port context |
| Context | configure service vprn <i>string</i> l2tp lac cisco-nas-port |
| Tree | cisco-nas-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ethernet string

| | |
|---------------|--|
| Synopsis | L2TP Cisco NAS port AVP with binary patterns for Ethernet |
| Context | configure service vprn string l2tp lac cisco-nas-port ethernet string |
| Tree | ethernet |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

df-bit boolean

| | |
|------------|--|
| Synopsis | Send all L2TP packets with DF bit set to 1 |
| Context | configure service vprn string l2tp lac df-bit boolean |
| Tree | df-bit |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-address string

| | |
|------------|--|
| Synopsis | Local address |
| Context | configure service vprn string l2tp local-address string |
| Tree | local-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-name string

| | |
|---------------|---|
| Synopsis | Local host name |
| Context | configure service vprn string l2tp local-name string |
| Tree | local-name |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-retries-estab *number*

| | |
|------------|---|
| Synopsis | Maximum retries for established tunnels |
| Context | configure service vprn <i>string</i> l2tp max-retries-estab <i>number</i> |
| Tree | max-retries-estab |
| Range | 2 to 7 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-retries-not-estab *number*

| | |
|------------|---|
| Synopsis | Maximum retries for unestablished tunnels |
| Context | configure service vprn <i>string</i> l2tp max-retries-not-estab <i>number</i> |
| Tree | max-retries-not-estab |
| Range | 2 to 7 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-attempt *keyword*

| | |
|------------|---|
| Synopsis | Tunnel that is selected when previous session setup failed |
| Context | configure service vprn <i>string</i> l2tp next-attempt <i>keyword</i> |
| Tree | next-attempt |
| Default | next-preference-level |
| Options | same-preference-level, next-preference-level |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

password *string*

| | |
|----------|--|
| Synopsis | L2TP password |
| Context | configure service vprn <i>string</i> l2tp password <i>string</i> |
| Tree | password |

String Length 1 to 115
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

peer-address-change-policy *keyword*

Synopsis Reaction for L2TP response from a different address
Context **configure service vprn string l2tp peer-address-change-policy keyword**
Tree [peer-address-change-policy](#)
Default reject
Options accept, ignore, reject
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-accounting-policy *reference*

Synopsis RADIUS accounting policy
Context **configure service vprn string l2tp radius-accounting-policy reference**
Tree [radius-accounting-policy](#)
Reference **configure aaa radius l2tp-accounting-policy string**
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive-window-size *number*

Synopsis L2TP receive window size
Context **configure service vprn string l2tp receive-window-size number**
Tree [receive-window-size](#)
Range 4 to 1024
Default 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

replace-result-code

| | |
|------------|---|
| Synopsis | Enter the replace-result-code context |
| Context | configure service vprn string l2tp replace-result-code |
| Tree | replace-result-code |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-invalid-dst *boolean*

| | |
|------------|--|
| Synopsis | Replace result code with general error code |
| Context | configure service vprn string l2tp replace-result-code cdn-invalid-dst <i>boolean</i> |
| Tree | cdn-invalid-dst |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-permanent-no-facilities *boolean*

| | |
|------------|--|
| Synopsis | Replace result code with general error |
| Context | configure service vprn string l2tp replace-result-code cdn-permanent-no-facilities <i>boolean</i> |
| Tree | cdn-permanent-no-facilities |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-temporary-no-facilities *boolean*

| | |
|------------|--|
| Synopsis | Replace result code with general error |
| Context | configure service vprn string l2tp replace-result-code cdn-temporary-no-facilities <i>boolean</i> |
| Tree | cdn-temporary-no-facilities |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rtm-debounce-time (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Debounce timer that declares L2TP action for route table management events |
| Context | configure service vprn <i>string</i> l2tp rtm-debounce-time (<i>number</i> <i>keyword</i>) |
| Tree | rtm-debounce-time |
| Range | 0 to 5000 |
| Default | infinite |
| Units | milliseconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-assign-method *keyword*

| | |
|------------|---|
| Synopsis | Session assignment method |
| Context | configure service vprn <i>string</i> l2tp session-assign-method <i>keyword</i> |
| Tree | session-assign-method |
| Default | existing-first |
| Options | existing-first, weighted, weighted-random |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limit *number*

| | |
|------------|--|
| Synopsis | L2TP session limit of this router |
| Context | configure service vprn <i>string</i> l2tp session-limit <i>number</i> |
| Tree | session-limit |
| Range | 1 to 250000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tunnel-selection-blacklist

| | |
|----------|---|
| Synopsis | Enter the tunnel-selection-blacklist context |
| Context | configure service vprn <i>string</i> l2tp tunnel-selection-blacklist |

| | |
|------------|---|
| Tree | tunnel-selection-blacklist |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

add-tunnel-on

| | |
|------------|--|
| Synopsis | Enter the add-tunnel-on context |
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on |
| Tree | add-tunnel-on |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address-change-timeout *boolean*

| | |
|------------|--|
| Synopsis | Enable a timed-out tunnel to be forced to the denylist |
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout <i>boolean</i> |
| Tree | address-change-timeout |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-err-code *boolean*

| | |
|------------|--|
| Synopsis | Add to deny if CDN is received with code: General error |
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code <i>boolean</i> |
| Tree | cdn-err-code |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-invalid-dst *boolean*

| | |
|----------|--|
| Synopsis | Force tunnel to the denylist in case of Result Codes 6 |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-invalid-dst boolean |
| Tree | cdn-invalid-dst |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-permanent-no-facilities boolean

| | |
|------------|--|
| Synopsis | Force tunnel to the denylist in case of Result Codes 5 |
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-permanent-no-facilities boolean |
| Tree | cdn-permanent-no-facilities |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cdn-temporary-no-facilities boolean

| | |
|------------|--|
| Synopsis | Force tunnel to the denylist in case of Result Codes 4 |
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities boolean |
| Tree | cdn-temporary-no-facilities |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stop-ccn-err-code boolean

| | |
|------------|--|
| Synopsis | Add to denylist if received with general error code |
| Context | configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code boolean |
| Tree | stop-ccn-err-code |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stop-ccn-other *boolean*

| | |
|------------|---|
| Synopsis | Add to denylist if StopCCN received with general error |
| Context | configure service vprn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other <i>boolean</i> |
| Tree | stop-ccn-other |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tx-cdn-not-established-in-time *boolean*

| | |
|------------|---|
| Synopsis | Add to denylist if CDN transmitted with result code |
| Context | configure service vprn <i>string</i> l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time <i>boolean</i> |
| Tree | tx-cdn-not-established-in-time |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-list-length (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Number of tunnels or peers in the denylist |
| Context | configure service vprn <i>string</i> l2tp tunnel-selection-blacklist max-list-length (<i>number</i> <i>keyword</i>) |
| Tree | max-list-length |
| Range | 1 to 65535 |
| Default | infinite |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-time *number*

| | |
|----------|--|
| Synopsis | Time that a tunnel or peer can remain in the denylist |
| Context | configure service vprn <i>string</i> l2tp tunnel-selection-blacklist max-time <i>number</i> |

| | |
|------------|---|
| Tree | max-time |
| Range | 1 to 60 |
| Default | 5 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout-action *keyword*

| | |
|------------|---|
| Synopsis | Action when a tunnel or peer exceeds time in denylist |
| Context | configure service vprn <i>string</i> l2tp tunnel-selection-blacklist timeout-action <i>keyword</i> |
| Tree | timeout-action |
| Default | remove-from-blacklist |
| Options | remove-from-blacklist, try-one-session |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tunnel-session-limit *number*

| | |
|------------|---|
| Synopsis | L2TP session limit for each tunnel of this router |
| Context | configure service vprn <i>string</i> l2tp tunnel-session-limit <i>number</i> |
| Tree | tunnel-session-limit |
| Range | 1 to 65534 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

label-mode *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Allocation mode for VPRN service labels |
| Context | configure service vprn <i>string</i> label-mode <i>keyword</i> |
| Tree | label-mode |
| Default | vrf |

| | |
|------------|---------------|
| Options | vrf, next-hop |
| Introduced | 16.0.R1 |
| Platforms | All |

local-routes-domain-id *string*

| | |
|-------------|--|
| Synopsis | Local routes domain ID |
| Context | configure service vprn <i>string</i> local-routes-domain-id <i>string</i> |
| Tree | local-routes-domain-id |
| Description | <p>This command specifies the domain ID that is used in the D-PATH attribute for local routes before those routes are exported to a BGP neighbor using BGP-IPVPN, EVPN-IFF, EVPN-IFL, or PE-CE BGP. A local route is a non-BGP route installed in the VPRN route table and learned using static route or an IGP.</p> <p>The domain IDs are used in the D-PATH attribute, in accordance with draft-ietf-bess-evpn-ipvpn-interworking. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN IFL and BGP IPVPN).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> |
| Introduced | 21.10.R1 |
| Platforms | All |

log

| | |
|------------|--|
| Synopsis | Enter the log context |
| Context | configure service vprn <i>string</i> log |
| Tree | log |
| Introduced | 16.0.R1 |
| Platforms | All |

filter [[filter-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the filter list instance |
| Context | configure service vprn <i>string</i> log filter <i>string</i> |
| Tree | filter |
| Max. Instances | 1500 |

Introduced 16.0.R1
Platforms All

[filter-name] *string*

Synopsis Filter ID
Context **configure** [service vprn](#) *string* [log filter](#) *string*
Tree [filter](#)
String Length 1 to 64
Notes This element is part of a list key.
Introduced 21.2.R1
Platforms All

default-action *keyword*

Synopsis Default action for the event filter
Context **configure** [service vprn](#) *string* [log filter](#) *string* [default-action](#) *keyword*
Tree [default-action](#)
Default forward
Options drop, forward
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** [service vprn](#) *string* [log filter](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms All

named-entry [[entry-name](#)] *string*

Synopsis Enter the **named-entry** list instance

| | |
|----------------|---|
| Context | configure service vprn string log filter string named-entry string |
| Tree | named-entry |
| Description | Commands in this context create or edit an event filter entry. |
| Max. Instances | 999 |
| Notes | This element is ordered by the user. |
| Introduced | 21.2.R1 |
| Platforms | All |

[entry-name] string

| | |
|---------------|---|
| Synopsis | Entry name |
| Context | configure service vprn string log filter string named-entry string |
| Tree | named-entry |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 21.2.R1 |
| Platforms | All |

action keyword

| | |
|------------|--|
| Synopsis | Action for this event filter entry |
| Context | configure service vprn string log filter string named-entry string action keyword |
| Tree | action |
| Options | drop, forward |
| Introduced | 21.2.R1 |
| Platforms | All |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string log filter string named-entry string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 21.2.R1 |

Platforms All

match

Synopsis Enter the **match** context

Context **configure service vprn string log filter string named-entry string match**

Tree **match**

Introduced 21.2.R1

Platforms All

application

Synopsis Enter the **application** context

Context **configure service vprn string log filter string named-entry string match application**

Tree **application**

Introduced 21.2.R1

Platforms All

eq keyword

Synopsis Application to match

Context **configure service vprn string log filter string named-entry string match application eq keyword**

Tree **eq**

Options application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsm, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.2.R1

Platforms All

neq keyword

| | |
|------------|---|
| Synopsis | Application to be filtered out |
| Context | configure service vprn string log filter string named-entry string match application neq keyword |
| Tree | neq |
| Options | application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec |
| Notes | The following elements are part of a choice: eq or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

event

| | |
|------------|---|
| Synopsis | Enter the event context |
| Context | configure service vprn string log filter string named-entry string match event |
| Tree | event |
| Introduced | 21.2.R1 |
| Platforms | All |

eq number

| | |
|------------|--|
| Synopsis | Log event message to match |
| Context | configure service vprn string log filter string named-entry string match event eq number |
| Tree | eq |
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

gt number

| | |
|------------|---|
| Synopsis | Number of the log event to match |
| Context | configure service vprn string log filter string named-entry string match event gt number |
| Tree | gt |
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

gte number

| | |
|------------|--|
| Synopsis | Number of the log event to match |
| Context | configure service vprn string log filter string named-entry string match event gte number |
| Tree | gte |
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

lt number

| | |
|------------|---|
| Synopsis | Number of the log event to match |
| Context | configure service vprn string log filter string named-entry string match event lt number |
| Tree | lt |
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

lte number

| | |
|----------|--|
| Synopsis | Number of the log event to match |
| Context | configure service vprn string log filter string named-entry string match event lte number |
| Tree | lte |

| | |
|------------|--|
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

neq *number*

| | |
|------------|--|
| Synopsis | Log event message to filter out |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match event neq <i>number</i> |
| Tree | neq |
| Range | 1 to 4294967295 |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

message

| | |
|------------|--|
| Synopsis | Enter the message context |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match message |
| Tree | message |
| Introduced | 21.2.R1 |
| Platforms | All |

eq *string*

| | |
|---------------|---|
| Synopsis | Log event message to match |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match message eq <i>string</i> |
| Tree | eq |
| String Length | 1 to 400 |
| Notes | The following elements are part of a choice: eq or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

neq string

| | |
|---------------|--|
| Synopsis | Log event message to be filtered out |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match message neq <i>string</i> |
| Tree | neq |
| String Length | 1 to 400 |
| Notes | The following elements are part of a choice: eq or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

regex boolean

| | |
|------------|---|
| Synopsis | String comparison to determine if the log event matches the value of pattern |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match message regex <i>boolean</i> |
| Tree | regex |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

severity

| | |
|------------|---|
| Synopsis | Enter the severity context |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity |
| Tree | severity |
| Introduced | 21.2.R1 |
| Platforms | All |

eq keyword

| | |
|----------|---|
| Synopsis | Log event severity level to match |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity eq <i>keyword</i> |
| Tree | eq |
| Options | cleared, indeterminate, critical, major, minor, warning |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |

Introduced 21.2.R1
Platforms All

gt keyword

Synopsis Log event severity level
Context **configure service vprn string log filter string named-entry string match severity gt keyword**
Tree [gt](#)
Options cleared, indeterminate, critical, major, minor, warning
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**
Introduced 21.2.R1
Platforms All

gte keyword

Synopsis Log event severity level
Context **configure service vprn string log filter string named-entry string match severity gte keyword**
Tree [gte](#)
Options cleared, indeterminate, critical, major, minor, warning
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**
Introduced 21.2.R1
Platforms All

lt keyword

Synopsis Log event severity level
Context **configure service vprn string log filter string named-entry string match severity lt keyword**
Tree [lt](#)
Options cleared, indeterminate, critical, major, minor, warning
Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**
Introduced 21.2.R1
Platforms All

Ite keyword

| | |
|------------|--|
| Synopsis | Log event severity level |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity lte <i>keyword</i> |
| Tree | lte |
| Options | cleared, indeterminate, critical, major, minor, warning |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

neq keyword

| | |
|------------|--|
| Synopsis | Log event severity level to filter out |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match severity neq <i>keyword</i> |
| Tree | neq |
| Options | cleared, indeterminate, critical, major, minor, warning |
| Notes | The following elements are part of a choice: eq , gt , gte , lt , lte , or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

subject

| | |
|------------|--|
| Synopsis | Enter the subject context |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match subject |
| Tree | subject |
| Introduced | 21.2.R1 |
| Platforms | All |

eq string

| | |
|----------|---|
| Synopsis | Log event subject string to match |
| Context | configure service vprn <i>string</i> log filter <i>string</i> named-entry <i>string</i> match subject eq <i>string</i> |
| Tree | eq |

| | |
|---------------|--|
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: eq or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

neq string

| | |
|---------------|--|
| Synopsis | Log event subject string to filter out |
| Context | configure service vprn string log filter string named-entry string match subject neq string |
| Tree | neq |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: eq or neq . |
| Introduced | 21.2.R1 |
| Platforms | All |

regexp boolean

| | |
|------------|--|
| Synopsis | String comparison to determine if the log event matches the value of subject |
| Context | configure service vprn string log filter string named-entry string match subject regexp boolean |
| Tree | regexp |
| Default | false |
| Introduced | 21.2.R1 |
| Platforms | All |

log-id [name] string

| | |
|----------------|--|
| Synopsis | Enter the log-id list instance |
| Context | configure service vprn string log log-id string |
| Tree | log-id |
| Max. Instances | 30 |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Log ID |
| Context | configure service vprn string log log-id string |
| Tree | log-id |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 21.2.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the log |
| Context | configure service vprn string log log-id string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string log log-id string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

destination

| | |
|------------|--|
| Synopsis | Enter the destination context |
| Context | configure service vprn string log log-id string destination |
| Tree | destination |
| Introduced | 16.0.R1 |

Platforms All

netconf

Synopsis Enable the **netconf** context

Context **configure service vprn string log log-id string destination netconf**

Tree [netconf](#)

Notes The following elements are part of a choice: **netconf**, **snmp**, or **syslog**.

Introduced 16.0.R1

Platforms All

max-entries *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of events stored in the NETCONF log

Context **configure service vprn string log log-id string destination netconf max-entries number**

Tree [max-entries](#)

Range 50 to 3000

Default 100

Introduced 16.0.R1

Platforms All

snmp

Synopsis Enable the **snmp** context

Context **configure service vprn string log log-id string destination snmp**

Tree [snmp](#)

Notes The following elements are part of a choice: **netconf**, **snmp**, or **syslog**.

Introduced 16.0.R1

Platforms All

max-entries *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Number of events stored in the memory log |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> destination snmp max-entries <i>number</i> |
| Tree | max-entries |
| Range | 50 to 3000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

syslog *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Index with the information to format event messages sent to a specific SYSLOG collector |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> destination syslog <i>reference</i> |
| Tree | syslog |
| Reference | configure service vprn <i>string</i> log syslog <i>string</i> |
| Notes | The following elements are part of a choice: netconf , snmp , or syslog . |
| Introduced | 16.0.R1 |
| Platforms | All |

filter *reference*

| | |
|------------|--|
| Synopsis | Event filter policy with the log destination |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> filter <i>reference</i> |
| Tree | filter |
| Reference | configure service vprn <i>string</i> log filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

netconf-stream *string*

| | |
|---------------|--|
| Synopsis | Destination NETCONF stream name |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> netconf-stream <i>string</i> |
| Tree | netconf-stream |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy name |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

source

| | |
|------------|--|
| Synopsis | Enter the source context |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> source |
| Tree | source |
| Introduced | 16.0.R1 |
| Platforms | All |

change *boolean*

| | |
|------------|---|
| Synopsis | Collect log events from the change event stream |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> source change <i>boolean</i> |
| Tree | change |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

debug *boolean*

| | |
|------------|--|
| Synopsis | Collect log events from the debug event stream |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> source debug <i>boolean</i> |
| Tree | debug |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

main *boolean*

| | |
|------------|---|
| Synopsis | Collect log events from the main event stream |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> source main <i>boolean</i> |
| Tree | main |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

security *boolean*

| | |
|------------|---|
| Synopsis | Collect log events from the security event stream |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> source security <i>boolean</i> |
| Tree | security |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

time-format *keyword*

| | |
|------------|---|
| Synopsis | Time zone output for file log contents and syslog |
| Context | configure service vprn <i>string</i> log log-id <i>string</i> time-format <i>keyword</i> |
| Tree | time-format |
| Default | utc |
| Options | utc, local |
| Introduced | 16.0.R1 |

Platforms All

snmp-trap-group [[log-name](#)] *string*

Synopsis Enter the **snmp-trap-group** list instance
 Context **configure** [service](#) [vprn](#) *string* [log snmp-trap-group](#) *string*
 Tree [snmp-trap-group](#)
 Introduced 16.0.R1
 Platforms All

[log-name] *string*

Synopsis Log ID
 Context **configure** [service](#) [vprn](#) *string* [log snmp-trap-group](#) *string*
 Tree [snmp-trap-group](#)
 String Length 1 to 17
 Notes This element is part of a list key.
 Introduced 21.2.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [service](#) [vprn](#) *string* [log snmp-trap-group](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

trap-target [[name](#)] *string*

Synopsis Enter the **trap-target** list instance
 Context **configure** [service](#) [vprn](#) *string* [log snmp-trap-group](#) *string* [trap-target](#) *string*
 Tree [trap-target](#)

| | |
|----------------|---------|
| Max. Instances | 25 |
| Introduced | 16.0.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | Trap target name |
| Context | configure service vpn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> |
| Tree | trap-target |
| String Length | 1 to 28 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | IP address of the trap receiver |
| Context | configure service vpn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

notify-community *string*

| | |
|---------------|--|
| Synopsis | SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification |
| Context | configure service vprn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> notify-community <i>string</i> |
| Tree | notify-community |
| String Length | 1 to 31 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

port *number*

| | |
|------------|--|
| Synopsis | UDP port number to send messages to this remote SNMP notification collector |
| Context | configure service vprn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> port <i>number</i> |
| Tree | port |
| Range | 0 1 to 65535 |
| Default | 162 |
| Introduced | 16.0.R1 |
| Platforms | All |

replay *boolean*

| | |
|------------|---|
| Synopsis | Retransmit missed notifications |
| Context | configure service vprn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> replay <i>boolean</i> |
| Tree | replay |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

security-level *keyword*

| | |
|----------|--|
| Synopsis | Security level at which SNMP notification messages are sent to SNMP notification collector |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> security-level <i>keyword</i> |
| Tree | security-level |
| Default | no-auth-no-privacy |
| Options | no-auth-no-privacy, auth-no-privacy, privacy |
| Introduced | 16.0.R1 |
| Platforms | All |

version *keyword*

| | |
|------------|---|
| Synopsis | SNMP version to format notification messages sent to this SNMP notification collector |
| Context | configure service vprn <i>string</i> log snmp-trap-group <i>string</i> trap-target <i>string</i> version <i>keyword</i> |
| Tree | version |
| Default | snmpv3 |
| Options | snmpv1, snmpv2c, snmpv3 |
| Introduced | 16.0.R1 |
| Platforms | All |

syslog [**syslog-name**] *string*

| | |
|----------------|---|
| Synopsis | Enter the syslog list instance |
| Context | configure service vprn <i>string</i> log syslog <i>string</i> |
| Tree | syslog |
| Max. Instances | 30 |
| Introduced | 16.0.R1 |
| Platforms | All |

[**syslog-name**] *string*

| | |
|---------------|---|
| Synopsis | Syslog name |
| Context | configure service vprn <i>string</i> log syslog <i>string</i> |
| Tree | syslog |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |

Introduced 21.2.R1
 Platforms All

address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP address of the Syslog target host
 Context **configure service vprn string log syslog string address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 Tree [address](#)
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure service vprn string log syslog string description string**
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms All

facility *keyword*

Synopsis Facility code for messages
 Context **configure service vprn string log syslog string facility keyword**
 Tree [facility](#)
 Default local7
 Options kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
 Introduced 16.0.R1
 Platforms All

log-prefix (*keyword | string*)

Synopsis String that is prepended to every log message sent to this target syslog host
 Context **configure service vprn string log syslog string log-prefix** (*keyword | string*)

| | |
|---------------|----------------------------|
| Tree | log-prefix |
| String Length | 1 to 32 |
| Default | TMNX |
| Options | no-prefix |
| Introduced | 16.0.R1 |
| Platforms | All |

port number

| | |
|------------|--|
| Synopsis | Destination port when sending syslog over UDP |
| Context | configure service vprn <i>string</i> log syslog <i>string</i> port number |
| Tree | port |
| Range | 0 1 to 65535 |
| Default | 514 |
| Introduced | 16.0.R1 |
| Platforms | All |

severity keyword

| | |
|------------|--|
| Synopsis | Severity level threshold for the syslog message |
| Context | configure service vprn <i>string</i> log syslog <i>string</i> severity <i>keyword</i> |
| Tree | severity |
| Default | info |
| Options | emergency, alert, critical, error, warning, notice, info, debug |
| Introduced | 16.0.R1 |
| Platforms | All |

tls-client-profile reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | TLS client profile used to encrypt syslog communication |
| Context | configure service vprn <i>string</i> log syslog <i>string</i> tls-client-profile <i>reference</i> |
| Tree | tls-client-profile |

| | |
|-------------|--|
| Description | This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.
Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.
When this command is unconfigured, the syslog messages are sent over UDP. |
| Reference | configure system security tls client-tls-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | All |

management

| | |
|------------|--|
| Synopsis | Enable the management context |
| Context | configure service vprn <i>string</i> management |
| Tree | management |
| Introduced | 16.0.R4 |
| Platforms | All |

allow-ftp *boolean*

| | |
|-------------|---|
| Synopsis | Allow access to the FTP server |
| Context | configure service vprn <i>string</i> management allow-ftp <i>boolean</i> |
| Tree | allow-ftp |
| Description | When configured to true , this command allows FTP access to the SR OS router via the VPRN router instance.
When configured to false , this command disallows access to the SR OS FTP server. |
| Default | false |
| Introduced | 16.0.R6 |
| Platforms | All |

allow-grpc *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the gRPC server |
| Context | configure service vprn <i>string</i> management allow-grpc <i>boolean</i> |
| Tree | allow-grpc |
| Description | When configured to true , this command allows access to the gRPC server via the VPRN router instance. |

| | |
|------------|--|
| | When configured to false , this command disallows gRPC server access. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

allow-netconf *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the NETCONF server |
| Context | configure service vprn string management allow-netconf boolean |
| Tree | allow-netconf |
| Description | When configured to true , this command allows NETCONF server access to the SR OS router via the VPRN router instance.
When configured to false , this command disallows access to the NETCONF server. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

allow-ssh *boolean*

| | |
|-------------|---|
| Synopsis | Allow access to the SSH server |
| Context | configure service vprn string management allow-ssh boolean |
| Tree | allow-ssh |
| Description | When configured to true , this command allows SSH server access to the SR OS router via the VPRN router instance.
When configured to false , this command disallows SSH server access. |
| Default | false |
| Introduced | 16.0.R5 |
| Platforms | All |

allow-telnet *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the IPv4 Telnet server |
| Context | configure service vprn string management allow-telnet boolean |
| Tree | allow-telnet |
| Description | When configured to true , this command allows IPv4 Telnet server access to the SR OS router via the VPRN router instance. |

When configured to **false**, this command disallows access to the IPv4 Telnet server.

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R5 |
| Platforms | All |

allow-telnet6 *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the Telnet IPv6 server |
| Context | configure service vprn string management allow-telnet6 boolean |
| Tree | allow-telnet6 |
| Description | When configured to true , this command allows IPv6 Telnet server access to the SR OS router via the VPRN router instance.
When configured to false , this command removes access to the IPv6 Telnet server. |
| Default | false |
| Introduced | 16.0.R5 |
| Platforms | All |

maximum-ipv4-routes

| | |
|------------|--|
| Synopsis | Enter the maximum-ipv4-routes context |
| Context | configure service vprn string maximum-ipv4-routes |
| Tree | maximum-ipv4-routes |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|------------|---|
| Synopsis | Action when the maximum number of routes, held within a VRF context, is reached |
| Context | configure service vprn string maximum-ipv4-routes log-only boolean |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|--|
| Synopsis | Mid-level water marker for the number of routes which this VRF holds |
| Context | configure <i>service vprn string maximum-ipv4-routes threshold number</i> |
| Tree | <i>threshold</i> |
| Range | 1 to 100 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

value *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Maximum number of routes that are configured on this virtual router |
| Context | configure <i>service vprn string maximum-ipv4-routes value number</i> |
| Tree | <i>value</i> |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-ipv6-routes

| | |
|------------|---|
| Synopsis | Enter the maximum-ipv6-routes context |
| Context | configure <i>service vprn string maximum-ipv6-routes</i> |
| Tree | <i>maximum-ipv6-routes</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|----------|--|
| Synopsis | Action when the maximum number of routes, held within a VRF context, is reached |
| Context | configure <i>service vprn string maximum-ipv6-routes log-only boolean</i> |
| Tree | <i>log-only</i> |
| Default | false |

Introduced 16.0.R1
 Platforms All

threshold *number*

Synopsis Mid-level water marker for the number of routes which this VRF holds
 Context **configure service vprn string maximum-ipv6-routes threshold number**
 Tree [threshold](#)
 Range 1 to 100
 Units percent
 Introduced 16.0.R1
 Platforms All

value *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of routes that are configured on this virtual router
 Context **configure service vprn string maximum-ipv6-routes value number**
 Tree [value](#)
 Range 1 to 2147483647
 Introduced 16.0.R1
 Platforms All

mc-maximum-routes

Synopsis Enter the **mc-maximum-routes** context
 Context **configure service vprn string mc-maximum-routes**
 Tree [mc-maximum-routes](#)
 Introduced 16.0.R1
 Platforms All

log-only *boolean*

| | |
|------------|---|
| Synopsis | Action when the maximum number of multicast routes, held within a VRF context, is reached |
| Context | configure service vprn <i>string mc-maximum-routes log-only boolean</i> |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|--|
| Synopsis | Mid-level water marker for the number of multicast routes which this VRF holds |
| Context | configure service vprn <i>string mc-maximum-routes threshold number</i> |
| Tree | threshold |
| Range | 1 to 100 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

value *number*

| | |
|------------|--|
| Synopsis | Maximum multicast routes configured on virtual router |
| Context | configure service vprn <i>string mc-maximum-routes value number</i> |
| Tree | value |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

mld

| | |
|------------|---|
| Synopsis | Enable the mld context |
| Context | configure service vprn <i>string mld</i> |
| Tree | mld |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MLD |
| Context | configure service vprn <i>string</i> mld admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

forwarding-group-interface [forwarding-service](#) *string* [group-interface-name](#) *reference*

| | |
|------------|--|
| Synopsis | Enter the forwarding-group-interface list instance |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> |
| Tree | forwarding-group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forwarding-service *string*

| | |
|---------------|--|
| Synopsis | Forwarding service for a subscriber interface in a retailer context |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> |
| Tree | forwarding-group-interface |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-interface-name *reference*

| | |
|----------|---|
| Synopsis | Group interface name |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> |
| Tree | forwarding-group-interface |

| | |
|------------|--|
| Reference | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MLD interface |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|---|
| Synopsis | Import policy to filter MLD packets |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|-------------|--|
| Synopsis | Maximum number of group sources for this interface |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |

| | |
|------------|---|
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|--|
| Synopsis | Maximum number of groups for this interface |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|---|
| Synopsis | Maximum number of sources that are allowed per group |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mcac

| | |
|------------|---|
| Synopsis | Enter the mcac context |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bandwidth

| | |
|----------|------------------------------------|
| Synopsis | Enter the bandwidth context |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mandatory (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

total (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-policy *reference*

| | |
|----------|---|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> mcac interface-policy <i>reference</i> |
| Tree | interface-policy |

| | |
|------------|---|
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy reference

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference mcac policy reference</i> |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference query-interval number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-last-member-interval *number*

| | |
|------------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-response-interval *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-source-address *string*

| | |
|------------|--|
| Synopsis | Source address for MLD queries |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> query-source-address <i>string</i> |
| Tree | query-source-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|----------|---|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure service vprn <i>string</i> mld forwarding-group-interface forwarding-service <i>string</i> group-interface-name <i>reference</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-hosts-only *boolean*

Synopsis Allow MLD traffic from known hosts only
 Context **configure** [service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference sub-hosts-only boolean](#)
 Tree [sub-hosts-only](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subnet-check *boolean*

Synopsis Enable subnet checking
 Context **configure** [service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference subnet-check boolean](#)
 Tree [subnet-check](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis MLD protocol version
 Context **configure** [service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference version keyword](#)
 Tree [version](#)
 Default 2
 Options 1, 2
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-if-query-source-address *string*

| | |
|------------|---|
| Synopsis | Source address in queries for group interfaces when not configured at group interface level |
| Context | configure service vpn <i>string</i> mld group-if-query-source-address <i>string</i> |
| Tree | group-if-query-source-address |
| Introduced | 16.0.R1 |
| Platforms | All |

group-interface [[group-interface-name](#)] *reference*

| | |
|------------|--|
| Synopsis | Enter the group-interface list instance |
| Context | configure service vpn <i>string</i> mld group-interface <i>reference</i> |
| Tree | group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[group-interface-name] *reference*

| | |
|------------|---|
| Synopsis | Group interface name |
| Context | configure service vpn <i>string</i> mld group-interface <i>reference</i> |
| Tree | group-interface |
| Reference | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MLD interface |
| Context | configure service vpn <i>string</i> mld group-interface <i>reference</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|---|
| Synopsis | Import policy to filter MLD packets |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|-------------|--|
| Synopsis | Maximum number of group sources for this interface |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|--|
| Synopsis | Maximum number of groups for this interface |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|----------|--|
| Synopsis | Maximum number of sources that are allowed per group |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn string mld group-interface reference maximum-number-sources number |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mcac

| | |
|------------|---|
| Synopsis | Enter the mcac context |
| Context | configure service vprn string mld group-interface reference mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bandwidth

| | |
|------------|---|
| Synopsis | Enter the bandwidth context |
| Context | configure service vprn string mld group-interface reference mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mandatory (*number | keyword*)

| | |
|------------|---|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure service vprn string mld group-interface reference mcac bandwidth mandatory (<i>number keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

total (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-policy *reference*

| | |
|------------|---|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|-------------|---|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> mcac policy <i>reference</i> |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured |

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

| | |
|------------|---|
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-last-member-interval *number*

| | |
|------------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-response-interval *number*

| | |
|------------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-source-address *string*

| | |
|------------|---|
| Synopsis | Source address for MLD queries |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> query-source-address <i>string</i> |
| Tree | query-source-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|--|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-hosts-only *boolean*

| | |
|------------|--|
| Synopsis | Allow MLD traffic from known hosts only |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> sub-hosts-only <i>boolean</i> |
| Tree | sub-hosts-only |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subnet-check *boolean*

| | |
|------------|--|
| Synopsis | Enable subnet checking |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> subnet-check <i>boolean</i> |
| Tree | subnet-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

version *keyword*

| | |
|------------|---|
| Synopsis | MLD protocol version |
| Context | configure service vprn <i>string</i> mld group-interface <i>reference</i> version <i>keyword</i> |
| Tree | version |
| Default | 2 |
| Options | 1, 2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface [[ip-interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-interface-name] *string*

| | |
|---------------|---|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the MLD interface |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|------------|--|
| Synopsis | Import policy to filter MLD packets |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-group-sources *number*

| | |
|-------------|--|
| Synopsis | Maximum number of group sources for this interface |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum number of groups for this interface |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | All |

maximum-number-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of sources that are allowed per group |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | All |

mcac

| | |
|------------|--|
| Synopsis | Enter the mcac context |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth

| | |
|------------|--|
| Synopsis | Enter the bandwidth context |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | All |

mandatory (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

total (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-policy *reference*

| | |
|------------|--|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-constraints

| | |
|------------|---|
| Synopsis | Enter the mc-constraints context |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac mc-constraints |
| Tree | mc-constraints |
| Introduced | 16.0.R1 |
| Platforms | All |

level [[level-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the level list instance |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac mc-constraints level <i>number</i> |
| Tree | level |
| Introduced | 16.0.R1 |

Platforms All

[level-id] *number*

Synopsis Bandwidth level ID for an MCAC constraint

Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* [mcac](#) [mc-constraints](#) [level](#) *number*

Tree [level](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

bandwidth *number*

Synopsis Bandwidth available for this level

Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* [mcac](#) [mc-constraints](#) [level](#) *number* [bandwidth](#) *number*

Tree [bandwidth](#)

Range 0 to 2147483647

Units kilobps

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

number-down [[number-lag-port-down](#)] *number*

Synopsis Enter the **number-down** list instance

Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* [mcac](#) [mc-constraints](#) [number-down](#) *number*

Tree [number-down](#)

Introduced 16.0.R1

Platforms All

[number-lag-port-down] *number*

Synopsis Number of ports that are down in this LAG link

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

level *number*

| | |
|-------------|--|
| Synopsis | Level ID to associate with number of down LAG ports |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i> |
| Tree | level |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority. |
| Range | 1 to 8 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

use-lag-port-weight *boolean*

| | |
|-------------|---|
| Synopsis | Use LAG port weight in calculating MCAC constraints |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i> |
| Tree | use-lag-port-weight |
| Description | When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn string mld interface string mcac policy reference |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference | configure mcac policy string |
| Introduced | 16.0.R1 |
| Platforms | All |

query-interval number

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure service vprn string mld interface string query-interval number |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval number

| | |
|----------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure service vprn string mld interface string query-last-member-interval number |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |

Introduced 16.0.R1
Platforms All

query-response-interval *number*

Synopsis Time to wait for a response to the host-query messages
Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* **query-response-interval** *number*
Tree [query-response-interval](#)
Range 1 to 1023
Introduced 16.0.R1
Platforms All

router-alert-check *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages
Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* **router-alert-check** *boolean*
Tree [router-alert-check](#)
Default true
Introduced 16.0.R1
Platforms All

ssm-translate

Synopsis Enter the **ssm-translate** context
Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* **ssm-translate**
Tree [ssm-translate](#)
Introduced 16.0.R1
Platforms All

group-range [start](#) *string* [end](#) *string*

Synopsis Enter the **group-range** list instance
Context **configure** [service](#) [vprn](#) *string* [mld](#) [interface](#) *string* [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string*
Tree [group-range](#)
Introduced 16.0.R1

Platforms All

start string

Synopsis Lower bound of the group range

Context **configure service vpn string mld interface string ssm-translate group-range start string end string**

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

end string

Synopsis Upper bound of the group range

Context **configure service vpn string mld interface string ssm-translate group-range start string end string**

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

source [source-address] string

Synopsis Add a list entry for **source**

Context **configure service vpn string mld interface string ssm-translate group-range start string end string source string**

Tree [source](#)

Min. 1

Instances

Introduced 16.0.R1

Platforms All

[source-address] string

Synopsis Source IP address

| | |
|------------|--|
| Context | configure service vprn <i>string</i> mld interface <i>string</i> ssm-translate group-range start <i>string</i> end <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

static

| | |
|------------|--|
| Synopsis | Enter the static context |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | All |

group [*group-address*] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> static group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | All |

[*group-address*] *string*

| | |
|------------|--|
| Synopsis | Group address of multicast channel |
| Context | configure service vprn <i>string</i> mld interface <i>string</i> static group <i>string</i> |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [*source-address*] *string*

| | |
|----------|------------------------------------|
| Synopsis | Add a list entry for source |
|----------|------------------------------------|

| | |
|------------|--|
| Context | configure service vpn <i>string</i> mld interface <i>string</i> static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address |
| Context | configure service vpn <i>string</i> mld interface <i>string</i> static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

starg

| | |
|------------|---|
| Synopsis | any source address (*,G) |
| Context | configure service vpn <i>string</i> mld interface <i>string</i> static group <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | All |

group-range [start](#) *string* [end](#) *string* [step](#) *string*

| | |
|------------|--|
| Synopsis | Enter the group-range list instance |
| Context | configure service vpn <i>string</i> mld interface <i>string</i> static group-range start <i>string</i> end <i>string</i> step <i>string</i> |
| Tree | group-range |
| Introduced | 16.0.R1 |
| Platforms | All |

start string

| | |
|------------|---|
| Synopsis | Lower bound of the static multicast group |
| Context | configure service vpn string mld interface string static group-range start string end string step string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

end string

| | |
|------------|---|
| Synopsis | Upper bound of the static multicast group |
| Context | configure service vpn string mld interface string static group-range start string end string step string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

step string

| | |
|------------|---|
| Synopsis | Step interval for the group-range addresses |
| Context | configure service vpn string mld interface string static group-range start string end string step string |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] [string](#)

| | |
|----------|---|
| Synopsis | Add a list entry for source |
| Context | configure service vpn string mld interface string static group-range start string end string step string source string |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |

Introduced 16.0.R1
 Platforms All

[source-address] *string*

Synopsis Source IP address
 Context **configure** [service vprn string](#) [mld interface string](#) [static group-range start string end string](#) [step string](#) [source string](#)
 Tree [source](#)
 Notes This element is part of a list key.
 Introduced 16.0.R2
 Platforms All

starg

Synopsis any source address (*,G)
 Context **configure** [service vprn string](#) [mld interface string](#) [static group-range start string end string](#) [step string](#) [starg](#)
 Tree [starg](#)
 Notes The following elements are part of a mandatory choice: **source** or **starg**.
 Introduced 16.0.R2
 Platforms All

version *keyword*

Synopsis MLD protocol version
 Context **configure** [service vprn string](#) [mld interface string](#) [version keyword](#)
 Tree [version](#)
 Default 2
 Options 1, 2
 Introduced 16.0.R1
 Platforms All

query-interval *number*

Synopsis Time between two consecutive host-query messages

| | |
|------------|--|
| Context | configure service vprn string mld query-interval number |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-last-member-interval number

| | |
|------------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure service vprn string mld query-last-member-interval number |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

query-response-interval number

| | |
|------------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure service vprn string mld query-response-interval number |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

robust-count number

| | |
|----------|--|
| Synopsis | Number of retries after expected message loss |
| Context | configure service vprn string mld robust-count number |
| Tree | robust-count |

| | |
|------------|---------|
| Range | 2 to 10 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | All |

ssm-translate

| | |
|------------|--|
| Synopsis | Enter the ssm-translate context |
| Context | configure service vprn <i>string</i> mld ssm-translate |
| Tree | ssm-translate |
| Introduced | 16.0.R1 |
| Platforms | All |

group-range [start](#) *string* [end](#) *string*

| | |
|------------|---|
| Synopsis | Enter the group-range list instance |
| Context | configure service vprn <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i> |
| Tree | group-range |
| Introduced | 16.0.R1 |
| Platforms | All |

[start](#) *string*

| | |
|------------|---|
| Synopsis | Lower bound of the group range |
| Context | configure service vprn <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i> |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

[end](#) *string*

| | |
|----------|---|
| Synopsis | Upper bound of the group range |
| Context | configure service vprn <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i> |
| Tree | group-range |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source [[source-address](#)] *string*

| | |
|----------------|---|
| Synopsis | Add a list entry for source |
| Context | configure service vprn <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i>
source <i>string</i> |
| Tree | source |
| Min. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[source-address] *string*

| | |
|------------|---|
| Synopsis | Source IP address |
| Context | configure service vprn <i>string</i> mld ssm-translate group-range start <i>string</i> end <i>string</i>
source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

msdp

| | |
|------------|--|
| Synopsis | Enable the msdp context |
| Context | configure service vprn <i>string</i> msdp |
| Tree | msdp |
| Introduced | 19.10.R1 |
| Platforms | All |

active-source-limit *number*

| | |
|----------|--|
| Synopsis | Maximum number of active messages accepted by MSDP |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string msdp active-source-limit number</i> |
| Tree | active-source-limit |
| Range | 0 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of MSDP |
| Context | configure service vprn <i>string msdp admin-state keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 19.10.R1 |
| Platforms | All |

data-encapsulation *boolean*

| | |
|------------|---|
| Synopsis | Enable encapsulation of multicast data used by MSDP |
| Context | configure service vprn <i>string msdp data-encapsulation boolean</i> |
| Tree | data-encapsulation |
| Default | true |
| Introduced | 19.10.R1 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|--|
| Synopsis | Policies to export source active state into MSDP |
| Context | configure service vprn <i>string msdp export-policy reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |

Platforms All

group *[name]* *string*

Synopsis Enter the **group** list instance
 Context **configure** *service vprn string msdp group string*
 Tree *group*
 Introduced 19.10.R1
 Platforms All

[name] *string*

Synopsis MSDP group name
 Context **configure** *service vprn string msdp group string*
 Tree *group*
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 19.10.R1
 Platforms All

active-source-limit *number*

Synopsis Maximum number of active messages accepted by MSDP
 Context **configure** *service vprn string msdp group string active-source-limit number*
 Tree *active-source-limit*
 Range 0 to 1000000
 Introduced 19.10.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of MSDP
 Context **configure** *service vprn string msdp group string admin-state keyword*
 Tree *admin-state*
 Default enable

| | |
|------------|-----------------|
| Options | enable, disable |
| Introduced | 19.10.R1 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|--|
| Synopsis | Policies to export source active state into MSDP |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|--|
| Synopsis | Policies to import Source Active state from the Source Active list into MSDP |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

local-address *string*

| | |
|------------|---|
| Synopsis | Local end of an MSDP session |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> local-address <i>string</i> |
| Tree | local-address |
| Introduced | 19.10.R1 |
| Platforms | All |

mode *keyword*

| | |
|------------|---|
| Synopsis | Topology of groups of peers |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> mode <i>keyword</i> |
| Tree | mode |
| Default | standard |
| Options | standard, mesh-group |
| Introduced | 19.10.R1 |
| Platforms | All |

peer [[ip-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the peer list instance |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> |
| Tree | peer |
| Introduced | 19.10.R1 |
| Platforms | All |

[ip-address] *string*

| | |
|------------|--|
| Synopsis | IP address of the remote MSDP router for peering |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> |
| Tree | peer |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

active-source-limit *number*

| | |
|------------|---|
| Synopsis | Maximum number of active messages accepted by MSDP |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> active-source-limit <i>number</i> |
| Tree | active-source-limit |
| Range | 0 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MSDP |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 19.10.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | MD5 authentication key for the MSDP peering session |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 370 |
| Introduced | 19.10.R1 |
| Platforms | All |

default-peer *boolean*

| | |
|------------|--|
| Synopsis | Enable/Disable default peer as MSDP peer |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> default-peer <i>boolean</i> |
| Tree | default-peer |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

export-policy *reference*

| | |
|-----------|---|
| Synopsis | Policies to export source active state into MSDP |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |

| | |
|----------------|--------------------------------------|
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies to import Source Active state from the Source Active list into MSDP |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

local-address *string*

| | |
|------------|--|
| Synopsis | Local end of an MSDP session |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> local-address <i>string</i> |
| Tree | local-address |
| Introduced | 19.10.R1 |
| Platforms | All |

receive-message-rate

| | |
|------------|---|
| Synopsis | Enter the receive-message-rate context |
| Context | configure service vprn <i>string</i> msdp group <i>string</i> peer <i>string</i> receive-message-rate |
| Tree | receive-message-rate |
| Introduced | 19.10.R1 |
| Platforms | All |

rate number

| | |
|------------|---|
| Synopsis | Number of MSDP messages read from the TCP session |
| Context | configure service vprn string msdp group string peer string receive-message-rate rate number |
| Tree | rate |
| Range | 10 to 10000 |
| Introduced | 19.10.R1 |
| Platforms | All |

threshold number

| | |
|------------|--|
| Synopsis | Limit for MSDP messages read from the TCP session |
| Context | configure service vprn string msdp group string peer string receive-message-rate threshold number |
| Tree | threshold |
| Range | 1 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

time number

| | |
|------------|---|
| Synopsis | Limit of MSDP messages read from the TCP session |
| Context | configure service vprn string msdp group string peer string receive-message-rate time number |
| Tree | time |
| Range | 1 to 600 |
| Units | seconds |
| Introduced | 19.10.R1 |
| Platforms | All |

receive-message-rate

| | |
|------------|---|
| Synopsis | Enter the receive-message-rate context |
| Context | configure service vprn string msdp group string receive-message-rate |
| Tree | receive-message-rate |
| Introduced | 19.10.R1 |

Platforms All

rate *number*

Synopsis Number of MSDP messages read from the TCP session
 Context **configure** [service vprn](#) *string* [msdp group](#) *string* [receive-message-rate](#) *rate number*
 Tree [rate](#)
 Range 10 to 10000
 Introduced 19.10.R1
 Platforms All

threshold *number*

Synopsis Limit for MSDP messages read from the TCP session
 Context **configure** [service vprn](#) *string* [msdp group](#) *string* [receive-message-rate](#) *threshold number*
 Tree [threshold](#)
 Range 1 to 1000000
 Introduced 19.10.R1
 Platforms All

time *number*

Synopsis Limit of MSDP messages read from the TCP session
 Context **configure** [service vprn](#) *string* [msdp group](#) *string* [receive-message-rate](#) *time number*
 Tree [time](#)
 Range 1 to 600
 Units seconds
 Introduced 19.10.R1
 Platforms All

import-policy *reference*

Synopsis Policies to import Source Active state from the Source Active list into MSDP
 Context **configure** [service vprn](#) *string* [msdp import-policy](#) *reference*
 Tree [import-policy](#)

| | |
|----------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

local-address *string*

| | |
|------------|---|
| Synopsis | Local end of an MSDP session |
| Context | configure service vpn <i>string</i> msdp local-address <i>string</i> |
| Tree | local-address |
| Introduced | 19.10.R1 |
| Platforms | All |

peer [[ip-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the peer list instance |
| Context | configure service vpn <i>string</i> msdp peer <i>string</i> |
| Tree | peer |
| Introduced | 19.10.R1 |
| Platforms | All |

[ip-address] *string*

| | |
|------------|--|
| Synopsis | IP address of the remote MSDP router for peering |
| Context | configure service vpn <i>string</i> msdp peer <i>string</i> |
| Tree | peer |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

active-source-limit *number*

| | |
|----------|--|
| Synopsis | Maximum number of active messages accepted by MSDP |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn string msdp peer string active-source-limit number |
| Tree | active-source-limit |
| Range | 0 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MSDP |
| Context | configure service vprn string msdp peer string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 19.10.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | MD5 authentication key for the MSDP peering session |
| Context | configure service vprn string msdp peer string authentication-key string |
| Tree | authentication-key |
| String Length | 1 to 370 |
| Introduced | 19.10.R1 |
| Platforms | All |

default-peer *boolean*

| | |
|------------|--|
| Synopsis | Enable/Disable default peer as MSDP peer |
| Context | configure service vprn string msdp peer string default-peer boolean |
| Tree | default-peer |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|--|
| Synopsis | Policies to export source active state into MSDP |
| Context | configure service vprn <i>string</i> msdp peer <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|--|
| Synopsis | Policies to import Source Active state from the Source Active list into MSDP |
| Context | configure service vprn <i>string</i> msdp peer <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 19.10.R1 |
| Platforms | All |

local-address *string*

| | |
|------------|---|
| Synopsis | Local end of an MSDP session |
| Context | configure service vprn <i>string</i> msdp peer <i>string</i> local-address <i>string</i> |
| Tree | local-address |
| Introduced | 19.10.R1 |
| Platforms | All |

receive-message-rate

| | |
|----------|--|
| Synopsis | Enter the receive-message-rate context |
| Context | configure service vprn <i>string</i> msdp peer <i>string</i> receive-message-rate |

| | |
|------------|--------------------------------------|
| Tree | receive-message-rate |
| Introduced | 19.10.R1 |
| Platforms | All |

rate number

| | |
|------------|--|
| Synopsis | Number of MSDP messages read from the TCP session |
| Context | configure service vprn string msdp peer string receive-message-rate rate number |
| Tree | rate |
| Range | 10 to 10000 |
| Introduced | 19.10.R1 |
| Platforms | All |

threshold number

| | |
|------------|---|
| Synopsis | Limit for MSDP messages read from the TCP session |
| Context | configure service vprn string msdp peer string receive-message-rate threshold number |
| Tree | threshold |
| Range | 1 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

time number

| | |
|------------|--|
| Synopsis | Limit of MSDP messages read from the TCP session |
| Context | configure service vprn string msdp peer string receive-message-rate time number |
| Tree | time |
| Range | 1 to 600 |
| Units | seconds |
| Introduced | 19.10.R1 |
| Platforms | All |

receive-message-rate

| | |
|----------|---|
| Synopsis | Enter the receive-message-rate context |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn string msdp receive-message-rate |
| Tree | receive-message-rate |
| Introduced | 19.10.R1 |
| Platforms | All |

rate number

| | |
|------------|--|
| Synopsis | Number of MSDP messages read from the TCP session |
| Context | configure service vprn string msdp receive-message-rate rate number |
| Tree | rate |
| Range | 10 to 10000 |
| Introduced | 19.10.R1 |
| Platforms | All |

threshold number

| | |
|------------|---|
| Synopsis | Limit for MSDP messages read from the TCP session |
| Context | configure service vprn string msdp receive-message-rate threshold number |
| Tree | threshold |
| Range | 1 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

time number

| | |
|------------|--|
| Synopsis | Limit of MSDP messages read from the TCP session |
| Context | configure service vprn string msdp receive-message-rate time number |
| Tree | time |
| Range | 1 to 600 |
| Units | seconds |
| Introduced | 19.10.R1 |
| Platforms | All |

rpf-table *keyword*

| | |
|------------|---|
| Synopsis | Route tables for RPF lookup |
| Context | configure service vprn <i>string</i> msdp rpf-table <i>keyword</i> |
| Tree | rpf-table |
| Default | rtable-u |
| Options | rtable-m, rtable-u, both |
| Introduced | 19.10.R1 |
| Platforms | All |

source [[ip-prefix](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the source list instance |
| Context | configure service vprn <i>string</i> msdp source <i>string</i> |
| Tree | source |
| Introduced | 19.10.R1 |
| Platforms | All |

[ip-prefix] *string*

| | |
|------------|---|
| Synopsis | Source IP address for accepted active source messages |
| Context | configure service vprn <i>string</i> msdp source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R1 |
| Platforms | All |

active-source-limit *number*

| | |
|------------|---|
| Synopsis | Number of active source messages accepted by MSDP |
| Context | configure service vprn <i>string</i> msdp source <i>string</i> active-source-limit <i>number</i> |
| Tree | active-source-limit |
| Range | 0 to 1000000 |
| Introduced | 19.10.R1 |
| Platforms | All |

source-active-cache-lifetime *number*

| | |
|------------|--|
| Synopsis | Lifetime given to SA cache entries when created or refreshed |
| Context | configure service vprn <i>string</i> msdp source-active-cache-lifetime <i>number</i> |
| Tree | source-active-cache-lifetime |
| Range | 90 to 600 |
| Default | 90 |
| Units | seconds |
| Introduced | 19.10.R1 |
| Platforms | All |

mss-adjust

| | |
|------------|--|
| Synopsis | Enable the mss-adjust context |
| Context | configure service vprn <i>string</i> mss-adjust |
| Tree | mss-adjust |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-group *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | NAT group used for TCP-MSS adjustment |
| Context | configure service vprn <i>string</i> mss-adjust nat-group <i>number</i> |
| Tree | nat-group |
| Max. Range | 0 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

segment-size *number*

| | |
|----------|--|
| Synopsis | TCP-MSS option value in transmitted TCP SYN requests |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> mss-adjust segment-size <i>number</i> |
| Tree | segment-size |
| Range | 160 to 10240 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mtrace2

| | |
|------------|--|
| Synopsis | Enter the mtrace2 context |
| Context | configure service vprn <i>string</i> mtrace2 |
| Tree | mtrace2 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of multicast path tracing |
| Context | configure service vprn <i>string</i> mtrace2 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

udp-port *number*

| | |
|------------|---|
| Synopsis | Destination UDP port for mstat2 mtrace2 test, or unsolicited mstat2 mtrace2 packets |
| Context | configure service vprn <i>string</i> mtrace2 udp-port <i>number</i> |
| Tree | udp-port |
| Range | 1024 to 49151 |
| Default | 5000 |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast-info-policy *reference*

| | |
|------------|--|
| Synopsis | Multicast policy name for virtual router |
| Context | configure service vprn <i>string</i> multicast-info-policy <i>reference</i> |
| Tree | multicast-info-policy |
| Reference | configure multicast-management multicast-info-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mvpn

| | |
|------------|--|
| Synopsis | Enable the mvpn context |
| Context | configure service vprn <i>string</i> mvpn |
| Tree | mvpn |
| Introduced | 19.5.R1 |
| Platforms | All |

auto-discovery

| | |
|------------|---|
| Synopsis | Enter the auto-discovery context |
| Context | configure service vprn <i>string</i> mvpn auto-discovery |
| Tree | auto-discovery |
| Introduced | 19.5.R1 |
| Platforms | All |

source-address *string*

| | |
|------------|--|
| Synopsis | IPv4 source address |
| Context | configure service vprn <i>string</i> mvpn auto-discovery source-address <i>string</i> |
| Tree | source-address |
| Default | 0.0.0.0 |
| Introduced | 19.5.R1 |
| Platforms | All |

type keyword

| | |
|------------|---|
| Synopsis | Status of multicast VPN membership auto-discovery |
| Context | configure service vprn string mvpn auto-discovery type keyword |
| Tree | type |
| Options | bgp, mdt-safi |
| Introduced | 19.5.R1 |
| Platforms | All |

c-mcast-signaling keyword

| | |
|------------|---|
| Synopsis | Protocol for PE-to-PE signaling of CE multicast states |
| Context | configure service vprn string mvpn c-mcast-signaling keyword |
| Tree | c-mcast-signaling |
| Default | pim |
| Options | bgp, pim |
| Introduced | 19.5.R1 |
| Platforms | All |

intersite-shared

| | |
|-------------|---|
| Synopsis | Enter the intersite-shared context |
| Context | configure service vprn string mvpn intersite-shared |
| Tree | intersite-shared |
| Description | Commands in this context configure whether to use inter-site shared C-trees. Optional parameters allow enabling additional intersite shared functionality. Not specifying an optional parameter when executing the command disables that parameter. |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state keyword

| | |
|----------|--|
| Synopsis | Administrative state of inter-site shared C-trees use |
| Context | configure service vprn string mvpn intersite-shared admin-state keyword |
| Tree | admin-state |
| Default | enable |

| | |
|------------|-----------------|
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

kat-type5-advertisement-withdraw *boolean*

| | |
|-------------|---|
| Synopsis | Enable KATs on source PEs for ng-MVPN deployments |
| Context | configure service vprn <i>string</i> mvpn intersite-shared kat-type5-advertisement-withdraw <i>boolean</i> |
| Tree | kat-type5-advertisement-withdraw |
| Description | When configured to true , this command specifies that the MVPN Type-5 “Source Active AD routes” are not removed even if all receivers are removed from the tree. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

persistent-type5-advertisement *boolean*

| | |
|-------------|--|
| Synopsis | Ensure Type-5 S-A routes are generated for MCAST source |
| Context | configure service vprn <i>string</i> mvpn intersite-shared persistent-type5-advertisement <i>boolean</i> |
| Tree | persistent-type5-advertisement |
| Description | When configured to true , this command removes the MVPN Type-5 “Source Active AD routes” even if receivers are present but the keepalive timer (KAT) has timed out because of no traffic. |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

mdt-type *keyword*

| | |
|----------|--|
| Synopsis | MVPN instance type per PE node |
| Context | configure service vprn <i>string</i> mvpn mdt-type <i>keyword</i> |
| Tree | mdt-type |
| Default | sender-receiver |
| Options | sender-only, receiver-only, sender-receiver |

| | |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms | All |

provider-tunnel

| | |
|------------|--|
| Synopsis | Enter the provider-tunnel context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel |
| Tree | provider-tunnel |
| Introduced | 19.5.R1 |
| Platforms | All |

inclusive

| | |
|------------|--|
| Synopsis | Enter the inclusive context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive |
| Tree | inclusive |
| Introduced | 19.5.R1 |
| Platforms | All |

bier

| | |
|------------|---|
| Synopsis | Enable the bier context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive bier |
| Tree | bier |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of BIER |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive bier admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms | All |

sub-domain *number*

| | |
|------------|--|
| Synopsis | Sub-domain used to attach the BIER provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive bier sub-domain <i>number</i> |
| Tree | sub-domain |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

bsr *keyword*

| | |
|------------|---|
| Synopsis | BSR signaling type |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive bsr <i>keyword</i> |
| Tree | bsr |
| Options | unicast, spmsi |
| Introduced | 19.5.R1 |
| Platforms | All |

mldp

| | |
|------------|---|
| Synopsis | Enable the mldp context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive mldp |
| Tree | mldp |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of MLDP LSP use for tunnels |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive mldp admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

p2mp-sr

| | |
|------------|---|
| Synopsis | Enable the p2mp-sr context |
| Context | configure service vprn string mvpn provider-tunnel inclusive p2mp-sr |
| Tree | p2mp-sr |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 21.5.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state for P2MP SR |
| Context | configure service vprn string mvpn provider-tunnel inclusive p2mp-sr admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | All |

bfd-leaf boolean

| | |
|-------------|--|
| Synopsis | Enable unidirectional multipoint BFD on the leaf PE |
| Context | configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-leaf boolean |
| Tree | bfd-leaf |
| Description | When configured to true , this command enables unidirectional multipoint BFD sessions on a receiver (leaf) PE node for upstream fast failure detection over P2MP SR tree LSP. |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

bfd-root

| | |
|------------|--|
| Synopsis | Enable the bfd-root context |
| Context | configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root |
| Tree | bfd-root |
| Introduced | 21.10.R1 |
| Platforms | All |

multiplier number

| | |
|-------------|--|
| Synopsis | Multiplier for the transmit interval of the BFD session |
| Context | configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root multiplier number |
| Tree | multiplier |
| Description | This command configures the multiplier for the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 21.10.R1 |
| Platforms | All |

transmit-interval number

| | |
|-------------|---|
| Synopsis | Transmit interval of the BFD session |
| Context | configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root transmit-interval number |
| Tree | transmit-interval |
| Description | This command configures the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined. |
| Range | 10 to 100000 |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | All |

p2mp-policy *boolean*

| | |
|------------|---|
| Synopsis | Use P2MP policy for inclusive MVPN provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr p2mp-policy <i>boolean</i> |
| Tree | p2mp-policy |
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | All |

static-policy *reference*

| | |
|------------|---|
| Synopsis | Static policy for inclusive MVPN provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive p2mp-sr static-policy <i>reference</i> |
| Tree | static-policy |
| Reference | configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> |
| Introduced | 21.5.R1 |
| Platforms | All |

pim

| | |
|------------|--|
| Synopsis | Enable the pim context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim |
| Tree | pim |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of PIM use for provider tunnels |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

Introduced 19.5.R1
Platforms All

group-address *string*

Synopsis Multicast group address
Context **configure service vprn** *string mvpn provider-tunnel inclusive pim group-address string*
Tree [group-address](#)
Notes This element is mandatory.
Introduced 19.5.R1
Platforms All

hello-interval *number*

Synopsis Frequency at which PIM Hello messages are transmitted
Context **configure service vprn** *string mvpn provider-tunnel inclusive pim hello-interval number*
Tree [hello-interval](#)
Range 0 to 255
Default 30
Introduced 19.5.R1
Platforms All

hello-multiplier *number*

Synopsis Multiplier to determine the holdtime for a PIM neighbor
Context **configure service vprn** *string mvpn provider-tunnel inclusive pim hello-multiplier number*
Tree [hello-multiplier](#)
Range 20 to 100
Default 35
Introduced 19.5.R1
Platforms All

improved-assert *boolean*

Synopsis Enable the improved assert procedure

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim improved-assert
<i>boolean</i> |
| Tree | improved-assert |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

mode *keyword*

| | |
|------------|---|
| Synopsis | PIM mode for the inclusive provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim mode <i>keyword</i> |
| Tree | mode |
| Options | asm, ssm |
| Notes | This element is mandatory. |
| Introduced | 19.5.R1 |
| Platforms | All |

three-way-hello *boolean*

| | |
|------------|---|
| Synopsis | Enable PIM three-way hello |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim three-way-hello
<i>boolean</i> |
| Tree | three-way-hello |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

tracking-support *boolean*

| | |
|------------|--|
| Synopsis | Enable the T bit in the LAN Prune Delay option |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive pim tracking-support
<i>boolean</i> |
| Tree | tracking-support |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

rsvp

| | |
|------------|---|
| Synopsis | Enable the rsvp context |
| Context | configure service vprn string mvpn provider-tunnel inclusive rsvp |
| Tree | rsvp |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of RSVP use for provider tunnels |
| Context | configure service vprn string mvpn provider-tunnel inclusive rsvp admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

bfd-leaf *boolean*

| | |
|------------|---|
| Synopsis | Enable unidirectional multi-point BFD on a receiver |
| Context | configure service vprn string mvpn provider-tunnel inclusive rsvp bfd-leaf boolean |
| Tree | bfd-leaf |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

bfd-root

| | |
|------------|---|
| Synopsis | Enable the bfd-root context |
| Context | configure service vprn string mvpn provider-tunnel inclusive rsvp bfd-root |
| Tree | bfd-root |
| Introduced | 19.5.R1 |
| Platforms | All |

multiplier *number*

| | |
|------------|---|
| Synopsis | Enable unidirectional multi-point BFD on a sender |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp bfd-root multiplier <i>number</i> |
| Tree | multiplier |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 19.5.R1 |
| Platforms | All |

transmit-interval *number*

| | |
|------------|--|
| Synopsis | Transmit interval for the BFD session |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp bfd-root transmit-interval <i>number</i> |
| Tree | transmit-interval |
| Range | 10 to 100000 |
| Notes | This element is mandatory. |
| Introduced | 19.5.R1 |
| Platforms | All |

lsp-template *reference*

| | |
|------------|---|
| Synopsis | P2MP LSP created as the provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive rsvp lsp-template <i>reference</i> |
| Tree | lsp-template |
| Reference | configure router <i>string</i> mpls lsp-template <i>string</i> |
| Introduced | 19.5.R1 |
| Platforms | All |

umh-rate-monitoring

| | |
|----------|--|
| Synopsis | Enter the umh-rate-monitoring context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive umh-rate-monitoring |

| | |
|------------|-------------------------------------|
| Tree | umh-rate-monitoring |
| Introduced | 21.5.R1 |
| Platforms | All |

revertive-timer *number*

| | |
|------------|--|
| Synopsis | Time until switch to primary PMSI after recovering rate |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive umh-rate-monitoring revertive-timer <i>number</i> |
| Tree | revertive-timer |
| Range | 0 to 3600 |
| Introduced | 21.5.R1 |
| Platforms | All |

traffic-rate-delta *number*

| | |
|------------|---|
| Synopsis | Rate delta between PMSIs under which traffic switches |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive umh-rate-monitoring traffic-rate-delta <i>number</i> |
| Tree | traffic-rate-delta |
| Range | 0 to 4294967294 |
| Introduced | 21.5.R1 |
| Platforms | All |

wildcard-spmsi *boolean*

| | |
|------------|--|
| Synopsis | Enable RFC 6625 S-PMSI functionality for NG-MVPN |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel inclusive wildcard-spmsi <i>boolean</i> |
| Tree | wildcard-spmsi |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

selective

| | |
|----------|------------------------------------|
| Synopsis | Enter the selective context |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective |
| Tree | selective |
| Introduced | 19.5.R1 |
| Platforms | All |

asm-mdt *boolean*

| | |
|------------|--|
| Synopsis | Enable Data MDT with PIM-ASM mode on receiver PE node |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective asm-mdt <i>boolean</i> |
| Tree | asm-mdt |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

auto-discovery *boolean*

| | |
|------------|---|
| Synopsis | Enable C-trees to P-tunnel binding auto-discovery |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective auto-discovery <i>boolean</i> |
| Tree | auto-discovery |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

bier

| | |
|------------|---|
| Synopsis | Enable the bier context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective bier |
| Tree | bier |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|------------------------------|
| Synopsis | Administrative state of BIER |
|----------|------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective bier admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

sub-domain *number*

| | |
|------------|---|
| Synopsis | Sub-domain used to attach the BIER provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective bier sub-domain <i>number</i> |
| Tree | sub-domain |
| Range | 0 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

data-delay-interval *number*

| | |
|------------|---|
| Synopsis | Interval a PE switches from inclusive to selective |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective data-delay-interval <i>number</i> |
| Tree | data-delay-interval |
| Range | 3 to 180 |
| Default | 3 |
| Introduced | 19.5.R1 |
| Platforms | All |

data-threshold

| | |
|------------|--|
| Synopsis | Enter the data-threshold context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective data-threshold |
| Tree | data-threshold |
| Introduced | 19.5.R1 |
| Platforms | All |

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Enter the group-prefix list instance |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Introduced | 19.5.R1 |
| Platforms | All |

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | IPv4 or IPv6 multicast group address and prefix |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

pe-threshold-add *number*

| | |
|------------|--|
| Synopsis | PE add threshold |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-add <i>number</i> |
| Tree | pe-threshold-add |
| Range | 1 to 65535 |
| Default | 65535 |
| Introduced | 19.5.R1 |
| Platforms | All |

pe-threshold-delete *number*

| | |
|----------|---|
| Synopsis | PE delete threshold |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) pe-threshold-delete <i>number</i> |
| Tree | pe-threshold-delete |
| Range | 2 to 65535 |

| | |
|------------|---------|
| Default | 65535 |
| Introduced | 19.5.R1 |
| Platforms | All |

threshold *number*

| | |
|------------|---|
| Synopsis | S-PMSI threshold |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective data-threshold group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold <i>number</i> |
| Tree | threshold |
| Range | 0 to 4294967294 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 19.5.R1 |
| Platforms | All |

join-tlv-packing *boolean*

| | |
|------------|---|
| Synopsis | Enable packing of MDT join TLVs into a single PDU |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective join-tlv-packing <i>boolean</i> |
| Tree | join-tlv-packing |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

mldp

| | |
|------------|--|
| Synopsis | Enable the mldp context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective mldp |
| Tree | mldp |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of MLDP LSP use for tunnels |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective mldp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

maximum-p2mp-spmsi *number*

| | |
|------------|---|
| Synopsis | Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective mldp maximum-p2mp-spmsi <i>number</i> |
| Tree | maximum-p2mp-spmsi |
| Range | 1 to 4000 |
| Default | 10 |
| Introduced | 19.5.R1 |
| Platforms | All |

multistream-spmsi [[multistream-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the multistream-spmsi list instance |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> |
| Tree | multistream-spmsi |
| Introduced | 19.5.R1 |
| Platforms | All |

[[multistream-id](#)] *number*

| | |
|----------|---|
| Synopsis | Multistream spmsi id |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> |
| Tree | multistream-spmsi |
| Range | 1 to 1024 |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of multi-stream S-PMSI |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i>
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

group-prefix [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [source-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Add a list entry for group-prefix |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i>
group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Introduced | 19.5.R1 |
| Platforms | All |

[ip-group-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | IPv4 or IPv6 multicast group address and prefix |
| Context | configure service vpn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i>
group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

source-prefix (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | IPv4 or IPv6 unicast source address and prefix |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

lsp-template *reference*

| | |
|------------|--|
| Synopsis | RSVP-TE LSP template for S-PMSI |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> lsp-template <i>reference</i> |
| Tree | lsp-template |
| Reference | configure router <i>string</i> mpls lsp-template <i>string</i> |
| Notes | The following elements are part of a choice: lsp-template , p2mp-sr , or pim . |
| Introduced | 19.5.R1 |
| Platforms | All |

p2mp-sr

| | |
|------------|--|
| Synopsis | Enter the p2mp-sr context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> p2mp-sr |
| Tree | p2mp-sr |
| Notes | The following elements are part of a choice: lsp-template , p2mp-sr , or pim . |
| Introduced | 21.5.R1 |
| Platforms | All |

p2mp-policy *boolean*

| | |
|----------|---|
| Synopsis | Use P2MP policy for selective MVPN provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> p2mp-sr p2mp-policy <i>boolean</i> |
| Tree | p2mp-policy |

| | |
|------------|---------|
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | All |

static-policy *reference*

| | |
|------------|---|
| Synopsis | P2MP static policy for inclusive MVPN provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> p2mp-sr static-policy <i>reference</i> |
| Tree | static-policy |
| Reference | configure router <i>string</i> p2mp-sr-tree p2mp-policy <i>string</i> |
| Introduced | 21.5.R1 |
| Platforms | All |

pim

| | |
|------------|--|
| Synopsis | Enable the pim context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> pim |
| Tree | pim |
| Notes | The following elements are part of a choice: lsp-template , p2mp-sr , or pim . |
| Introduced | 19.5.R1 |
| Platforms | All |

group-address *string*

| | |
|------------|--|
| Synopsis | Group address of the data MDT |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective multistream-spmsi <i>number</i> pim group-address <i>string</i> |
| Tree | group-address |
| Introduced | 19.5.R1 |
| Platforms | All |

mode *keyword*

| | |
|----------|--|
| Synopsis | PIM mode for the selective provider tunnel |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> <i>mvpn provider-tunnel selective multistream-spmsi number pim mode keyword</i> |
| Tree | mode |
| Options | asm, ssm |
| Introduced | 19.5.R1 |
| Platforms | All |

p2mp-sr

| | |
|------------|---|
| Synopsis | Enable the p2mp-sr context |
| Context | configure service vprn <i>string</i> <i>mvpn provider-tunnel selective p2mp-sr</i> |
| Tree | p2mp-sr |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 21.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of P2MP SR |
| Context | configure service vprn <i>string</i> <i>mvpn provider-tunnel selective p2mp-sr admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | All |

p2mp-policy *boolean*

| | |
|------------|---|
| Synopsis | Use P2MP policy for selective MVPN provider tunnel |
| Context | configure service vprn <i>string</i> <i>mvpn provider-tunnel selective p2mp-sr p2mp-policy boolean</i> |
| Tree | p2mp-policy |
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | All |

static-policy *reference*

| | |
|------------|--|
| Synopsis | Static policy for selective MVPN provider tunnel |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective p2mp-sr static-policy reference |
| Tree | static-policy |
| Reference | configure router <i>string</i> p2mp-sr-tree p2mp-policy string |
| Introduced | 21.5.R1 |
| Platforms | All |

pim

| | |
|------------|---|
| Synopsis | Enable the pim context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective pim |
| Tree | pim |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

group-prefix *string*

| | |
|------------|--|
| Synopsis | Multicast group address and netmask length |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective pim group-prefix string |
| Tree | group-prefix |
| Notes | This element is mandatory. |
| Introduced | 19.5.R1 |
| Platforms | All |

mode *keyword*

| | |
|----------|---|
| Synopsis | PIM mode. |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective pim mode keyword |
| Tree | mode |
| Options | asm, ssm |
| Notes | This element is mandatory. |

| | |
|------------|---------|
| Introduced | 19.5.R1 |
| Platforms | All |

rsvp

| | |
|------------|---|
| Synopsis | Enable the rsvp context |
| Context | configure service vprn string mvpn provider-tunnel selective rsvp |
| Tree | rsvp |
| Notes | The following elements are part of a choice: bier , mldp , p2mp-sr , pim , or rsvp . |
| Introduced | 19.5.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of RSVP use for provider tunnels |
| Context | configure service vprn string mvpn provider-tunnel selective rsvp admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.5.R1 |
| Platforms | All |

lsp-template reference

| | |
|------------|---|
| Synopsis | P2MP LSP created as the selective provider tunnel |
| Context | configure service vprn string mvpn provider-tunnel selective rsvp lsp-template reference |
| Tree | lsp-template |
| Reference | configure router string mpls lsp-template string |
| Introduced | 19.5.R1 |
| Platforms | All |

maximum-p2mp-spmsi number

| | |
|----------|--|
| Synopsis | Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective rsvp maximum-p2mp-spmsi <i>number</i> |
| Tree | maximum-p2mp-spmsi |
| Range | 1 to 4000 |
| Default | 10 |
| Introduced | 19.5.R1 |
| Platforms | All |

umh-rate-monitoring

| | |
|------------|---|
| Synopsis | Enter the umh-rate-monitoring context |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring |
| Tree | umh-rate-monitoring |
| Introduced | 21.5.R1 |
| Platforms | All |

group [group-ip-address] (*ipv4-prefix* | *ipv6-prefix*) **source** (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Enter the group list instance |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group |
| Introduced | 21.5.R1 |
| Platforms | All |

[group-ip-address] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Group IP address |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | All |

source (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Source IP address |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | All |

revertive-timer *number*

| | |
|------------|---|
| Synopsis | Time until switch to primary PMSI after recovering rate |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) revertive-timer <i>number</i> |
| Tree | revertive-timer |
| Range | 0 to 3600 |
| Introduced | 21.5.R1 |
| Platforms | All |

traffic-rate-delta *number*

| | |
|------------|--|
| Synopsis | Rate delta between PMSIs under which traffic switches |
| Context | configure service vprn <i>string</i> mvpn provider-tunnel selective umh-rate-monitoring group (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) source (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) traffic-rate-delta <i>number</i> |
| Tree | traffic-rate-delta |
| Range | 0 to 4294967294 |
| Introduced | 21.5.R1 |
| Platforms | All |

redundant-source-list

| | |
|------------|---|
| Synopsis | Enter the redundant-source-list context |
| Context | configure service vprn <i>string</i> mvpn redundant-source-list |
| Tree | redundant-source-list |
| Introduced | 19.5.R1 |
| Platforms | All |

source-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|----------------|---|
| Synopsis | Add a list entry for source-prefix |
| Context | configure service vpn <i>string</i> mvpn redundant-source-list source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | source-prefix |
| Max. Instances | 16 |
| Introduced | 19.5.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Unicast address prefix and mask |
| Context | configure service vpn <i>string</i> mvpn redundant-source-list source-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | source-prefix |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

rpf-select

| | |
|------------|--|
| Synopsis | Enter the rpf-select context |
| Context | configure service vpn <i>string</i> mvpn rpf-select |
| Tree | rpf-select |
| Introduced | 19.5.R1 |
| Platforms | All |

core-mvpn [[core-mvpn-service-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the core-mvpn list instance |
| Context | configure service vpn <i>string</i> mvpn rpf-select core-mvpn <i>reference</i> |
| Tree | core-mvpn |
| Introduced | 19.5.R1 |
| Platforms | All |

[core-mvpn-service-name] reference

| | |
|------------|--|
| Synopsis | Core MVPN service name |
| Context | configure service vprn <i>string</i> <i>mvpn rpf-select core-mvpn reference</i> |
| Tree | core-mvpn |
| Reference | configure service vprn <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

group-prefix [ip-group-prefix] string

| | |
|----------------|---|
| Synopsis | Enter the group-prefix list instance |
| Context | configure service vprn <i>string</i> <i>mvpn rpf-select core-mvpn reference</i> group-prefix <i>string</i> |
| Tree | group-prefix |
| Min. Instances | 1 |
| Introduced | 19.5.R1 |
| Platforms | All |

[ip-group-prefix] string

| | |
|------------|---|
| Synopsis | IPv4 multicast address prefix and mask |
| Context | configure service vprn <i>string</i> <i>mvpn rpf-select core-mvpn reference</i> group-prefix <i>string</i> |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

starg boolean**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|-------------|
| Synopsis | Starg flag. |
|----------|-------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> mvpn rpf-select core-mvpn <i>reference</i> group-prefix <i>string</i>
starg <i>boolean</i> |
| Tree | starg |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

umh-pe-backup

| | |
|------------|---|
| Synopsis | Enter the umh-pe-backup context |
| Context | configure service vprn <i>string</i> mvpn umh-pe-backup |
| Tree | umh-pe-backup |
| Introduced | 19.5.R1 |
| Platforms | All |

umh-pe [*ip-address*] *string*

| | |
|------------|--|
| Synopsis | Enter the umh-pe list instance |
| Context | configure service vprn <i>string</i> mvpn umh-pe-backup umh-pe <i>string</i> |
| Tree | umh-pe |
| Introduced | 19.5.R1 |
| Platforms | All |

[*ip-address*] *string*

| | |
|------------|--|
| Synopsis | IP address for the standby PE |
| Context | configure service vprn <i>string</i> mvpn umh-pe-backup umh-pe <i>string</i> |
| Tree | umh-pe |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

standby *string*

| | |
|----------|---------------------|
| Synopsis | <i>ip-address</i> . |
|----------|---------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> mvpn umh-pe-backup umh-pe <i>string</i> standby <i>string</i> |
| Tree | standby |
| Notes | This element is mandatory. |
| Introduced | 19.5.R1 |
| Platforms | All |

umh-selection *keyword*

| | |
|------------|--|
| Synopsis | UMH selection mechanism |
| Context | configure service vprn <i>string</i> mvpn umh-selection <i>keyword</i> |
| Tree | umh-selection |
| Default | highest-ip |
| Options | highest-ip, hash-based, tunnel-status, unicast-rt-pref |
| Introduced | 19.5.R1 |
| Platforms | All |

vrf-export

| | |
|------------|--|
| Synopsis | Enter the vrf-export context |
| Context | configure service vprn <i>string</i> mvpn vrf-export |
| Tree | vrf-export |
| Introduced | 19.5.R1 |
| Platforms | All |

policy (*policy-expr-string* | *string*)

| | |
|----------------|---|
| Synopsis | Route policy name |
| Context | configure service vprn <i>string</i> mvpn vrf-export policy (<i>policy-expr-string</i> <i>string</i>) |
| Tree | policy |
| Description | This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes. |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |

| | |
|------------|--|
| Notes | The following elements are part of a choice: policy or unicast .
This element is ordered by the user. |
| Introduced | 19.5.R1 |
| Platforms | All |

unicast *boolean*

| | |
|------------|--|
| Synopsis | Enable the unicast VRF export policy for the MVPN |
| Context | configure <i>service vprn string mvpn vrf-export unicast boolean</i> |
| Tree | <i>unicast</i> |
| Default | false |
| Notes | The following elements are part of a choice: policy or unicast . |
| Introduced | 19.5.R1 |
| Platforms | All |

vrf-import

| | |
|------------|---|
| Synopsis | Enter the vrf-import context |
| Context | configure <i>service vprn string mvpn vrf-import</i> |
| Tree | <i>vrf-import</i> |
| Introduced | 19.5.R1 |
| Platforms | All |

policy (*policy-expr-string | string*)

| | |
|----------------|---|
| Synopsis | Route policy name |
| Context | configure <i>service vprn string mvpn vrf-import policy (policy-expr-string string)</i> |
| Tree | <i>policy</i> |
| Description | This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes. |
| String Length | 1 to 255 |
| Max. Instances | 15 |
| Min. Instances | 1 |
| Notes | The following elements are part of a choice: policy or unicast . |

This element is ordered by the user.

Introduced 19.5.R1
Platforms All

unicast *boolean*

Synopsis Enable the unicast VRF import policy for the MVPN
Context **configure** *service vprn string mvpn vrf-import unicast boolean*
Tree *unicast*
Default false
Notes The following elements are part of a choice: **policy** or **unicast**.
Introduced 19.5.R1
Platforms All

vrf-target

Synopsis Enter the **vrf-target** context
Context **configure** *service vprn string mvpn vrf-target*
Tree *vrf-target*
Introduced 19.5.R1
Platforms All

community *string*

Synopsis Extended community name for the MVPN
Context **configure** *service vprn string mvpn vrf-target community string*
Tree *community*
String Length 10 to 28
Introduced 19.5.R1
Platforms All

export

Synopsis Enter the **export** context
Context **configure** *service vprn string mvpn vrf-target export*

| | |
|------------|------------------------|
| Tree | export |
| Introduced | 19.5.R1 |
| Platforms | All |

community *string*

| | |
|---------------|--|
| Synopsis | Extended community name for the MVPN |
| Context | configure service vprn <i>string</i> mvpn vrf-target export community <i>string</i> |
| Tree | community |
| String Length | 10 to 28 |
| Introduced | 19.5.R1 |
| Platforms | All |

unicast *boolean*

| | |
|------------|---|
| Synopsis | Enable the unicast vrf-target for the MVPN |
| Context | configure service vprn <i>string</i> mvpn vrf-target export unicast <i>boolean</i> |
| Tree | unicast |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

import

| | |
|------------|--|
| Synopsis | Enter the import context |
| Context | configure service vprn <i>string</i> mvpn vrf-target import |
| Tree | import |
| Introduced | 19.5.R1 |
| Platforms | All |

community *string*

| | |
|----------|--|
| Synopsis | Extended community name for the MVPN |
| Context | configure service vprn <i>string</i> mvpn vrf-target import community <i>string</i> |
| Tree | community |

String Length 10 to 28
 Introduced 19.5.R1
 Platforms All

unicast *boolean*

Synopsis Enable the unicast vrf-target for the MVPN
 Context **configure** [service vprn](#) *string* [mvpn vrf-target import unicast](#) *boolean*
 Tree [unicast](#)
 Default false
 Introduced 19.5.R1
 Platforms All

unicast *boolean*

Synopsis Enable unicast vrf-target for the MVPN
 Context **configure** [service vprn](#) *string* [mvpn vrf-target unicast](#) *boolean*
 Tree [unicast](#)
 Default false
 Introduced 19.5.R1
 Platforms All

nat

Synopsis Enable the **nat** context
 Context **configure** [service vprn](#) *string* [nat](#)
 Tree [nat](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

inside

Synopsis Enter the **inside** context
 Context **configure** [service vprn](#) *string* [nat inside](#)
 Tree [inside](#)

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

I2-aware

Synopsis Enter the **I2-aware** context
 Context **configure service vprn string nat inside I2-aware**
 Tree [I2-aware](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

force-unique-ip-addresses boolean

Synopsis Enforce unique IPv4 addresses for L2-aware subscribers
 Context **configure service vprn string nat inside I2-aware force-unique-ip-addresses boolean**
 Tree [force-unique-ip-addresses](#)
 Description When configured to **true**, the system enforces the uniqueness of IPv4 addresses of L2-aware subscribers in an inside routing context.
 This functionality is required if multicast sourced from the inside routing context is enabled for L2-aware subscribers.
 Default false
 Introduced 23.3.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscribers [prefix] string

Synopsis Add a list entry for **subscribers**
 Context **configure service vprn string nat inside I2-aware subscribers string**
 Tree [subscribers](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[prefix] string

Synopsis Layer-2 Aware NAT subscriber prefix
 Context **configure service vprn string nat inside I2-aware subscribers string**

| | |
|------------|--|
| Tree | subscribers |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

large-scale

| | |
|------------|---|
| Synopsis | Enter the large-scale context |
| Context | configure service vprn string nat inside large-scale |
| Tree | large-scale |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dnat-only

| | |
|------------|---|
| Synopsis | Enter the dnat-only context |
| Context | configure service vprn string nat inside large-scale dnat-only |
| Tree | dnat-only |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

source-prefix-list *reference*

| | |
|------------|--|
| Synopsis | NAT prefix list that contains source IP addresses |
| Context | configure service vprn string nat inside large-scale dnat-only source-prefix-list reference |
| Tree | source-prefix-list |
| Reference | configure service nat prefix-list string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dual-stack-lite

| | |
|----------|---|
| Synopsis | Enter the dual-stack-lite context |
| Context | configure service vprn string nat inside large-scale dual-stack-lite |

| | |
|------------|--|
| Tree | dual-stack-lite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of Dual Stack Lite |
| Context | configure service vprn <i>string</i> nat inside large-scale dual-stack-lite admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

deterministic

| | |
|------------|---|
| Synopsis | Enter the deterministic context |
| Context | configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic |
| Tree | deterministic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix-map [[source-prefix](#)] *string nat-policy reference*

| | |
|------------|---|
| Synopsis | Enter the prefix-map list instance |
| Context | configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string nat-policy reference</i> |
| Tree | prefix-map |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[source-prefix] *string*

| | |
|----------|---|
| Synopsis | List containing source IP addresses on the private side |
| Context | configure service vprn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string nat-policy reference</i> |

| | |
|------------|--|
| Tree | prefix-map |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-policy *reference*

| | |
|------------|--|
| Synopsis | NAT policy |
| Context | configure service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference |
| Tree | prefix-map |
| Reference | configure service nat nat-policy string |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the prefix |
| Context | configure service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

map [[from](#)] *string to string*

| | |
|------------|---|
| Synopsis | Enter the map list instance |
| Context | configure service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string |
| Tree | map |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[from] *string*

| | |
|------------|--|
| Synopsis | Beginning of the range for IPv6 addresses |
| Context | configure service vpn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string</i> nat-policy reference map <i>string</i> to <i>string</i> |
| Tree | map |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

to *string*

| | |
|------------|--|
| Synopsis | End of the range for IPv6 addresses |
| Context | configure service vpn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string</i> nat-policy reference map <i>string</i> to <i>string</i> |
| Tree | map |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

first-outside-address *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Outside IP address mapped to inside IP address range |
| Context | configure service vpn <i>string</i> nat inside large-scale dual-stack-lite deterministic prefix-map <i>string</i> nat-policy reference map <i>string</i> to <i>string</i> first-outside-address <i>string</i> |
| Tree | first-outside-address |
| Notes | This element is mandatory. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

endpoint [[address](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the endpoint list instance |
|----------|---|

| | |
|----------------|--|
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint string</i> |
| Tree | endpoint |
| Max. Instances | 128 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[address] *string*

| | |
|------------|--|
| Synopsis | Dual Stack Lite IPv6 address |
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint string</i> |
| Tree | endpoint |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-fragmentation *keyword*

| | |
|------------|---|
| Synopsis | Fragmentation control of the AFTR originated downstream IPv6 traffic |
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint string ip-fragmentation keyword</i> |
| Tree | ip-fragmentation |
| Options | fragment-ipv6, fragment-ipv6-unless-ipv4-df-set |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

min-first-fragment-size-rx *number*

| | |
|-------------|---|
| Synopsis | Minimum MTU size for upstream packets |
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint string min-first-fragment-size-rx number</i> |
| Tree | min-first-fragment-size-rx |
| Description | This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If |

a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.

| | |
|------------|--|
| Range | 512 to 1280 |
| Default | 1280 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

reassemble *boolean*

| | |
|------------|---|
| Synopsis | Reassembly of IPv6 payload datagrams |
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint</i> <i>string reassemble</i> <i>boolean</i> |
| Tree | reassemble |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel-mtu *number*

| | |
|-------------|--|
| Synopsis | DS-Lite tunnel MTU for this address |
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite endpoint</i> <i>string tunnel-mtu</i> <i>number</i> |
| Tree | tunnel-mtu |
| Description | This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address. |
| Range | 464 to 9212 |
| Default | 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|----------|---|
| Synopsis | Largest value for all subscriber limits in each deterministic pool |
| Context | configure service vprn <i>string nat inside large-scale dual-stack-lite max-subscriber-limit</i> <i>number</i> |

| | |
|------------|--|
| Tree | max-subscriber-limit |
| Range | 1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber-prefix-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|---|
| Synopsis | IPv6 prefix length of the Dual Stack Lite subscribers |
| Context | configure service vprn <i>string</i> nat inside large-scale dual-stack-lite subscriber-prefix-length <i>number</i> |
| Tree | subscriber-prefix-length |
| Range | 32 to 64 128 |
| Default | 128 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filters

| | |
|------------|--|
| Synopsis | Enter the filters context |
| Context | configure service vprn <i>string</i> nat inside large-scale filters |
| Tree | filters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

downstream

| | |
|------------|---|
| Synopsis | Enter the downstream context |
| Context | configure service vprn <i>string</i> nat inside large-scale filters downstream |
| Tree | downstream |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 reference

Synopsis IPv4 filter policy name
 Context **configure** [service vprn](#) *string* [nat](#) [inside large-scale filters downstream ipv4](#) *reference*
 Tree [ipv4](#)
 Reference **configure** [filter ip-filter](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy reference



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy for LSN
 Context **configure** [service vprn](#) *string* [nat](#) [inside large-scale nat-policy](#) *reference*
 Tree [nat-policy](#)
 Reference **configure** [service nat nat-policy](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat44

Synopsis Enter the **nat44** context
 Context **configure** [service vprn](#) *string* [nat](#) [inside large-scale nat44](#)
 Tree [nat44](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

destination-prefix [[ip-prefix-length](#)] *string*

Synopsis Enter the **destination-prefix** list instance
 Context **configure** [service vprn](#) *string* [nat](#) [inside large-scale nat44 destination-prefix](#) *string*
 Tree [destination-prefix](#)

| | |
|----------------|--|
| Max. Instances | 6144 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[ip-prefix-length] *string*

| | |
|------------|---|
| Synopsis | Traffic sent to destinations within this prefix will be NATed |
| Context | configure service vpn <i>string nat inside large-scale nat44 destination-prefix string</i> |
| Tree | destination-prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-policy *reference*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | NAT policy |
| Context | configure service vpn <i>string nat inside large-scale nat44 destination-prefix string nat-policy reference</i> |
| Tree | nat-policy |
| Reference | configure service nat <i>nat-policy string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

deterministic

| | |
|------------|---|
| Synopsis | Enter the deterministic context |
| Context | configure service vpn <i>string nat inside large-scale nat44 deterministic</i> |
| Tree | deterministic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix-map [[source-prefix](#)] *string nat-policy reference*

| | |
|------------|---|
| Synopsis | Enter the prefix-map list instance |
| Context | configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i> |
| Tree | prefix-map |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[source-prefix] *string*

| | |
|------------|---|
| Synopsis | Traffic sent from sources within this prefix will be NATed |
| Context | configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i> |
| Tree | prefix-map |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-policy *reference*

| | |
|------------|---|
| Synopsis | NAT policy |
| Context | configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i> |
| Tree | prefix-map |
| Reference | configure service nat <i>nat-policy string</i> |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the prefix |
| Context | configure service vprn <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|--|
| Options | enable, disable |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

map [**from**] *string to string*

| | |
|------------|---|
| Synopsis | Enter the map list instance |
| Context | configure service vprn string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string |
| Tree | map |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[from] *string*

| | |
|------------|---|
| Synopsis | Beginning of the range for IPv4 addresses |
| Context | configure service vprn string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string |
| Tree | map |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

to *string*

| | |
|------------|---|
| Synopsis | End of the range for IPv4 addresses |
| Context | configure service vprn string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string |
| Tree | map |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

first-outside-address *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Outside IP address mapped to inside IP address range |
| Context | configure service vpn <i>string</i> nat inside large-scale nat44 deterministic prefix-map <i>string</i> nat-policy reference map <i>string to string</i> first-outside-address <i>string</i> |
| Tree | first-outside-address |
| Notes | This element is mandatory. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-subscriber-limit *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | Largest value for all subscriber limits in each deterministic pool |
| Context | configure service vpn <i>string</i> nat inside large-scale nat44 max-subscriber-limit <i>number</i> |
| Tree | max-subscriber-limit |
| Range | 1 2 4 8 16 32 64 128 256 512 1024 2048 4096 8192 16384 32768 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-import *reference*

| | |
|-------------|--|
| Synopsis | Import BGP-VPN routes in NAT inside routing context |
| Context | configure service vpn <i>string</i> nat inside large-scale nat44 nat-import <i>reference</i> |
| Tree | nat-import |
| Description | <p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> |

All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.

| | |
|----------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat64

| | |
|------------|---|
| Synopsis | Enable the nat64 context |
| Context | configure service vpn <i>string</i> nat inside large-scale nat64 |
| Tree | nat64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of NAT64 |
| Context | configure service vpn <i>string</i> nat inside large-scale nat64 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

drop-zero-ipv4-checksum *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Drop UDP datagrams with zero IPv4 checksum |
| Context | configure service vpn <i>string</i> nat inside large-scale nat64 drop-zero-ipv4-checksum <i>boolean</i> |
| Tree | drop-zero-ipv4-checksum |

| | |
|------------|--|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

insert-ipv6-fragment-header *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Include IPv6 fragment header to indicate that the sender allows fragmentation |
| Context | configure service vprn <i>string</i> nat inside large-scale nat64 insert-ipv6-fragment-header <i>boolean</i> |
| Tree | insert-ipv6-fragment-header |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-fragmentation *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Control fragmentation of originated downstream IPv6 traffic |
| Context | configure service vprn <i>string</i> nat inside large-scale nat64 ip-fragmentation <i>keyword</i> |
| Tree | ip-fragmentation |
| Options | fragment-ipv6, fragment-ipv6-unless-ipv4-df-set |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6-mtu *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Size of the IPv6 downstream packet in NAT64 |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string nat inside large-scale nat64 ipv6-mtu number</i> |
| Tree | ipv6-mtu |
| Range | 1280 to 9212 |
| Default | 1520 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPv6 prefix to derive the IPv6 address from the IPv4 address |
| Context | configure service vprn <i>string nat inside large-scale nat64 prefix string</i> |
| Tree | prefix |
| Default | 64:ff9b::/96 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber-prefix-length *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|----------|--|
| Synopsis | IPv6 prefix length for the NAT64 subscribers |
| Context | configure service vprn <i>string nat inside large-scale nat64 subscriber-prefix-length number</i> |
| Tree | subscriber-prefix-length |
| Range | 32 to 64 128 |
| Default | 128 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tos



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the tos context |
| Context | configure service vprn string nat inside large-scale nat64 tos |
| Tree | tos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

downstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the downstream context |
| Context | configure service vprn string nat inside large-scale nat64 tos downstream |
| Tree | downstream |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

use-ipv4 *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame |
| Context | configure service vprn string nat inside large-scale nat64 tos downstream use-ipv4 boolean |
| Tree | use-ipv4 |
| Default | false |

| | |
|------------|--|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

upstream



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the upstream context |
| Context | configure service vprn string nat inside large-scale nat64 tos upstream |
| Tree | upstream |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

set-tos (*keyword* | *number*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | TOS/DSCP bits in IPv4 frame in the upstream direction |
| Context | configure service vprn string nat inside large-scale nat64 tos upstream set-tos (<i>keyword</i> <i>number</i>) |
| Tree | set-tos |
| Range | 0 to 255 |
| Default | use-ipv6 |
| Options | use-ipv6 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

redundancy

| | |
|------------|--|
| Synopsis | Enter the redundancy context |
| Context | configure service vprn string nat inside large-scale redundancy |
| Tree | redundancy |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer string

Synopsis IP address of the NAT redundancy peer for this virtual router instance
Context **configure service vprn string nat inside large-scale redundancy peer string**
Tree [peer](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer6 string

Synopsis IPv6 address of the NAT redundancy peer for this virtual router instance
Context **configure service vprn string nat inside large-scale redundancy peer6 string**
Tree [peer6](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

steering-route string

Synopsis IP address and prefix length of the steering route
Context **configure service vprn string nat inside large-scale redundancy steering-route string**
Tree [steering-route](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-identification

Synopsis Enter the **subscriber-identification** context
Context **configure service vprn string nat inside large-scale subscriber-identification**
Tree [subscriber-identification](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of subscriber identification |
| Context | configure service vprn string nat inside large-scale subscriber-identification admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

attribute

| | |
|------------|---|
| Synopsis | Enter the attribute context |
| Context | configure service vprn string nat inside large-scale subscriber-identification attribute |
| Tree | attribute |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | RADIUS attribute used as subscriber identifier |
| Context | configure service vprn string nat inside large-scale subscriber-identification attribute type keyword |
| Tree | type |
| Default | alc-sub-string |
| Options | alc-sub-string, user-name, class, station-id, imsi, imei |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vendor keyword**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | The RADIUS Vendor |
| Context | configure service vprn string nat inside large-scale subscriber-identification attribute vendor keyword |
| Tree | vendor |
| Default | nokia |
| Options | standard, nokia, 3gpp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string nat inside large-scale subscriber-identification description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

drop-unidentified-traffic boolean**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Drop traffic from unidentified flows |
| Context | configure service vprn string nat inside large-scale subscriber-identification drop-unidentified-traffic boolean |
| Tree | drop-unidentified-traffic |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

radius-proxy-server

| | |
|------------|--|
| Synopsis | Enable the radius-proxy-server context |
| Context | configure service vprn <i>string</i> nat inside large-scale subscriber-identification radius-proxy-server |
| Tree | radius-proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Router instance |
| Context | configure service vprn <i>string</i> nat inside large-scale subscriber-identification radius-proxy-server router-instance <i>string</i> |
| Tree | router-instance |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

server *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Server name |
| Context | configure service vprn <i>string</i> nat inside large-scale subscriber-identification radius-proxy-server server <i>string</i> |
| Tree | server |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

map

| | |
|------------|--|
| Synopsis | Enter the map context |
| Context | configure service vprn string nat map |
| Tree | map |
| Introduced | 16.0.R1 |
| Platforms | VSR |

map-domain [domain-name] reference

| | |
|------------|---|
| Synopsis | Add a list entry for map-domain |
| Context | configure service vprn string nat map map-domain reference |
| Tree | map-domain |
| Introduced | 16.0.R1 |
| Platforms | VSR |

[domain-name] reference

| | |
|------------|---|
| Synopsis | MAP domain template name |
| Context | configure service vprn string nat map map-domain reference |
| Tree | map-domain |
| Reference | configure service nat map-t domain string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | VSR |

outside

| | |
|------------|--|
| Synopsis | Enter the outside context |
| Context | configure service vprn string nat outside |
| Tree | outside |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dnat-only

| | |
|------------|--|
| Synopsis | Enter the dnat-only context |
| Context | configure service vprn string nat outside dnat-only |
| Tree | dnat-only |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

route-limit *number*

| | |
|------------|---|
| Synopsis | Number that is used to limit internal routes for downstream traffic |
| Context | configure service vprn string nat outside dnat-only route-limit number |
| Tree | route-limit |
| Range | 1 to 131072 |
| Default | 32768 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

filters

| | |
|------------|--|
| Synopsis | Enter the filters context |
| Context | configure service vprn string nat outside filters |
| Tree | filters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

downstream

| | |
|------------|---|
| Synopsis | Enter the downstream context |
| Context | configure service vprn string nat outside filters downstream |
| Tree | downstream |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4 reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> nat outside filters downstream ipv4 <i>reference</i> |
| Tree | ipv4 |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string</i> nat outside filters downstream ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

upstream

| | |
|------------|--|
| Synopsis | Enter the upstream context |
| Context | configure service vprn <i>string</i> nat outside filters upstream |
| Tree | upstream |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4 reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> nat outside filters upstream ipv4 <i>reference</i> |
| Tree | ipv4 |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6 reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn string nat outside filters upstream ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter string |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mtu number

| | |
|------------|---|
| Synopsis | MTU for downstream traffic |
| Context | configure service vprn string nat outside mtu number |
| Tree | mtu |
| Range | 512 to 9000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool [name] string

| | |
|----------------|--|
| Synopsis | Enter the pool list instance |
| Context | configure service vprn string nat outside pool string |
| Tree | pool |
| Max. Instances | 4096 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] string

| | |
|---------------|--|
| Synopsis | NAT pool name |
| Context | configure service vprn string nat outside pool string |
| Tree | pool |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-pooling *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Outside IP address allocation mode for a NAT subscriber |
| Context | configure service vprn string nat outside pool string address-pooling keyword |
| Tree | address-pooling |
| Description | <p>This command configures address pooling which defines a relationship between the NAT subscriber and its outside IP address(es).</p> <p>The behavior in NAT, as defined in RFC 7857, strongly recommends that the NAT subscribers be mapped to a single outside IP address. If this outside IP address runs out of ports, no new ports for the subscriber are allocated. This behavior is called paired address pooling.</p> <p>The alternative behavior is arbitrary address pooling, where a NAT subscriber is mapped to multiple IP addresses when the current outside IP address runs out of ports. This way, the subscriber becomes associated with multiple outside IP addresses. While this results in better resource utilization in NAT, it may negatively affect the behavior of some applications.</p> |
| Default | paired |
| Options | paired, arbitrary |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address-range [*start*] *string end string*

| | |
|----------------|--|
| Synopsis | Enter the address-range list instance |
| Context | configure service vprn string nat outside pool string address-range string end string |
| Tree | address-range |
| Max. Instances | 4096 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[start] string

| | |
|------------|--|
| Synopsis | Lower bound of the NAT address range |
| Context | configure service vprn string nat outside pool string address-range string end string |
| Tree | address-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

end string

| | |
|------------|--|
| Synopsis | Upper bound of the NAT address range |
| Context | configure service vprn string nat outside pool string address-range string end string |
| Tree | address-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string nat outside pool string address-range string end string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

drain boolean

| | |
|------------|--|
| Synopsis | Start or stop draining this NAT address range |
| Context | configure service vprn string nat outside pool string address-range string end string drain boolean |
| Tree | drain |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the outside routing NAT pool
 Context **configure service vpn** *string nat outside pool string admin-state keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

applications

Synopsis Enter the **applications** context
 Context **configure service vpn** *string nat outside pool string applications*
 Tree [applications](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

agnostic *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis NAT pool to create in the outside routing context
 Context **configure service vpn** *string nat outside pool string applications agnostic boolean*
 Tree [agnostic](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string nat outside pool string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

icmp-echo-reply boolean

| | |
|-------------|---|
| Synopsis | Allow NAT pool IP addresses to respond to ICMP PINGs |
| Context | configure service vprn string nat outside pool string icmp-echo-reply boolean |
| Tree | icmp-echo-reply |
| Description | <p>This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.</p> <p>In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.</p> <p>In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.</p> <p>In LSN, the reply from an outside IP address is generated regardless if a binding is present.</p> |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-aware

| | |
|------------|---|
| Synopsis | Enter the I2-aware context |
| Context | configure service vprn string nat outside pool string I2-aware |
| Tree | I2-aware |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-host

| | |
|----------|--|
| Synopsis | Enable the default-host context |
|----------|--|

| | |
|-------------|--|
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> l2-aware default-host |
| Tree | default-host |
| Description | <p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p> |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inside-router-instance *string*

| | |
|-------------|--|
| Synopsis | Router instance of the DMZ |
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> l2-aware default-host inside-router-instance <i>string</i> |
| Tree | inside-router-instance |
| Description | This command configures the router instance on the inside where the default DMZ host resides. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-address *string*

| | |
|-------------|---|
| Synopsis | IP address of the default DMZ host |
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> l2-aware default-host ip-address <i>string</i> |
| Tree | ip-address |
| Description | This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rate-limit *number*

| | |
|-------------|--|
| Synopsis | Rate limit for unknown traffic sent to default DMZ host |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> l2-aware default-host rate-limit <i>number</i> |
| Tree | rate-limit |
| Description | This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM. |
| Range | 1 to 10000 |
| Default | 10 |
| Units | megabps |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

external-assignment *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | External IP address for Layer-2-aware |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> l2-aware external-assignment <i>boolean</i> |
| Tree | external-assignment |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-block-extension



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable the port-block-extension context |
| Context | configure service vprn string nat outside pool string l2-aware port-block-extension |
| Tree | port-block-extension |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Number of ports per dynamic port-block |
| Context | configure service vprn string nat outside pool string l2-aware port-block-extension ports number |
| Tree | ports |
| Description | <p>For Carrier Grade NAT (CGN), this command represents the size of all port blocks for NAT subscribes in the NAT pool.</p> <p>For L2-Aware NAT, this command represents only the size of the initial port block of a subscriber in the L2-aware NAT pool. Additional port-blocks (extended port blocks) for the L2-Aware subscriber must be explicitly enabled under the l2-aware port-block-extension hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port-blocks.</p> |
| Range | 10 to 5000 |
| Notes | This element is mandatory. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber

| | |
|----------|---|
| Synopsis | Enter the subscriber context |
| Context | configure service vprn string nat outside pool string l2-aware port-block-extension subscriber |

| | |
|------------|--|
| Tree | subscriber |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|-------------|---|
| Synopsis | Enable the watermarks context |
| Context | configure service vpn string nat outside pool string l2-aware port-block-extension subscriber watermarks |
| Tree | watermarks |
| Description | This command configures watermarks for NAT resources. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high number

| | |
|-------------|---|
| Synopsis | High watermark percentage |
| Context | configure service vpn string nat outside pool string l2-aware port-block-extension subscriber watermarks high number |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service vpn string nat outside pool string l2-aware port-block-extension subscriber watermarks low number |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |

| | |
|------------|--|
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber-limit *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Number of L2-Aware NAT subscribers per outside address |
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> l2-aware port-block-extension subscriber-limit <i>number</i> |
| Tree | subscriber-limit |
| Description | <p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none"> • well-known port (this is a fixed and permanently allocated block of ports for all NAT types) • static port-forwarding range (if enabled by configuration) • port range allocated for initial port blocks of each L2-Aware subscriber • port range allocated for extended port blocks for the remainder after the three previous port ranges <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p> |
| Range | 2 to 2000 |
| Notes | This element is mandatory. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|----------|--------------------------------------|
| Synopsis | Enable the watermarks context |
|----------|--------------------------------------|

| | |
|------------|---|
| Context | configure service vprn string nat outside pool string l2-aware port-block-extension watermarks |
| Tree | watermarks |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high number

| | |
|-------------|---|
| Synopsis | High watermark percentage |
| Context | configure service vprn string nat outside pool string l2-aware port-block-extension watermarks high number |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service vprn string nat outside pool string l2-aware port-block-extension watermarks low number |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

large-scale

| | |
|------------|---|
| Synopsis | Enter the large-scale context |
| Context | configure service vpn string nat outside pool string large-scale |
| Tree | large-scale |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-host

| | |
|-------------|--|
| Synopsis | Enable the default-host context |
| Context | configure service vpn string nat outside pool string large-scale default-host |
| Tree | default-host |
| Description | <p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p> |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inside-router-instance *string*

| | |
|-------------|--|
| Synopsis | Router instance of the DMZ |
| Context | configure service vpn string nat outside pool string large-scale default-host inside-router-instance string |
| Tree | inside-router-instance |
| Description | This command configures the router instance on the inside where the default DMZ host resides. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-address string

| | |
|-------------|---|
| Synopsis | IP address of the default DMZ host |
| Context | configure service vprn string nat outside pool string large-scale default-host ip-address string |
| Tree | ip-address |
| Description | This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rate-limit number

| | |
|-------------|--|
| Synopsis | Rate limit for unknown traffic sent to default DMZ host |
| Context | configure service vprn string nat outside pool string large-scale default-host rate-limit number |
| Tree | rate-limit |
| Description | This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM. |
| Range | 1 to 10000 |
| Default | 10 |
| Units | megabps |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

deterministic

| | |
|------------|--|
| Synopsis | Enter the deterministic context |
| Context | configure service vprn string nat outside pool string large-scale deterministic |
| Tree | deterministic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-reservation *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|---|
| Synopsis | Number of ports per deterministic port-block |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> large-scale deterministic port-reservation <i>number</i> |
| Tree | port-reservation |
| Range | 1 to 65536 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|-------------|--|
| Synopsis | Enable the watermarks context |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> large-scale deterministic watermarks |
| Tree | watermarks |
| Description | <p>Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.</p> <p>High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.</p> <p>For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.</p> |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high *number*

| | |
|----------|--|
| Synopsis | High watermark percentage |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> large-scale deterministic watermarks high <i>number</i> |

| | |
|-------------|---|
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service vprn string nat outside pool string large-scale deterministic watermarks low number |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

redundancy

| | |
|------------|---|
| Synopsis | Enter the redundancy context |
| Context | configure service vprn string nat outside pool string large-scale redundancy |
| Tree | redundancy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|----------|---|
| Synopsis | Administrative state of NAT pool redundancy |
| Context | configure service vprn string nat outside pool string large-scale redundancy admin-state keyword |

| | |
|------------|---|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Notes | The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

export-route *string*

| | |
|------------|---|
| Synopsis | Route to export to the peer |
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> large-scale redundancy export-route <i>string</i> |
| Tree | export-route |
| Notes | The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

follow

| | |
|------------|---|
| Synopsis | Enter the follow context |
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow |
| Tree | follow |
| Notes | The following elements are part of a choice: (admin-state , export-route , and monitor-route) or follow . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | Name of the pool where activity is shared |
| Context | configure service vpn <i>string</i> nat outside pool <i>string</i> large-scale redundancy follow name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance where the lead pool resides
 Context **configure** [service](#) [vpn](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [redundancy](#) [follow](#) [router-instance](#) *string*
 Tree [router-instance](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

monitor-route *string*

Synopsis Monitor the peer route
 Context **configure** [service](#) [vpn](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [redundancy](#) [monitor-route](#) *string*
 Tree [monitor-route](#)
 Notes The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit *number*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum number of subscribers per IP address
 Context **configure** [service](#) [vpn](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [subscriber-limit](#) *number*
 Tree [subscriber-limit](#)
 Range 1 to 65535 | 4294967295
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mode *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|------------|--|
| Synopsis | Mode of operation of this NAT address pool |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> mode <i>keyword</i> |
| Tree | mode |
| Options | auto, napt, one-to-one |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-group *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Create a NAT group |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> nat-group <i>reference</i> |
| Tree | nat-group |
| Reference | configure isa nat-group <i>number</i> |
| Notes | The following elements are part of a mandatory choice: nat-group or wlan-gw-group . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-forwarding

| | |
|----------|--|
| Synopsis | Enter the port-forwarding context |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding |
| Tree | port-forwarding |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dynamic-block-reservation *boolean*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Reserve dynamic block for subscriber |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding dynamic-block-reservation <i>boolean</i> |
| Tree | dynamic-block-reservation |
| Description | <p>When configured to true, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p> <p>When configured to false, dynamic port blocks are not reserved when the first port forward for the subscriber is created.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

range-end *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|----------|---|
| Synopsis | End of the wildcard range for port forwards |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding range-end <i>number</i> |
| Tree | range-end |

| | |
|-------------|---|
| Description | <p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-start command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-end implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p> |
| Range | 0 1023 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

range-start *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Start of the wildcard range for port forwards |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-forwarding range-start <i>number</i> |
| Tree | range-start |
| Description | <p>This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the range-end command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If left unconfigured, the range-start implicit value is set to 1. Port 0 is always excluded from the port forwarding range.</p> <p>Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.</p> |
| Range | 0 1 1025 to 65535 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-reservation

| | |
|------------|--|
| Synopsis | Enter the port-reservation context |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-reservation |
| Tree | port-reservation |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

port-blocks *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Port block size for NAT subscribers |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-reservation port-blocks <i>number</i> |
| Tree | port-blocks |
| Description | <p>In CGN, this specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the l2-aware port-block-extension hierarchy in the NAT pool.</p> |
| Range | 0 to 64512 |
| Notes | The following elements are part of a choice: port-blocks or ports . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ports *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Size of the port block for NAT subscribers |
| Context | configure service vprn <i>string</i> nat outside pool <i>string</i> port-reservation ports <i>number</i> |
| Tree | ports |
| Description | For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool. |

For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the **I2-aware port-block-extension** hierarchy in the NAT pool.

This command does not affect the size of extended port blocks.

| | |
|------------|---|
| Range | 1 to 64512 |
| Notes | The following elements are part of a choice: port-blocks or ports . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*



WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | NAT pool type |
| Context | configure service vprn string nat outside pool string type keyword |
| Tree | type |
| Options | large-scale, I2-aware, wlan-gw-anchor |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|-------------|---|
| Synopsis | Enable the watermarks context |
| Context | configure service vprn string nat outside pool string watermarks |
| Tree | watermarks |
| Description | This command configures watermarks for NAT resources. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high number

| | |
|-------------|---|
| Synopsis | High watermark percentage |
| Context | configure service vprn string nat outside pool string watermarks high number |
| Tree | high |
| Description | This command configures the high threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|-------------|--|
| Synopsis | Low watermark percentage |
| Context | configure service vprn string nat outside pool string watermarks low number |
| Tree | low |
| Description | This command configures the low threshold value as a percentage of the total port-block space in a NAT pool. |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group reference

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Create a WLAN GW group for NAT |
| Context | configure service vprn string nat outside pool string wlan-gw-group reference |

| | |
|------------|---|
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Notes | The following elements are part of a mandatory choice: nat-group or wlan-gw-group . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

network

| | |
|------------|---|
| Synopsis | Enter the network context |
| Context | configure service vprn <i>string network</i> |
| Tree | network |
| Introduced | 16.0.R4 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string network ingress</i> |
| Tree | ingress |
| Introduced | 16.0.R4 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string network ingress filter</i> |
| Tree | filter |
| Introduced | 16.0.R4 |
| Platforms | All |

ip reference

| | |
|----------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string network ingress filter ip reference</i> |
| Tree | ip |

| | |
|------------|---|
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6 *reference*

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string</i> network ingress filter ipv6 <i>reference</i> |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> network ingress qos |
| Tree | qos |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

fp-redirect-group *reference*

| | |
|------------|--|
| Synopsis | The forwarding-plane queue group Policy for this VPRN |
| Context | configure service vprn <i>string</i> network ingress qos fp-redirect-group <i>reference</i> |
| Tree | fp-redirect-group |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

instance *number*

| | |
|----------|--|
| Synopsis | Forwarding plane ingress queue group instance |
| Context | configure service vprn <i>string</i> network ingress qos instance <i>number</i> |
| Tree | instance |

| | |
|------------|--|
| Range | 1 to 65535 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

network-policy *reference*

| | |
|------------|---|
| Synopsis | Network policy name associated with a VPRN |
| Context | configure service vprn <i>string</i> network ingress qos network-policy <i>reference</i> |
| Tree | network-policy |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR |

urpf-check *boolean*

| | |
|------------|---|
| Synopsis | Enable unicast RPF check of network ingress traffic |
| Context | configure service vprn <i>string</i> network ingress urpf-check <i>boolean</i> |
| Tree | urpf-check |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

network-interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the network-interface list instance |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> |
| Tree | network-interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|----------|---|
| Synopsis | Network interface name |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> |
| Tree | network-interface |

| | |
|---------------|-------------------------------------|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

cflowd-parameters

| | |
|------------|--|
| Synopsis | Enter the cflowd-parameters context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters |
| Tree | cflowd-parameters |
| Introduced | 16.0.R1 |
| Platforms | All |

sampling [[sampling-type](#)] *keyword*

| | |
|------------|--|
| Synopsis | Enter the sampling list instance |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Introduced | 16.0.R1 |
| Platforms | All |

[[sampling-type](#)] *keyword*

| | |
|----------|-----------------------|
| Synopsis | Traffic sampling type |
|----------|-----------------------|

| | |
|-------------|--|
| Context | configure service vprn string network-interface string cflowd-parameters sampling keyword |
| Tree | sampling |
| Description | This command configures the type of traffic to be sampled on the associated IP interface. |
| Options | unicast, multicast, both |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

direction keyword

| | |
|-------------|--|
| Synopsis | Direction of traffic for cflowd sampling |
| Context | configure service vprn string network-interface string cflowd-parameters sampling keyword direction keyword |
| Tree | direction |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces. |
| Default | ingress-only |
| Options | ingress-only, egress-only, both |
| Introduced | 16.0.R1 |
| Platforms | All |

sample-profile (keyword | number)

| | |
|-------------|--|
| Synopsis | Sample profile ID |
| Context | configure service vprn string network-interface string cflowd-parameters sampling keyword sample-profile (keyword number) |
| Tree | sample-profile |
| Description | This command defines the sampling rate profile associated with this interface. |
| Max. Range | 0 to 4294967295 |
| Options | 1 |
| Introduced | 19.5.R1 |
| Platforms | All |

type keyword

| | |
|-------------|---|
| Synopsis | Type of cflowd analysis |
| Context | configure service vprn string network-interface string cflowd-parameters sampling keyword type keyword |
| Tree | type |
| Description | This command configures the cflowd sampling type on the associated IP interface. |
| Options | acl, interface |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

cpu-protection reference

| | |
|------------|--|
| Synopsis | CPM Protection policy associated with an interface |
| Context | configure service vprn string network-interface string cpu-protection reference |
| Tree | cpu-protection |
| Reference | configure system security cpu-protection policy number |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string network-interface string description string |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

dist-cpu-protection reference

| | |
|-----------|---|
| Synopsis | Distributed CPU protection policy |
| Context | configure service vprn string network-interface string dist-cpu-protection reference |
| Tree | dist-cpu-protection |
| Reference | configure system security dist-cpu-protection policy string |

Introduced 16.0.R1
Platforms All

egress

Synopsis Enter the **egress** context
Context **configure service vprn string network-interface string egress**
Tree **egress**
Introduced 16.0.R1
Platforms All

filter

Synopsis Enter the **filter** context
Context **configure service vprn string network-interface string egress filter**
Tree **filter**
Introduced 16.0.R1
Platforms All

ip reference

Synopsis IPv4 filter policy name
Context **configure service vprn string network-interface string egress filter ip reference**
Tree **ip**
Reference **configure filter ip-filter string**
Introduced 16.0.R1
Platforms All

hold-time

Synopsis Enter the **hold-time** context
Context **configure service vprn string network-interface string hold-time**
Tree **hold-time**
Introduced 16.0.R1
Platforms All

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn string network-interface string hold-time ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure service vprn string network-interface string hold-time ipv4 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | All |

init-only *boolean*

| | |
|-------------|---|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service vprn string network-interface string hold-time ipv4 down init-only boolean |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|----------|--|
| Synopsis | Down hold time for the IP interface |
| Context | configure service vprn string network-interface string hold-time ipv4 down seconds number |

| | |
|------------|-------------------------|
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service vprn string network-interface string hold-time ipv4 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Up hold time for the IP interface |
| Context | configure service vprn string network-interface string hold-time ipv4 up seconds number |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn string network-interface string ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | All |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn string network-interface string ingress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | All |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn string network-interface string ingress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter string |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect ingress statistics |
| Context | configure service vprn string network-interface string ingress-stats boolean |
| Tree | ingress-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-mtu *number*

| | |
|------------|---|
| Synopsis | IP MTU applied to outgoing packets |
| Context | configure service vprn string network-interface string ip-mtu number |
| Tree | ip-mtu |
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-directed-broadcasts *boolean*

| | |
|------------|---|
| Synopsis | Accept broadcasts that are directed to this interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 allow-directed-broadcasts <i>boolean</i> |
| Tree | allow-directed-broadcasts |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd

| | |
|------------|--|
| Synopsis | Enter the bfd context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd |
| Tree | bfd |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

echo-receive *number*

| | |
|------------|---|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

receive *number*

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 bfd receive <i>number</i> |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 16.0.R1 |

Platforms All

transmit-interval *number*

Synopsis BFD transmit interval over this interface

Context **configure service vprn** *string network-interface string ipv4 bfd transmit-interval number*

Tree **transmit-interval**

Description This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis Local termination point for the BFD session

Context **configure service vprn** *string network-interface string ipv4 bfd type keyword*

Tree **type**

Description This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are:

- **auto** (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the **cpm-np**.
- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Default auto

Options cpm-np, auto, fp

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

icmp

| | |
|------------|---|
| Synopsis | Enter the icmp context |
| Context | configure service vprn string network-interface string ipv4 icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | All |

mask-reply *boolean*

| | |
|------------|--|
| Synopsis | Allow responses to ICMP mask requests on the interface |
| Context | configure service vprn string network-interface string ipv4 icmp mask-reply boolean |
| Tree | mask-reply |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

param-problem

| | |
|-------------|---|
| Synopsis | Enter the param-problem context |
| Context | configure service vprn string network-interface string ipv4 icmp param-problem |
| Tree | param-problem |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of sent Parameter Problem messages |
| Context | configure service vprn string network-interface string ipv4 icmp param-problem admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

number *number*

Synopsis Maximum number of Parameter Problem messages to send

Context **configure** *service vprn string network-interface string ipv4 icmp param-problem number number*

Tree *number*

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

seconds *number*

Synopsis Time used to limit number of Parameter Problem messages

Context **configure** *service vprn string network-interface string ipv4 icmp param-problem seconds number*

Tree *seconds*

Range 1 to 60

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

redirects

Synopsis Enter the **redirects** context

Context **configure** *service vprn string network-interface string ipv4 icmp redirects*

Tree *redirects*

Description Commands in this context configure the settings for ICMP redirect messages generated by the interface.

The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of sending ICMP redirect messages |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|---|
| Synopsis | Maximum number of ICMP redirect messages to send |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|--|
| Synopsis | Time used to limit the number of ICMP redirect messages |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ttl-expired

| | |
|-------------|---|
| Synopsis | Enter the ttl-expired context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp ttl-expired |
| Tree | ttl-expired |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending TTL expired messages |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp ttl-expired admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of TTL expired messages to send |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp ttl-expired number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|----------|---|
| Synopsis | Time used to limit the number of TTL expired messages |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp ttl-expired seconds <i>number</i> |

| | |
|------------|-------------------------|
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

unreachables

| | |
|-------------|---|
| Synopsis | Enter the unreachables context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable |
| Tree | unreachables |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending unreachable messages |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|----------|--|
| Synopsis | Maximum number of unreachable messages to send |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

seconds *number*

| | |
|------------|---|
| Synopsis | Time to limit the number of ICMP unreachable messages |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 icmp unreachable seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor-discovery

| | |
|------------|---|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | All |

retry-timer *number*

| | |
|------------|---|
| Synopsis | ARP retry interval |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery retry-timer <i>number</i> |
| Tree | retry-timer |
| Range | 1 to 300 |
| Default | 50 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

static-neighbor [ipv4-address] *string*

| | |
|------------|---|
| Synopsis | Enter the static-neighbor list instance |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|---|
| Synopsis | IPv4 address that corresponds to the physical address |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> |
| Tree | static-neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mac-address *string*

| | |
|------------|---|
| Synopsis | MAC address for the static neighbor |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery static-neighbor <i>string</i> mac-address <i>string</i> |
| Tree | mac-address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|-------------|---|
| Synopsis | Timeout for an ARP entry learned on the interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i> |
| Tree | timeout |
| Description | This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request |

or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.

| | |
|------------|------------|
| Range | 0 to 65535 |
| Default | 14400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

primary

| | |
|------------|--|
| Synopsis | Enable the primary context |
| Context | configure service vprn string network-interface string ipv4 primary |
| Tree | primary |
| Introduced | 16.0.R1 |
| Platforms | All |

address string

| | |
|------------|---|
| Synopsis | Primary IPv4 address assigned to the interface |
| Context | configure service vprn string network-interface string ipv4 primary address string |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast keyword

| | |
|------------|--|
| Synopsis | Broadcast address format |
| Context | configure service vprn string network-interface string ipv4 primary broadcast keyword |
| Tree | broadcast |
| Default | host-ones |
| Options | all-ones, host-ones |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 primary prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

secondary [[address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the secondary list instance |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 secondary <i>string</i> |
| Tree | secondary |
| Introduced | 16.0.R1 |
| Platforms | All |

[address] *string*

| | |
|------------|--|
| Synopsis | Secondary IPv4 address assigned to the interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 secondary <i>string</i> |
| Tree | secondary |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast *keyword*

| | |
|------------|---|
| Synopsis | Broadcast address format |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 secondary <i>string</i> broadcast <i>keyword</i> |
| Tree | broadcast |
| Default | host-ones |
| Options | all-ones, host-ones |
| Introduced | 16.0.R1 |

Platforms All

igp-inhibit *boolean*

Synopsis Disable the running IGP from recognizing secondary IP

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 secondary](#) *string* **igp-inhibit** *boolean*

Tree [igp-inhibit](#)

Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.

Default false

Introduced 16.0.R1

Platforms All

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 secondary](#) *string* **prefix-length** *number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

tcp-mss *number*

Synopsis TCP maximum segment size for the interface

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4](#) **tcp-mss** *number*

Tree [tcp-mss](#)

Range 384 to 9746

Introduced 16.0.R1

Platforms All

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-default *boolean*

| | |
|------------|---|
| Synopsis | Ignore default route when performing a uRPF check |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 urpf-check ignore-default <i>boolean</i> |
| Tree | ignore-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mode *keyword*

| | |
|------------|---|
| Synopsis | Unicast RPF check mode |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> ipv4 urpf-check mode <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | All |

lag

| | |
|------------|---|
| Synopsis | Enter the lag context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> lag |
| Tree | lag |
| Introduced | 16.0.R1 |
| Platforms | All |

link-map-profile *number*

| | |
|-------------|--|
| Synopsis | LAG link map profile for a SAP or network interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> lag link-map-profile <i>number</i> |
| Tree | link-map-profile |
| Description | This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing. |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

per-link-hash

| | |
|------------|---|
| Synopsis | Enter the per-link-hash context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> lag per-link-hash |
| Tree | per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | All |

class *number*

| | |
|------------|---|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> lag per-link-hash class <i>number</i> |
| Tree | class |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight *number*

| | |
|----------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> lag per-link-hash weight <i>number</i> |

| | |
|------------|------------------------|
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

load-balancing

| | |
|------------|--|
| Synopsis | Enter the load-balancing context |
| Context | configure service vprn string network-interface string load-balancing |
| Tree | load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

flow-label-load-balancing *boolean*

| | |
|-------------|--|
| Synopsis | Enable flow label load balancing |
| Context | configure service vprn string network-interface string load-balancing flow-label-load-balancing boolean |
| Tree | flow-label-load-balancing |
| Description | When configured to true , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.

When configured to false , the router disables load balancing in ECMP and LAG. |
| Default | false |
| Introduced | 21.5.R1 |
| Platforms | All |

ip-load-balancing *keyword*

| | |
|-------------|--|
| Synopsis | IP load-balancing algorithm |
| Context | configure service vprn string network-interface string load-balancing ip-load-balancing keyword |
| Tree | ip-load-balancing |
| Description | This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the l4-load-balancing |

command is enabled, this command also includes the source or destination port in the hash inputs.

| | |
|------------|-------------------------------------|
| Default | both |
| Options | both, destination, source, inner-ip |
| Introduced | 16.0.R3 |
| Platforms | All |

lsr-load-balancing *keyword*

| | |
|-------------|---|
| Synopsis | LSR load-balancing algorithm |
| Context | configure service vprn string network-interface string load-balancing lsr-load-balancing keyword |
| Tree | lsr-load-balancing |
| Description | This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting. |
| Options | lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid |
| Introduced | 16.0.R1 |
| Platforms | All |

spi-load-balancing *boolean*

| | |
|-------------|---|
| Synopsis | Enable SPI use in hashing |
| Context | configure service vprn string network-interface string load-balancing spi-load-balancing boolean |
| Tree | spi-load-balancing |
| Description | When configured to true , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

teid-load-balancing *boolean*

| | |
|----------|--|
| Synopsis | Enable use of TEID in hashing |
| Context | configure service vprn string network-interface string load-balancing teid-load-balancing boolean |
| Tree | teid-load-balancing |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

loopback

| | |
|------------|--|
| Synopsis | Use interface as a loopback interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> loopback |
| Tree | loopback |
| Notes | The following elements are part of a choice: loopback or port . |
| Introduced | 16.0.R1 |
| Platforms | All |

mac string

| | |
|------------|---|
| Synopsis | MAC address for the interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> mac <i>string</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

port string

| | |
|---------------|--|
| Synopsis | Port to bind the interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> port <i>string</i> |
| Tree | port |
| String Length | 1 to 45 |
| Notes | The following elements are part of a choice: loopback or port . |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|----------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> qos |

| | |
|------------|---------------------|
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | All |

egress-instance *number*

| | |
|-------------|---|
| Synopsis | Port egress queue group instance for this interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> qos egress-instance <i>number</i> |
| Tree | egress-instance |
| Description | This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port. |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

egress-port-redirect-group *reference*

| | |
|-------------|---|
| Synopsis | QoS queue group name |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> qos egress-port-redirect-group <i>reference</i> |
| Tree | egress-port-redirect-group |
| Description | This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface. |
| Reference | configure qos queue-group-templates egress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress-fp-redirect-group *reference*

| | |
|----------|--|
| Synopsis | Forwarding plane queue group policy for the interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> qos ingress-fp-redirect-group <i>reference</i> |
| Tree | ingress-fp-redirect-group |

| | |
|-------------|---|
| Description | This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface. |
| Reference | configure qos queue-group-templates ingress queue-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

ingress-instance *number*

| | |
|-------------|---|
| Synopsis | Forwarding plane ingress queue group for this interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> qos ingress-instance <i>number</i> |
| Tree | ingress-instance |
| Description | This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane. |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

network-policy *reference*

| | |
|-------------|---|
| Synopsis | Network policy name associated with a network interface |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> qos network-policy <i>reference</i> |
| Tree | network-policy |
| Description | This command associates an existing network policy name with the IP interface. |
| Reference | configure qos network <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

tos-marking-state *keyword*

| | |
|----------|--|
| Synopsis | TOS marking state |
| Context | configure service vprn <i>string</i> network-interface <i>string</i> tos-marking-state <i>keyword</i> |
| Tree | tos-marking-state |
| Default | trusted |

| | |
|------------|--------------------|
| Options | trusted, untrusted |
| Introduced | 16.0.R1 |
| Platforms | All |

ntp

| | |
|------------|--|
| Synopsis | Enable the ntp context |
| Context | configure service vprn string ntp |
| Tree | ntp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of NTP execution |
| Context | configure service vprn string ntp admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authenticate *boolean*

| | |
|------------|---|
| Synopsis | Authentication of NTP PDUs when acting as a server |
| Context | configure service vprn string ntp authenticate boolean |
| Tree | authenticate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-check *boolean*

| | |
|----------|--|
| Synopsis | Reject NTP PDUs that do not match the authentication key-id, type, or key requirements |
| Context | configure service vprn string ntp authentication-check boolean |

| | |
|------------|--------------------------------------|
| Tree | authentication-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key [[key-id](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the authentication-key list instance |
| Context | configure service vprn <i>string</i> ntp authentication-key <i>number</i> |
| Tree | authentication-key |
| Introduced | 16.0.R1 |
| Platforms | All |

[key-id] *number*

| | |
|------------|--|
| Synopsis | Index of the NTP authentication key table that uniquely identifies an authentication key and type |
| Context | configure service vprn <i>string</i> ntp authentication-key <i>number</i> |
| Tree | authentication-key |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

key *string*

| | |
|---------------|--|
| Synopsis | Key to authenticate NTP packets |
| Context | configure service vprn <i>string</i> ntp authentication-key <i>number</i> key <i>string</i> |
| Tree | key |
| String Length | 1 to 71 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

type keyword

| | |
|------------|---|
| Synopsis | Type of authentication method to authenticate NTP packet |
| Context | configure service vprn string ntp authentication-key number type keyword |
| Tree | type |
| Options | des, message-digest |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast [interface-name] reference

| | |
|------------|--|
| Synopsis | Enter the broadcast list instance |
| Context | configure service vprn string ntp broadcast reference |
| Tree | broadcast |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] reference

| | |
|------------|--|
| Synopsis | Local interface used to transmit NTP broadcast packets |
| Context | configure service vprn string ntp broadcast reference |
| Tree | broadcast |
| Reference | configure service vprn string interface string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

key-id reference

| | |
|------------|---|
| Synopsis | Authentication key and type used by the node |
| Context | configure service vprn string ntp broadcast reference key-id reference |
| Tree | key-id |
| Reference | configure service vprn string ntp authentication-key number |
| Introduced | 16.0.R1 |

Platforms All

t*ttl number*

Synopsis TTL value of messages transmitted by this broadcast address
 Context **configure** *service vprn string ntp broadcast reference ttl number*
 Tree *ttl*
 Range 1 to 255
 Default 127
 Introduced 16.0.R1
 Platforms All

v*version number*

Synopsis NTP version number generated or accepted by this node in NTP packets
 Context **configure** *service vprn string ntp broadcast reference version number*
 Tree *version*
 Range 2 to 4
 Default 4
 Introduced 16.0.R1
 Platforms All

ospf [*ospf-instance*] *number*

Synopsis Enter the **ospf** list instance
 Context **configure** *service vprn string ospf number*
 Tree *ospf*
 Max. Instances 32
 Introduced 16.0.R1
 Platforms All

[ospf-instance] *number*

Synopsis Specifies the value of the integrated OSPF instance.
 Context **configure** *service vprn string ospf number*

| | |
|------------|-------------------------------------|
| Tree | ospf |
| Range | 0 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the OSPF instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-router-capability *keyword*

| | |
|------------|--|
| Synopsis | Allow router advertisement capabilities |
| Context | configure service vprn <i>string</i> ospf <i>number</i> advertise-router-capability <i>keyword</i> |
| Tree | advertise-router-capability |
| Default | false |
| Options | false, link, area, as |
| Introduced | 16.0.R1 |
| Platforms | All |

area [[area-id](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the area list instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> |
| Tree | area |
| Introduced | 16.0.R1 |
| Platforms | All |

[area-id] string

| | |
|------------|---|
| Synopsis | Area-ID attribute |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> |
| Tree | area |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-ne-profile reference

| | |
|------------|---|
| Synopsis | Network element profile to be advertised |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> advertise-ne-profile <i>reference</i> |
| Tree | advertise-ne-profile |
| Reference | configure system network-element-discovery profile <i>string</i> |
| Introduced | 19.5.R1 |
| Platforms | All |

advertise-router-capability boolean

| | |
|------------|--|
| Synopsis | Allow router advertisement capabilities |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> advertise-router-capability <i>boolean</i> |
| Tree | advertise-router-capability |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

area-range [ip-prefix-mask] string

| | |
|------------|--|
| Synopsis | Enter the area-range list instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> area-range <i>string</i> |
| Tree | area-range |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix-mask] *string*

| | |
|------------|--|
| Synopsis | IPv4 unicast address prefix and mask |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> area-range <i>string</i> |
| Tree | area-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise *boolean*

| | |
|------------|--|
| Synopsis | Advertise summarized range of addresses to other areas |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> area-range <i>string</i> advertise <i>boolean</i> |
| Tree | advertise |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

blackhole-aggregate *boolean*

| | |
|------------|--|
| Synopsis | Install a low priority blackhole route to avoid loops |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> blackhole-aggregate <i>boolean</i> |
| Tree | blackhole-aggregate |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

export-policy *reference*

| | |
|-----------|--|
| Synopsis | Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |

| | |
|----------------|--------------------------------------|
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|---|
| Synopsis | Route imported as Summary Type 3/Inter-Area-Prefix-LSA |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [[interface-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|---------------|--|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the OSPF interface |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-router-capability *boolean*

| | |
|------------|---|
| Synopsis | Allow router advertisement capabilities |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-router-capability <i>boolean</i> |
| Tree | advertise-router-capability |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-subnet *boolean*

| | |
|------------|--|
| Synopsis | Advertise point-to-point interfaces as subnet routes |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> advertise-subnet <i>boolean</i> |
| Tree | advertise-subnet |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|----------|---|
| Synopsis | Authentication key |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-key <i>string</i> |

| | |
|---------------|------------------------------------|
| Tree | authentication-key |
| String Length | 1 to 38 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|------------|--|
| Synopsis | TCP authentication keychain for the session |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-keychain <i>reference</i> |
| Tree | authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

authentication-type *keyword*

| | |
|------------|--|
| Synopsis | Authentication type used on OSPF interface |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> authentication-type <i>keyword</i> |
| Tree | authentication-type |
| Options | password, message-digest |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|--|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |
| Platforms | All |

remain-down-on-failure *boolean*

| | |
|----------|---|
| Synopsis | Force adjacency down on failure until session returns |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness remain-down-on-failure <i>boolean</i> |
| Tree | remain-down-on-failure |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

strict *boolean*

| | |
|-------------|---|
| Synopsis | Enable BFD strict mode |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness strict <i>boolean</i> |
| Tree | strict |
| Description | <p>When configured to true, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to true, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p> |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | All |

strict-mode-holddown *number*

| | |
|-------------|--|
| Synopsis | Adjacency up time delay after BFD session establishment |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> bfd-liveness strict-mode-holddown <i>number</i> |
| Tree | strict-mode-holddown |
| Description | This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles. |
| Range | 1 to 600 |
| Units | seconds |
| Introduced | 23.3.R1 |

Platforms All

dead-interval *number*

Synopsis OSPF wait time for Hellos before neighbor declared down

Context **configure** [service vprn](#) *string* [ospf](#) *number* [area](#) *string* [interface](#) *string* [dead-interval](#) *number*

Tree [dead-interval](#)

Range 2 to 65535

Units seconds

Introduced 16.0.R1

Platforms All

hello-interval *number*

Synopsis Time between OSPF Hellos of this interface

Context **configure** [service vprn](#) *string* [ospf](#) *number* [area](#) *string* [interface](#) *string* [hello-interval](#) *number*

Tree [hello-interval](#)

Range 1 to 65535

Default 10

Units seconds

Introduced 16.0.R1

Platforms All

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Interface type

Context **configure** [service vprn](#) *string* [ospf](#) *number* [area](#) *string* [interface](#) *string* [interface-type](#) *keyword*

Tree [interface-type](#)

Description This command specifies the interface type.

Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.

If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.

Configuring the interface type to **secondary**, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

| | |
|------------|---|
| Options | broadcast, non-broadcast, point-to-point, secondary |
| Introduced | 16.0.R1 |
| Platforms | All |

load-balancing-weight *number*

| | |
|------------|--|
| Synopsis | Configure load-balancing-weight. |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> load-balancing-weight <i>number</i> |
| Tree | load-balancing-weight |
| Range | 1 to 4294967295 |
| Introduced | 20.2.R1 |
| Platforms | All |

loopfree-alternate

| | |
|------------|---|
| Synopsis | Enter the loopfree-alternate context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate |
| Tree | loopfree-alternate |
| Introduced | 16.0.R3 |
| Platforms | All |

exclude *boolean*

| | |
|----------|---|
| Synopsis | Enable fast reroute at OSPF primary interface level |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i> |

| | |
|------------|-------------------------|
| Tree | exclude |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

policy-map

| | |
|------------|---|
| Synopsis | Enable the policy-map context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map |
| Tree | policy-map |
| Introduced | 16.0.R3 |
| Platforms | All |

route-nh-template *reference*

| | |
|------------|--|
| Synopsis | Route next hop policy template that is applied to interface |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i> |
| Tree | route-nh-template |
| Reference | configure routing-options route-next-hop-policy template <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R3 |
| Platforms | All |

lsa-filter-out *keyword*

| | |
|------------|---|
| Synopsis | LSA flooding reduction |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> lsa-filter-out <i>keyword</i> |
| Tree | lsa-filter-out |
| Default | none |
| Options | none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults |
| Introduced | 16.0.R1 |
| Platforms | All |

message-digest-key [*key-id*] *number*

| | |
|------------|--|
| Synopsis | Enter the message-digest-key list instance |
| Context | configure <i>service</i> <i>vprn</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> message-digest-key <i>number</i> |
| Tree | message-digest-key |
| Introduced | 16.0.R1 |
| Platforms | All |

[key-id] *number*

| | |
|------------|--|
| Synopsis | Message digest index |
| Context | configure <i>service</i> <i>vprn</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> message-digest-key <i>number</i> |
| Tree | message-digest-key |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

md5 *string*

| | |
|---------------|---|
| Synopsis | MD5 hash key |
| Context | configure <i>service</i> <i>vprn</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> message-digest-key <i>number</i> md5 <i>string</i> |
| Tree | md5 |
| String Length | 1 to 51 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

metric *number*

| | |
|----------|--|
| Synopsis | Explicit route cost metric that is applied to the interface |
| Context | configure <i>service</i> <i>vprn</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> metric <i>number</i> |
| Tree | metric |

| | |
|------------|------------|
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

mtu number

| | |
|------------|--|
| Synopsis | MTU for the OSPF to use on the interface |
| Context | configure service vprn string ospf number area string interface string mtu number |
| Tree | mtu |
| Range | 512 to 9786 |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor [address] string

| | |
|------------|---|
| Synopsis | Add a list entry for neighbor |
| Context | configure service vprn string ospf number area string interface string neighbor string |
| Tree | neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[address] string

| | |
|------------|---|
| Synopsis | IPv4 address of the OSPFv2 neighbor |
| Context | configure service vprn string ospf number area string interface string neighbor string |
| Tree | neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

passive boolean

| | |
|----------|---|
| Synopsis | Allow interface to be advertised as an OSPF interface without running the OSPF protocol |
| Context | configure service vprn string ospf number area string interface string passive boolean |

| | |
|------------|-------------------------|
| Tree | passive |
| Introduced | 16.0.R1 |
| Platforms | All |

poll-interval *number*

| | |
|------------|---|
| Synopsis | Interval for Hellos to non-adjacent OSPF NBMA neighbor |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> poll-interval <i>number</i> |
| Tree | poll-interval |
| Max. Range | 0 to 4294967295 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|------------|--|
| Synopsis | Interface priority in the DR election on the subnet |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> priority <i>number</i> |
| Tree | priority |
| Range | 0 to 255 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

retransmit-interval *number*

| | |
|------------|---|
| Synopsis | Time before OSPF retransmits an unacknowledged LSA |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> interface <i>string</i> retransmit-interval <i>number</i> |
| Tree | retransmit-interval |
| Range | 1 to 1800 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms All

rib-priority *keyword*

Synopsis RIB priority for OSPF

Context **configure** [service vprn](#) *string* [ospf number area](#) *string* [interface](#) *string* **rib-priority** *keyword*

Tree [rib-priority](#)

Options high

Introduced 16.0.R1

Platforms All

transit-delay *number*

Synopsis Required LSA transmit time

Context **configure** [service vprn](#) *string* [ospf number area](#) *string* [interface](#) *string* **transit-delay** *number*

Tree [transit-delay](#)

Range 1 to 1800

Default 1

Units seconds

Introduced 16.0.R1

Platforms All

loopfree-alternate-exclude *boolean*

Synopsis Exclude interfaces in OSPF areas in SPF LFA computation

Context **configure** [service vprn](#) *string* [ospf number area](#) *string* **loopfree-alternate-exclude** *boolean*

Tree [loopfree-alternate-exclude](#)

Default false

Introduced 16.0.R1

Platforms All

nssa

| | |
|------------|---|
| Synopsis | Enable the nssa context |
| Context | configure service vprn string ospf number area string nssa |
| Tree | nssa |
| Introduced | 16.0.R1 |
| Platforms | All |

area-range [[ip-prefix-mask](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the area-range list instance |
| Context | configure service vprn string ospf number area string nssa area-range string |
| Tree | area-range |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix-mask] *string*

| | |
|------------|---|
| Synopsis | IPv4 unicast address prefix and mask |
| Context | configure service vprn string ospf number area string nssa area-range string |
| Tree | area-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise *boolean*

| | |
|------------|---|
| Synopsis | Advertise summarized range of addresses to other areas |
| Context | configure service vprn string ospf number area string nssa area-range string advertise boolean |
| Tree | advertise |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

originate-default-route

| | |
|------------|---|
| Synopsis | Enable the originate-default-route context |
| Context | configure service vprn string ospf number area string nssa originate-default-route |
| Tree | originate-default-route |
| Introduced | 16.0.R1 |
| Platforms | All |

adjacency-check *boolean*

| | |
|------------|--|
| Synopsis | Perform adjacency checks before originating a default route |
| Context | configure service vprn string ospf number area string nssa originate-default-route adjacency-check <i>boolean</i> |
| Tree | adjacency-check |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

type-nssa *boolean*

| | |
|------------|--|
| Synopsis | Generate a default route using NSSA-LSA type |
| Context | configure service vprn string ospf number area string nssa originate-default-route type-nssa <i>boolean</i> |
| Tree | type-nssa |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

redistribute-external *boolean*

| | |
|------------|--|
| Synopsis | Redistribute external routes into the NSSA |
| Context | configure service vprn string ospf number area string nssa redistribute-external <i>boolean</i> |
| Tree | redistribute-external |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

summaries *boolean*

| | |
|------------|---|
| Synopsis | Send summary (Type 3) LSAs into the NSSA on an ABR |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> nssa summaries <i>boolean</i> |
| Tree | summaries |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

sham-link [[interface](#)] *string* [ip-address](#) *string*

| | |
|------------|--|
| Synopsis | Enter the sham-link list instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> |
| Tree | sham-link |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface] *string*

| | |
|---------------|--|
| Synopsis | Local interface name used for the sham-link |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> |
| Tree | sham-link |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

ip-address *string*

| | |
|------------|--|
| Synopsis | IP address of the sham-link neighbor |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> |
| Tree | sham-link |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the OSPF interface |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|--|
| Synopsis | Authentication key to send and receive OSPF packets |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 38 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain *reference*

| | |
|------------|--|
| Synopsis | TCP authentication keychain for the session |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> authentication-keychain <i>reference</i> |
| Tree | authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | All |

authentication-type *keyword*

| | |
|----------|--|
| Synopsis | Authentication type to be used |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> authentication-type <i>keyword</i> |

| | |
|------------|-------------------------------------|
| Tree | authentication-type |
| Options | password, message-digest |
| Introduced | 16.0.R1 |
| Platforms | All |

dead-interval *number*

| | |
|------------|--|
| Synopsis | OSPF wait time for Hellos before neighbor declared down |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> dead-interval <i>number</i> |
| Tree | dead-interval |
| Range | 2 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-interval *number*

| | |
|------------|---|
| Synopsis | Time between OSPF Hellos of this interface |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> hello-interval <i>number</i> |
| Tree | hello-interval |
| Range | 1 to 65535 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

message-digest-key [[key-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the message-digest-key list instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> message-digest-key <i>number</i> |
| Tree | message-digest-key |
| Introduced | 16.0.R1 |
| Platforms | All |

[key-id] *number*

| | |
|------------|--|
| Synopsis | Message digest index |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> message-digest-key <i>number</i> |
| Tree | message-digest-key |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

md5 *string*

| | |
|---------------|---|
| Synopsis | MD5 key or hash key |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> message-digest-key <i>number</i> md5 <i>string</i> |
| Tree | md5 |
| String Length | 1 to 51 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

metric *number*

| | |
|------------|--|
| Synopsis | Explicit route cost metric that is applied to the sham link |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> metric <i>number</i> |
| Tree | metric |
| Range | 1 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

retransmit-interval *number*

| | |
|----------|--|
| Synopsis | Time before OSPF retransmits an unacknowledged LSA |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> retransmit-interval <i>number</i> |
| Tree | retransmit-interval |
| Range | 1 to 1800 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-delay *number*

| | |
|------------|---|
| Synopsis | Required LSA transmit time |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> sham-link <i>string</i> ip-address <i>string</i> transit-delay <i>number</i> |
| Tree | transit-delay |
| Range | 1 to 1800 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

stub

| | |
|------------|---|
| Synopsis | Enable the stub context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> stub |
| Tree | stub |
| Introduced | 16.0.R1 |
| Platforms | All |

default-metric *number*

| | |
|----------|---|
| Synopsis | Metric used by the ABR for the default route into the stub area |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> stub default-metric <i>number</i> |
| Tree | default-metric |
| Range | 1 to 16777214 |
| Default | 1 |

Introduced 16.0.R1
 Platforms All

summaries *boolean*

Synopsis Send summary (Type 3) LSAs into the stub area on an ABR
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [stub](#) [summaries](#) *boolean*
 Tree [summaries](#)
 Default true
 Introduced 16.0.R1
 Platforms All

virtual-link [[router-id](#)] *string* [transit-area](#) *reference*

Synopsis Enter the **virtual-link** list instance
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference*
 Tree [virtual-link](#)
 Introduced 16.0.R1
 Platforms All

[router-id] *string*

Synopsis Router identity of the virtual link neighbor
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference*
 Tree [virtual-link](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

transit-area *reference*

Synopsis Transit area that links backbone area to area without physical connection with the backbone

| | |
|------------|---|
| Context | configure service vprn string ospf number area string virtual-link string transit-area reference |
| Tree | virtual-link |
| Reference | configure service vprn string ospf number area string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the OSPF interface |
| Context | configure service vprn string ospf number area string virtual-link string transit-area reference admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key string

| | |
|---------------|---|
| Synopsis | Authentication key |
| Context | configure service vprn string ospf number area string virtual-link string transit-area reference authentication-key string |
| Tree | authentication-key |
| String Length | 1 to 38 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-keychain reference

| | |
|-----------|---|
| Synopsis | TCP authentication keychain for the session |
| Context | configure service vprn string ospf number area string virtual-link string transit-area reference authentication-keychain reference |
| Tree | authentication-keychain |
| Reference | configure system security keychains keychain string |

Introduced 16.0.R3
 Platforms All

authentication-type *keyword*

Synopsis Authentication type used on OSPF interface
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [authentication-type](#) *keyword*
 Tree [authentication-type](#)
 Options password, message-digest
 Introduced 16.0.R1
 Platforms All

dead-interval *number*

Synopsis OSPF wait time for Hellos before neighbor declared down
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [dead-interval](#) *number*
 Tree [dead-interval](#)
 Range 2 to 65535
 Units seconds
 Introduced 16.0.R1
 Platforms All

hello-interval *number*

Synopsis Time between OSPF Hellos of this interface
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [hello-interval](#) *number*
 Tree [hello-interval](#)
 Range 1 to 65535
 Default 10
 Units seconds
 Introduced 16.0.R1
 Platforms All

message-digest-key [[key-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the message-digest-key list instance |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i> |
| Tree | message-digest-key |
| Introduced | 16.0.R1 |
| Platforms | All |

[key-id] *number*

| | |
|------------|---|
| Synopsis | Message digest index |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i> |
| Tree | message-digest-key |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

md5 *string*

| | |
|---------------|---|
| Synopsis | MD5 hash key |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> message-digest-key <i>number</i> md5 <i>string</i> |
| Tree | md5 |
| String Length | 1 to 51 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

retransmit-interval *number*

| | |
|----------|--|
| Synopsis | Time before OSPF retransmits an unacknowledged LSA |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> retransmit-interval <i>number</i> |

| | |
|------------|-------------------------------------|
| Tree | retransmit-interval |
| Range | 1 to 1800 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-delay *number*

| | |
|------------|--|
| Synopsis | Required LSA transmit time |
| Context | configure service vprn <i>string</i> ospf <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> transit-delay <i>number</i> |
| Tree | transit-delay |
| Range | 1 to 1800 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

compatible-rfc1583 *boolean*

| | |
|------------|--|
| Synopsis | OSPF summary and external route calculations |
| Context | configure service vprn <i>string</i> ospf <i>number</i> compatible-rfc1583 <i>boolean</i> |
| Tree | compatible-rfc1583 |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

export-limit

| | |
|------------|---|
| Synopsis | Enable the export-limit context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> export-limit |
| Tree | export-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-percent *number*

| | |
|------------|---|
| Synopsis | Export limit before warning and SNMP notification sent |
| Context | configure service vprn <i>string</i> ospf <i>number</i> export-limit log-percent <i>number</i> |
| Tree | log-percent |
| Range | 1 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

number *number*

| | |
|------------|--|
| Synopsis | Maximum routes or prefixes exported from route table |
| Context | configure service vprn <i>string</i> ospf <i>number</i> export-limit number <i>number</i> |
| Tree | number |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|--|
| Synopsis | Export policies that determine exported routes |
| Context | configure service vprn <i>string</i> ospf <i>number</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Description | <p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the aggregate command is also configured in the configure router context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the configure router policy-options context.</p> |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |

| | |
|------------|--------------------------------------|
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

external-db-overflow

| | |
|------------|---|
| Synopsis | Enable the external-db-overflow context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> external-db-overflow |
| Tree | external-db-overflow |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|------------|---|
| Synopsis | Time during which the router operates in overload |
| Context | configure service vprn <i>string</i> ospf <i>number</i> external-db-overflow <i>interval</i> <i>number</i> |
| Tree | interval |
| Range | 0 to 2147483647 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

limit *number*

| | |
|------------|--|
| Synopsis | Number of external LSA at which overload is triggered |
| Context | configure service vprn <i>string</i> ospf <i>number</i> external-db-overflow <i>limit</i> <i>number</i> |
| Tree | limit |
| Range | 0 to 2147483647 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

external-preference *number*

| | |
|------------|--|
| Synopsis | Preference for OSPF external routes |
| Context | configure service vprn <i>string</i> ospf number external-preference number |
| Tree | external-preference |
| Range | 1 to 255 |
| Default | 150 |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-restart

| | |
|------------|--|
| Synopsis | Enable the graceful-restart context |
| Context | configure service vprn <i>string</i> ospf number graceful-restart |
| Tree | graceful-restart |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-mode *boolean*

| | |
|------------|---|
| Synopsis | Enable graceful restart helper for OSPF |
| Context | configure service vprn <i>string</i> ospf number graceful-restart helper-mode <i>boolean</i> |
| Tree | helper-mode |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

strict-lsa-checking *boolean*

| | |
|------------|---|
| Synopsis | Perform strict LSA checking during graceful restart helper |
| Context | configure service vprn <i>string</i> ospf number graceful-restart strict-lsa-checking <i>boolean</i> |
| Tree | strict-lsa-checking |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-dn-bit *boolean*

| | |
|------------|--|
| Synopsis | Ignore the DN bit for OSPF LSA packets for the instance |
| Context | configure service vprn <i>string</i> ospf number ignore-dn-bit <i>boolean</i> |
| Tree | ignore-dn-bit |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|--|
| Synopsis | Import policy names for routes from IGP to route table |
| Context | configure service vprn <i>string</i> ospf number import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

loopfree-alternate

| | |
|------------|--|
| Synopsis | Enable the loopfree-alternate context |
| Context | configure service vprn <i>string</i> ospf number loopfree-alternate |
| Tree | loopfree-alternate |
| Introduced | 16.0.R1 |
| Platforms | All |

exclude

| | |
|------------|--|
| Synopsis | Enter the exclude context |
| Context | configure service vprn <i>string</i> ospf number loopfree-alternate exclude |
| Tree | exclude |
| Introduced | 16.0.R3 |

Platforms All

prefix-policy *reference*

Synopsis Policy to exclude prefixes from LFA SPF calculation

Context **configure** [service vprn string ospf number loopfree-alternate exclude prefix-policy reference](#)

Tree [prefix-policy](#)

Description This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.

An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.

Reference **configure** [policy-options policy-statement string](#)

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R3

Platforms All

multicast-import *boolean*

Synopsis Submit routes into the multicast Route Table Manager

Context **configure** [service vprn string ospf number multicast-import boolean](#)

Tree [multicast-import](#)

Default false

Introduced 16.0.R1

Platforms All

overload *boolean*

Synopsis Change local router state to appear overloaded

Context **configure** [service vprn string ospf number overload boolean](#)

Tree [overload](#)

Default false

Introduced 16.0.R1

Platforms All

overload-include-ext-1 *boolean*

| | |
|------------|---|
| Synopsis | Advertise routes with maximum metric value for overload |
| Context | configure service vprn <i>string</i> ospf <i>number</i> overload-include-ext-1 <i>boolean</i> |
| Tree | overload-include-ext-1 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

overload-include-ext-2 *boolean*

| | |
|------------|---|
| Synopsis | Advertise routes with maximum metric value for overload |
| Context | configure service vprn <i>string</i> ospf <i>number</i> overload-include-ext-2 <i>boolean</i> |
| Tree | overload-include-ext-2 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-include-stub *boolean*

| | |
|------------|--|
| Synopsis | Advertise all stub interfaces with max metric value |
| Context | configure service vprn <i>string</i> ospf <i>number</i> overload-include-stub <i>boolean</i> |
| Tree | overload-include-stub |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-on-boot

| | |
|------------|--|
| Synopsis | Enable the overload-on-boot context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> overload-on-boot |
| Tree | overload-on-boot |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|--|
| Synopsis | Time during which the router operates in overload state before reestablishing normal operations |
| Context | configure service vprn <i>string</i> ospf number overload-on-boot <i>timeout number</i> |
| Tree | timeout |
| Range | 60 to 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|---|
| Synopsis | Preference for OSPF internal routes |
| Context | configure service vprn <i>string</i> ospf number preference number |
| Tree | preference |
| Range | 1 to 255 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

reference-bandwidth *number*

| | |
|------------|--|
| Synopsis | Bandwidth to reference the default costing of interfaces |
| Context | configure service vprn <i>string</i> ospf number reference-bandwidth number |
| Tree | reference-bandwidth |
| Range | 1 to 18446744073709551615 |
| Default | 100000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

rib-priority

| | |
|----------|---------------------------------------|
| Synopsis | Enter the rib-priority context |
|----------|---------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string ospf number rib-priority</i> |
| Tree | rib-priority |
| Introduced | 16.0.R1 |
| Platforms | All |

high

| | |
|------------|---|
| Synopsis | Enter the high context |
| Context | configure service vprn <i>string ospf number rib-priority high</i> |
| Tree | high |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-list *reference*

| | |
|------------|---|
| Synopsis | Higher priority list used during OSPF route calculation |
| Context | configure service vprn <i>string ospf number rib-priority high prefix-list reference</i> |
| Tree | prefix-list |
| Reference | configure policy-options prefix-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Unique router ID for the OSPF instance |
| Context | configure service vprn <i>string ospf number router-id string</i> |
| Tree | router-id |
| Introduced | 16.0.R1 |
| Platforms | All |

rtr-adv-lsa-limit

| | |
|------------|--|
| Synopsis | Enable the rtr-adv-lsa-limit context |
| Context | configure service vprn string ospf number rtr-adv-lsa-limit |
| Tree | rtr-adv-lsa-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only boolean

| | |
|------------|---|
| Synopsis | Log the event without triggering overload |
| Context | configure service vprn string ospf number rtr-adv-lsa-limit log-only boolean |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

max-lsa-count number

| | |
|------------|---|
| Synopsis | Max number of LSAs one router can advertise |
| Context | configure service vprn string ospf number rtr-adv-lsa-limit max-lsa-count number |
| Tree | max-lsa-count |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-timeout (number | keyword)

| | |
|----------|--|
| Synopsis | Maximum time in overload after LSA limit is reached |
| Context | configure service vprn string ospf number rtr-adv-lsa-limit overload-timeout (number keyword) |
| Tree | overload-timeout |
| Range | 1 to 1800 |
| Default | forever |
| Units | seconds |

| | |
|------------|---------|
| Options | forever |
| Introduced | 16.0.R1 |
| Platforms | All |

warning-threshold *number*

| | |
|------------|--|
| Synopsis | Percentage of the max LSA count that causes a warning |
| Context | configure service vprn <i>string</i> ospf <i>number</i> rtr-adv-lsa-limit warning-threshold <i>number</i> |
| Tree | warning-threshold |
| Range | 0 to 100 |
| Default | 0 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

super-backbone *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable super-backbone functionality. |
| Context | configure service vprn <i>string</i> ospf <i>number</i> super-backbone <i>boolean</i> |
| Tree | super-backbone |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

suppress-dn-bit *boolean*

| | |
|------------|---|
| Synopsis | Suppress the DN bit setting for OSPF LSA packets |
| Context | configure service vprn <i>string</i> ospf <i>number</i> suppress-dn-bit <i>boolean</i> |
| Tree | suppress-dn-bit |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

timers

| | |
|------------|---|
| Synopsis | Enter the timers context |
| Context | configure service vprn string ospf number timers |
| Tree | timers |
| Introduced | 16.0.R1 |
| Platforms | All |

incremental-spf-wait number

| | |
|------------|---|
| Synopsis | Delay time before an incremental SPF calculation starts |
| Context | configure service vprn string ospf number timers incremental-spf-wait number |
| Tree | incremental-spf-wait |
| Range | 0 to 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

lsa-accumulate number

| | |
|------------|---|
| Synopsis | Delay to gather LSAs before advertising to neighbors |
| Context | configure service vprn string ospf number timers lsa-accumulate number |
| Tree | lsa-accumulate |
| Range | 0 to 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

lsa-arrival number

| | |
|----------|--|
| Synopsis | Min delay between receipt of same LSAs from neighbors |
| Context | configure service vprn string ospf number timers lsa-arrival number |
| Tree | lsa-arrival |
| Range | 0 to 600000 |

| | |
|------------|--------------|
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

Isa-generate

| | |
|------------|---|
| Synopsis | Enter the Isa-generate context |
| Context | configure service vprn string ospf number timers Isa-generate |
| Tree | Isa-generate |
| Introduced | 16.0.R1 |
| Platforms | All |

Isa-initial-wait *number*

| | |
|------------|--|
| Synopsis | First wait period between OSPF LSA generation |
| Context | configure service vprn string ospf number timers Isa-generate Isa-initial-wait <i>number</i> |
| Tree | Isa-initial-wait |
| Range | 10 to 600000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

Isa-second-wait *number*

| | |
|------------|---|
| Synopsis | Hold time between the first and second LSA generation |
| Context | configure service vprn string ospf number timers Isa-generate Isa-second-wait <i>number</i> |
| Tree | Isa-second-wait |
| Range | 10 to 600000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

max-lsa-wait *number*

| | |
|------------|---|
| Synopsis | Max time between two LSAs being generated |
| Context | configure service vprn <i>string</i> ospf <i>number</i> timers lsa-generate max-lsa-wait <i>number</i> |
| Tree | max-lsa-wait |
| Range | 10 to 600000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

redistribute-delay *number*

| | |
|------------|--|
| Synopsis | Hold down timer for external routes into OSPF |
| Context | configure service vprn <i>string</i> ospf <i>number</i> timers redistribute-delay <i>number</i> |
| Tree | redistribute-delay |
| Range | 0 to 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-wait

| | |
|------------|--|
| Synopsis | Enter the spf-wait context |
| Context | configure service vprn <i>string</i> ospf <i>number</i> timers spf-wait |
| Tree | spf-wait |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-initial-wait *number*

| | |
|----------|---|
| Synopsis | Initial SPF calculation delay after a topology change |
| Context | configure service vprn <i>string</i> ospf <i>number</i> timers spf-wait spf-initial-wait <i>number</i> |
| Tree | spf-initial-wait |

| | |
|------------|--------------|
| Range | 10 to 100000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-max-wait *number*

| | |
|------------|---|
| Synopsis | Max interval between two consecutive SPF calculations |
| Context | configure service vprn <i>string</i> ospf <i>number</i> timers spf-wait spf-max-wait <i>number</i> |
| Tree | spf-max-wait |
| Range | 10 to 120000 |
| Default | 10000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-second-wait *number*

| | |
|------------|--|
| Synopsis | Hold time between the first and second SPF calculation |
| Context | configure service vprn <i>string</i> ospf <i>number</i> timers spf-wait spf-second-wait <i>number</i> |
| Tree | spf-second-wait |
| Range | 10 to 100000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

unicast-import *boolean*

| | |
|------------|--|
| Synopsis | Submit routes into the unicast Route Table Manager |
| Context | configure service vprn <i>string</i> ospf <i>number</i> unicast-import <i>boolean</i> |
| Tree | unicast-import |
| Default | true |
| Introduced | 16.0.R1 |

Platforms All

vpn-domain

Synopsis Enable the **vpn-domain** context
 Context **configure service vpn** *string ospf number vpn-domain*
 Tree [vpn-domain](#)
 Introduced 16.0.R1
 Platforms All

id string

Synopsis OSPF VPN domain ID
 Context **configure service vpn** *string ospf number vpn-domain id string*
 Tree [id](#)
 Description This command specifies the OSPF VPN domain. This is exchanged using BGP in the Extended Community attribute associated with a prefix.
 String Length 14
 Default 0000.0000.0000
 Introduced 16.0.R1
 Platforms All

type keyword

Synopsis VPN domain type
 Context **configure service vpn** *string ospf number vpn-domain type keyword*
 Tree [type](#)
 Options 0005, 0105, 0205, 8005
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms All

vpn-tag number

Synopsis OSPF VPN tag

| | |
|------------|---|
| Context | configure service vpn <i>string ospf number vpn-tag number</i> |
| Tree | vpn-tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

ospf3 [**ospf-instance**] *number*

| | |
|----------------|---|
| Synopsis | Enter the ospf3 list instance |
| Context | configure service vpn <i>string ospf3 number</i> |
| Tree | ospf3 |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

[ospf-instance] *number*

| | |
|------------|---|
| Synopsis | Specifies the value of the integrated OSPF instance. |
| Context | configure service vpn <i>string ospf3 number</i> |
| Tree | ospf3 |
| Range | 0 to 31 64 to 95 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the OSPF instance |
| Context | configure service vpn <i>string ospf3 number admin-state keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

advertise-router-capability *keyword*

Synopsis Allow router advertisement capabilities

Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* **advertise-router-capability** *keyword*

Tree [advertise-router-capability](#)

Default false

Options false, link, area, as

Introduced 16.0.R1

Platforms All

area [[area-id](#)] *string*

Synopsis Enter the **area** list instance

Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* **area** *string*

Tree [area](#)

Introduced 16.0.R1

Platforms All

[[area-id](#)] *string*

Synopsis Area-ID attribute

Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* **area** *string*

Tree [area](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

advertise-router-capability *boolean*

Synopsis Allow router advertisement capabilities

Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **advertise-router-capability** *boolean*

Tree [advertise-router-capability](#)

| | |
|------------|---------|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

area-range [[ip-prefix-mask](#)] (*ipv4-prefix | ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Enter the area-range list instance |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> area-range (<i>ipv4-prefix ipv6-prefix</i>) |
| Tree | area-range |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix-mask] (*ipv4-prefix | ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Address ranges to create on an ABR for route summarization or suppression |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> area-range (<i>ipv4-prefix ipv6-prefix</i>) |
| Tree | area-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise *boolean*

| | |
|------------|---|
| Synopsis | Advertise summarized range of addresses to other areas |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> area-range (<i>ipv4-prefix ipv6-prefix</i>) advertise <i>boolean</i> |
| Tree | advertise |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

blackhole-aggregate *boolean*

| | |
|----------|---|
| Synopsis | Install a low priority blackhole route to avoid loops |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> blackhole-aggregate <i>boolean</i> |
| Tree | blackhole-aggregate |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|--|
| Synopsis | Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|--|
| Synopsis | Route imported as Summary Type 3/Inter-Area-Prefix-LSA |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [**interface-name**] *string*

| | |
|----------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> |
| Tree | interface |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|---------------|--|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the OSPF interface |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

advertise-router-capability *boolean*

| | |
|------------|--|
| Synopsis | Allow router advertisement capabilities |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> advertise-router-capability <i>boolean</i> |
| Tree | advertise-router-capability |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication

| | |
|------------|---|
| Synopsis | Enable the authentication context |
| Context | configure service vprn string ospf3 number area string interface string authentication |
| Tree | authentication |
| Introduced | 16.0.R6 |
| Platforms | All |

inbound reference

| | |
|------------|---|
| Synopsis | sa-name |
| Context | configure service vprn string ospf3 number area string interface string authentication inbound reference |
| Tree | inbound |
| Reference | configure ipsec static-sa string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R6 |
| Platforms | All |

outbound reference

| | |
|------------|--|
| Synopsis | sa-name |
| Context | configure service vprn string ospf3 number area string interface string authentication outbound reference |
| Tree | outbound |
| Reference | configure ipsec static-sa string |
| Notes | This element is mandatory. |
| Introduced | 16.0.R6 |
| Platforms | All |

bfd-liveness

| | |
|------------|---|
| Synopsis | Enable the bfd-liveness context |
| Context | configure service vprn string ospf3 number area string interface string bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |

Platforms All

remain-down-on-failure *boolean*

Synopsis Force adjacency down on failure until session returns

Context **configure service vprn** *string* **ospf3** *number* **area** *string* **interface** *string* **bfd-liveness** **remain-down-on-failure** *boolean*

Tree **remain-down-on-failure**

Default false

Introduced 16.0.R1

Platforms All

strict *boolean*

Synopsis Enable BFD strict mode

Context **configure service vprn** *string* **ospf3** *number* **area** *string* **interface** *string* **bfd-liveness** **strict** *boolean*

Tree **strict**

Description When configured to **true**, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to **true**, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.

During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.

Default false

Introduced 23.3.R1

Platforms All

strict-mode-holddown *number*

Synopsis Adjacency up time delay after BFD session establishment

Context **configure service vprn** *string* **ospf3** *number* **area** *string* **interface** *string* **bfd-liveness** **strict-mode-holddown** *number*

Tree **strict-mode-holddown**

Description This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn

when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.

| | |
|------------|----------|
| Range | 1 to 600 |
| Units | seconds |
| Introduced | 23.3.R1 |
| Platforms | All |

dead-interval *number*

| | |
|------------|---|
| Synopsis | OSPF wait time for Hellos before neighbor declared down |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> dead-interval <i>number</i> |
| Tree | dead-interval |
| Range | 2 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-interval *number*

| | |
|------------|--|
| Synopsis | Time between OSPF Hellos of this interface |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> hello-interval <i>number</i> |
| Tree | hello-interval |
| Range | 1 to 65535 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|----------------|
| Synopsis | Interface type |
|----------|----------------|

| | |
|-------------|--|
| Context | configure service vprn <i>string ospf3 number area string interface string interface-type keyword</i> |
| Tree | interface-type |
| Description | <p>This command specifies the interface type.</p> <p>Use this command to set the interface type of an Ethernet link to point-to-point to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided the link is used as a point-to-point.</p> <p>If the interface type is not known at the time the interface is added to OSPF and subsequently the IP interface is bound (or moved) to a different interface type, this command must be entered manually.</p> <p>Configuring the interface type to secondary, allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p> |
| Options | broadcast, non-broadcast, point-to-point, secondary |
| Introduced | 16.0.R1 |
| Platforms | All |

load-balancing-weight *number*

| | |
|------------|--|
| Synopsis | Configure load-balancing-weight. |
| Context | configure service vprn <i>string ospf3 number area string interface string load-balancing-weight number</i> |
| Tree | load-balancing-weight |
| Range | 1 to 4294967295 |
| Introduced | 20.2.R1 |
| Platforms | All |

loopfree-alternate

| | |
|------------|--|
| Synopsis | Enter the loopfree-alternate context |
| Context | configure service vprn <i>string ospf3 number area string interface string loopfree-alternate</i> |
| Tree | loopfree-alternate |
| Introduced | 16.0.R3 |
| Platforms | All |

exclude *boolean*

| | |
|------------|--|
| Synopsis | Enable fast reroute at OSPF primary interface level |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate exclude <i>boolean</i> |
| Tree | exclude |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | All |

policy-map

| | |
|------------|--|
| Synopsis | Enable the policy-map context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map |
| Tree | policy-map |
| Introduced | 16.0.R3 |
| Platforms | All |

route-nh-template *reference*

| | |
|------------|---|
| Synopsis | Route next hop policy template that is applied to interface |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> loopfree-alternate policy-map route-nh-template <i>reference</i> |
| Tree | route-nh-template |
| Reference | configure routing-options route-next-hop-policy template <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R3 |
| Platforms | All |

lsa-filter-out *keyword*

| | |
|----------|--|
| Synopsis | LSA flooding reduction |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> lsa-filter-out <i>keyword</i> |
| Tree | lsa-filter-out |
| Default | none |

| | |
|------------|--|
| Options | none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults |
| Introduced | 16.0.R1 |
| Platforms | All |

metric number

| | |
|------------|---|
| Synopsis | Explicit route cost metric that is applied to the interface |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> metric <i>number</i> |
| Tree | metric |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | All |

mtu number

| | |
|------------|--|
| Synopsis | MTU for the OSPF to use on the interface |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> mtu <i>number</i> |
| Tree | mtu |
| Range | 512 to 9786 |
| Introduced | 16.0.R1 |
| Platforms | All |

neighbor [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Add a list entry for neighbor |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> neighbor (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | neighbor |
| Introduced | 16.0.R1 |
| Platforms | All |

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------|---|
| Synopsis | IPv6 link local address of the OSPFv3 neighbor |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> neighbor (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |

| | |
|------------|-------------------------------------|
| Tree | neighbor |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

passive *boolean*

| | |
|------------|---|
| Synopsis | Allow interface to be advertised as an OSPF interface without running the OSPF protocol |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> passive <i>boolean</i> |
| Tree | passive |
| Introduced | 16.0.R1 |
| Platforms | All |

poll-interval *number*

| | |
|------------|--|
| Synopsis | Interval for Hellos to non-adjacent OSPF NBMA neighbor |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> poll-interval <i>number</i> |
| Tree | poll-interval |
| Max. Range | 0 to 4294967295 |
| Default | 120 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|------------|---|
| Synopsis | Interface priority in the DR election on the subnet |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> priority <i>number</i> |
| Tree | priority |
| Range | 0 to 255 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

retransmit-interval *number*

| | |
|------------|--|
| Synopsis | Time before OSPF retransmits an unacknowledged LSA |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> retransmit-interval <i>number</i> |
| Tree | retransmit-interval |
| Range | 1 to 1800 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

rib-priority *keyword*

| | |
|------------|--|
| Synopsis | RIB priority for OSPF |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> rib-priority <i>keyword</i> |
| Tree | rib-priority |
| Options | high |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-delay *number*

| | |
|------------|--|
| Synopsis | Required LSA transmit time |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> interface <i>string</i> transit-delay <i>number</i> |
| Tree | transit-delay |
| Range | 1 to 1800 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

key-rollover-interval *number*

| | |
|------------|--|
| Synopsis | Key rollover interval |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> key-rollover-interval <i>number</i> |
| Tree | key-rollover-interval |
| Range | 10 to 300 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

loopfree-alternate-exclude *boolean*

| | |
|------------|--|
| Synopsis | Exclude interfaces in OSPF areas in SPF LFA computation |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> loopfree-alternate-exclude <i>boolean</i> |
| Tree | loopfree-alternate-exclude |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

nssa

| | |
|------------|---|
| Synopsis | Enable the nssa context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> nssa |
| Tree | nssa |
| Introduced | 16.0.R1 |
| Platforms | All |

area-range [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Enter the area-range list instance |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> nssa area-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | area-range |
| Introduced | 16.0.R1 |

Platforms All

[ip-prefix-mask] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Address ranges to create on an ABR for route summarization or suppression

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) *area-range* (*ipv4-prefix* | *ipv6-prefix*)

Tree [area-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

advertise *boolean*

Synopsis Advertise summarized range of addresses to other areas

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) *area-range* (*ipv4-prefix* | *ipv6-prefix*) [advertise](#) *boolean*

Tree [advertise](#)

Default true

Introduced 16.0.R1

Platforms All

originate-default-route

Synopsis Enable the **originate-default-route** context

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#)

Tree [originate-default-route](#)

Introduced 16.0.R1

Platforms All

adjacency-check *boolean*

Synopsis Perform adjacency checks before originating a default route

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#) [adjacency-check](#) *boolean*

Tree [adjacency-check](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

type-nssa *boolean*

| | |
|------------|--|
| Synopsis | Generate a default route using NSSA-LSA type |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> nssa originate-default-route type-nssa <i>boolean</i> |
| Tree | type-nssa |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

redistribute-external *boolean*

| | |
|------------|--|
| Synopsis | Redistribute external routes into the NSSA |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> nssa redistribute-external <i>boolean</i> |
| Tree | redistribute-external |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

summaries *boolean*

| | |
|------------|--|
| Synopsis | Send summary (Type 3) LSAs into the NSSA on an ABR |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> nssa summaries <i>boolean</i> |
| Tree | summaries |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

stub

| | |
|----------|--------------------------------|
| Synopsis | Enable the stub context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string ospf3 number area string stub</i> |
| Tree | stub |
| Introduced | 16.0.R1 |
| Platforms | All |

default-metric *number*

| | |
|------------|---|
| Synopsis | Metric used by the ABR for the default route into the stub area |
| Context | configure service vprn <i>string ospf3 number area string stub default-metric number</i> |
| Tree | default-metric |
| Range | 1 to 16777214 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

summaries *boolean*

| | |
|------------|---|
| Synopsis | Send summary (Type 3) LSAs into the stub area on an ABR |
| Context | configure service vprn <i>string ospf3 number area string stub summaries boolean</i> |
| Tree | summaries |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

virtual-link [**router-id**] *string transit-area reference*

| | |
|------------|---|
| Synopsis | Enter the virtual-link list instance |
| Context | configure service vprn <i>string ospf3 number area string virtual-link string transit-area reference</i> |
| Tree | virtual-link |
| Introduced | 16.0.R1 |
| Platforms | All |

[router-id] *string*

| | |
|----------|--|
| Synopsis | Router identity of the virtual link neighbor |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string ospf3 number area string virtual-link string transit-area reference</i> |
| Tree | virtual-link |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-area *reference*

| | |
|------------|---|
| Synopsis | Transit area that links backbone area to area without physical connection with the backbone |
| Context | configure service vprn <i>string ospf3 number area string virtual-link string transit-area reference</i> |
| Tree | virtual-link |
| Reference | configure service vprn <i>string ospf3 number area string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the OSPF interface |
| Context | configure service vprn <i>string ospf3 number area string virtual-link string transit-area reference admin-state keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication

| | |
|----------|--|
| Synopsis | Enable the authentication context |
| Context | configure service vprn <i>string ospf3 number area string virtual-link string transit-area reference authentication</i> |
| Tree | authentication |

Introduced 16.0.R6
 Platforms All

inbound *reference*

Synopsis sa-name
 Context **configure** [service vprn string ospf3 number area string virtual-link string transit-area reference authentication inbound reference](#)
 Tree [inbound](#)
 Reference **configure** [ipsec static-sa string](#)
 Notes This element is mandatory.
 Introduced 16.0.R6
 Platforms All

outbound *reference*

Synopsis sa-name
 Context **configure** [service vprn string ospf3 number area string virtual-link string transit-area reference authentication outbound reference](#)
 Tree [outbound](#)
 Reference **configure** [ipsec static-sa string](#)
 Notes This element is mandatory.
 Introduced 16.0.R6
 Platforms All

dead-interval *number*

Synopsis OSPF wait time for Hellos before neighbor declared down
 Context **configure** [service vprn string ospf3 number area string virtual-link string transit-area reference dead-interval number](#)
 Tree [dead-interval](#)
 Range 2 to 65535
 Units seconds
 Introduced 16.0.R1
 Platforms All

hello-interval *number*

| | |
|------------|--|
| Synopsis | Time between OSPF Hellos of this interface |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> hello-interval <i>number</i> |
| Tree | hello-interval |
| Range | 1 to 65535 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

retransmit-interval *number*

| | |
|------------|---|
| Synopsis | Time before OSPF retransmits an unacknowledged LSA |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> retransmit-interval <i>number</i> |
| Tree | retransmit-interval |
| Range | 1 to 1800 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

transit-delay *number*

| | |
|------------|---|
| Synopsis | Required LSA transmit time |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> area <i>string</i> virtual-link <i>string</i> transit-area <i>reference</i> transit-delay <i>number</i> |
| Tree | transit-delay |
| Range | 1 to 1800 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

export-limit

| | |
|------------|--|
| Synopsis | Enable the export-limit context |
| Context | configure service vprn string ospf3 number export-limit |
| Tree | export-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-percent number

| | |
|------------|---|
| Synopsis | Export limit before warning and SNMP notification sent |
| Context | configure service vprn string ospf3 number export-limit log-percent number |
| Tree | log-percent |
| Range | 1 to 100 |
| Introduced | 16.0.R1 |
| Platforms | All |

number number

| | |
|------------|--|
| Synopsis | Maximum routes or prefixes exported from route table |
| Context | configure service vprn string ospf3 number export-limit number number |
| Tree | number |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

export-policy reference

| | |
|-------------|--|
| Synopsis | Export policies that determine exported routes |
| Context | configure service vprn string ospf3 number export-policy reference |
| Tree | export-policy |
| Description | <p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> |

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

| | |
|----------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

external-db-overflow

| | |
|------------|--|
| Synopsis | Enable the external-db-overflow context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> external-db-overflow |
| Tree | external-db-overflow |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|------------|---|
| Synopsis | Time during which the router operates in overload |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> external-db-overflow interval <i>number</i> |
| Tree | interval |
| Range | 0 to 2147483647 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

limit *number*

| | |
|----------|--|
| Synopsis | Number of external LSA at which overload is triggered |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> external-db-overflow limit <i>number</i> |
| Tree | limit |

| | |
|------------|-----------------|
| Range | 0 to 2147483647 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

external-preference *number*

| | |
|------------|---|
| Synopsis | Preference for OSPF external routes |
| Context | configure service vprn <i>string ospf3</i> <i>number external-preference</i> <i>number</i> |
| Tree | external-preference |
| Range | 1 to 255 |
| Default | 150 |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-restart

| | |
|------------|--|
| Synopsis | Enable the graceful-restart context |
| Context | configure service vprn <i>string ospf3</i> <i>number graceful-restart</i> |
| Tree | graceful-restart |
| Introduced | 16.0.R1 |
| Platforms | All |

helper-mode *boolean*

| | |
|------------|--|
| Synopsis | Enable graceful restart helper for OSPF |
| Context | configure service vprn <i>string ospf3</i> <i>number graceful-restart</i> helper-mode <i>boolean</i> |
| Tree | helper-mode |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

strict-lsa-checking *boolean*

| | |
|----------|--|
| Synopsis | Perform strict LSA checking during graceful restart helper |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string ospf3 number graceful-restart strict-lsa-checking boolean</i> |
| Tree | strict-lsa-checking |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ignore-dn-bit *boolean*

| | |
|------------|--|
| Synopsis | Ignore the DN bit for OSPF LSA packets for the instance |
| Context | configure service vprn <i>string ospf3 number ignore-dn-bit boolean</i> |
| Tree | ignore-dn-bit |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|--|
| Synopsis | Import policy names for routes from IGP to route table |
| Context | configure service vprn <i>string ospf3 number import-policy reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

loopfree-alternate

| | |
|------------|---|
| Synopsis | Enable the loopfree-alternate context |
| Context | configure service vprn <i>string ospf3 number loopfree-alternate</i> |
| Tree | loopfree-alternate |
| Introduced | 16.0.R1 |
| Platforms | All |

exclude

| | |
|------------|---|
| Synopsis | Enter the exclude context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> loopfree-alternate exclude |
| Tree | exclude |
| Introduced | 16.0.R3 |
| Platforms | All |

prefix-policy *reference*

| | |
|----------------|--|
| Synopsis | Policy to exclude prefixes from LFA SPF calculation |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> loopfree-alternate exclude prefix-policy <i>reference</i> |
| Tree | prefix-policy |
| Description | This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.

An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R3 |
| Platforms | All |

multicast-import *boolean*

| | |
|------------|---|
| Synopsis | Submit routes into the multicast Route Table Manager |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> multicast-import <i>boolean</i> |
| Tree | multicast-import |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload *boolean*

| | |
|------------|--|
| Synopsis | Change local router state to appear overloaded |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> overload <i>boolean</i> |
| Tree | overload |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-include-ext-1 *boolean*

| | |
|------------|--|
| Synopsis | Advertise routes with maximum metric value for overload |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> overload-include-ext-1 <i>boolean</i> |
| Tree | overload-include-ext-1 |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

overload-include-ext-2 *boolean*

| | |
|------------|--|
| Synopsis | Advertise routes with maximum metric value for overload |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> overload-include-ext-2 <i>boolean</i> |
| Tree | overload-include-ext-2 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-include-stub *boolean*

| | |
|------------|---|
| Synopsis | Advertise all stub interfaces with max metric value |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> overload-include-stub <i>boolean</i> |
| Tree | overload-include-stub |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-on-boot

| | |
|------------|--|
| Synopsis | Enable the overload-on-boot context |
| Context | configure service vprn string ospf3 number overload-on-boot |
| Tree | overload-on-boot |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|---|
| Synopsis | Time during which the router operates in overload state before reestablishing normal operations |
| Context | configure service vprn string ospf3 number overload-on-boot timeout <i>number</i> |
| Tree | timeout |
| Range | 60 to 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | Preference for OSPF internal routes |
| Context | configure service vprn string ospf3 number preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

reference-bandwidth *number*

| | |
|----------|---|
| Synopsis | Bandwidth to reference the default costing of interfaces |
| Context | configure service vprn string ospf3 number reference-bandwidth <i>number</i> |
| Tree | reference-bandwidth |
| Range | 1 to 18446744073709551615 |

| | |
|------------|-----------|
| Default | 100000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | All |

rib-priority

| | |
|------------|--|
| Synopsis | Enter the rib-priority context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> rib-priority |
| Tree | rib-priority |
| Introduced | 16.0.R1 |
| Platforms | All |

high

| | |
|------------|---|
| Synopsis | Enter the high context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> rib-priority high |
| Tree | high |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-list *reference*

| | |
|------------|--|
| Synopsis | Higher priority list used during OSPF route calculation |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> rib-priority high prefix-list <i>reference</i> |
| Tree | prefix-list |
| Reference | configure policy-options prefix-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

router-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Unique router ID for the OSPF instance |
| Context | configure service vprn <i>string ospf3 number router-id string</i> |
| Tree | router-id |
| Introduced | 16.0.R1 |
| Platforms | All |

rtr-adv-lsa-limit

| | |
|------------|--|
| Synopsis | Enable the rtr-adv-lsa-limit context |
| Context | configure service vprn <i>string ospf3 number rtr-adv-lsa-limit</i> |
| Tree | rtr-adv-lsa-limit |
| Introduced | 16.0.R1 |
| Platforms | All |

log-only *boolean*

| | |
|------------|---|
| Synopsis | Log the event without triggering overload |
| Context | configure service vprn <i>string ospf3 number rtr-adv-lsa-limit log-only boolean</i> |
| Tree | log-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

max-lsa-count *number*

| | |
|------------|---|
| Synopsis | Max number of LSAs one router can advertise |
| Context | configure service vprn <i>string ospf3 number rtr-adv-lsa-limit max-lsa-count number</i> |
| Tree | max-lsa-count |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

overload-timeout (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum time in overload after LSA limit is reached |
| Context | configure service vprn <i>string ospf3 number rtr-adv-lsa-limit</i> overload-timeout (<i>number</i> <i>keyword</i>) |
| Tree | overload-timeout |
| Range | 1 to 1800 |
| Default | forever |
| Units | seconds |
| Options | forever |
| Introduced | 16.0.R1 |
| Platforms | All |

warning-threshold *number*

| | |
|------------|---|
| Synopsis | Percentage of the max LSA count that causes a warning |
| Context | configure service vprn <i>string ospf3 number rtr-adv-lsa-limit</i> warning-threshold <i>number</i> |
| Tree | warning-threshold |
| Range | 0 to 100 |
| Default | 0 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | All |

suppress-dn-bit *boolean*

| | |
|------------|--|
| Synopsis | Suppress the DN bit setting for OSPF LSA packets |
| Context | configure service vprn <i>string ospf3 number</i> suppress-dn-bit <i>boolean</i> |
| Tree | suppress-dn-bit |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

timers

| | |
|----------|---------------------------------|
| Synopsis | Enter the timers context |
|----------|---------------------------------|

| | |
|------------|--|
| Context | configure service vprn string ospf3 number timers |
| Tree | timers |
| Introduced | 16.0.R1 |
| Platforms | All |

incremental-spf-wait *number*

| | |
|------------|--|
| Synopsis | Delay time before an incremental SPF calculation starts |
| Context | configure service vprn string ospf3 number timers incremental-spf-wait number |
| Tree | incremental-spf-wait |
| Range | 0 to 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

lsa-accumulate *number*

| | |
|------------|--|
| Synopsis | Delay to gather LSAs before advertising to neighbors |
| Context | configure service vprn string ospf3 number timers lsa-accumulate number |
| Tree | lsa-accumulate |
| Range | 0 to 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

lsa-arrival *number*

| | |
|----------|---|
| Synopsis | Min delay between receipt of same LSAs from neighbors |
| Context | configure service vprn string ospf3 number timers lsa-arrival number |
| Tree | lsa-arrival |
| Range | 0 to 600000 |
| Default | 1000 |
| Units | milliseconds |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

Isa-generate

| | |
|------------|---|
| Synopsis | Enter the Isa-generate context |
| Context | configure service vprn string ospf3 number timers Isa-generate |
| Tree | Isa-generate |
| Introduced | 16.0.R1 |
| Platforms | All |

Isa-initial-wait *number*

| | |
|------------|--|
| Synopsis | First wait period between OSPF LSA generation |
| Context | configure service vprn string ospf3 number timers Isa-generate Isa-initial-wait <i>number</i> |
| Tree | Isa-initial-wait |
| Range | 10 to 600000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

Isa-second-wait *number*

| | |
|------------|---|
| Synopsis | Hold time between the first and second LSA generation |
| Context | configure service vprn string ospf3 number timers Isa-generate Isa-second-wait <i>number</i> |
| Tree | Isa-second-wait |
| Range | 10 to 600000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

max-lsa-wait *number*

| | |
|------------|--|
| Synopsis | Max time between two LSAs being generated |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> timers lsa-generate max-lsa-wait <i>number</i> |
| Tree | max-lsa-wait |
| Range | 10 to 600000 |
| Default | 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

redistribute-delay *number*

| | |
|------------|---|
| Synopsis | Hold down timer for external routes into OSPF |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> timers redistribute-delay <i>number</i> |
| Tree | redistribute-delay |
| Range | 0 to 1000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-wait

| | |
|------------|---|
| Synopsis | Enter the spf-wait context |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> timers spf-wait |
| Tree | spf-wait |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-initial-wait *number*

| | |
|----------|--|
| Synopsis | Initial SPF calculation delay after a topology change |
| Context | configure service vprn <i>string</i> ospf3 <i>number</i> timers spf-wait spf-initial-wait <i>number</i> |
| Tree | spf-initial-wait |
| Range | 10 to 100000 |

| | |
|------------|--------------|
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-max-wait *number*

| | |
|------------|--|
| Synopsis | Max interval between two consecutive SPF calculations |
| Context | configure service vprn string ospf3 number timers spf-wait spf-max-wait <i>number</i> |
| Tree | spf-max-wait |
| Range | 10 to 120000 |
| Default | 10000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

spf-second-wait *number*

| | |
|------------|---|
| Synopsis | Hold time between the first and second SPF calculation |
| Context | configure service vprn string ospf3 number timers spf-wait spf-second-wait <i>number</i> |
| Tree | spf-second-wait |
| Range | 10 to 100000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

unicast-import *boolean*

| | |
|------------|---|
| Synopsis | Submit routes into the unicast Route Table Manager |
| Context | configure service vprn string ospf3 number unicast-import <i>boolean</i> |
| Tree | unicast-import |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

pcp

| | |
|------------|--|
| Synopsis | Enter the pcp context |
| Context | configure service vprn string pcp |
| Tree | pcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

server [name] string

| | |
|----------------|--|
| Synopsis | Enter the server list instance |
| Context | configure service vprn string pcp server string |
| Tree | server |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] string

| | |
|---------------|--|
| Synopsis | PCP server name |
| Context | configure service vprn string pcp server string |
| Tree | server |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|----------|--|
| Synopsis | Administrative state of the PCP server |
| Context | configure service vprn string pcp server string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [service vprn](#) *string* [pcp server](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dual-stack-lite-address *string*

Synopsis Inside Dual Stack Lite AFTR address
 Context **configure** [service vprn](#) *string* [pcp server](#) *string* [dual-stack-lite-address](#) *string*
 Tree [dual-stack-lite-address](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fwd-inside-router *string*

Synopsis PCP forwarding inside virtual router instance
 Context **configure** [service vprn](#) *string* [pcp server](#) *string* [fwd-inside-router](#) *string*
 Tree [fwd-inside-router](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface [[name](#)] *reference*

Synopsis Add a list entry for **interface**
 Context **configure** [service vprn](#) *string* [pcp server](#) *string* [interface](#) *reference*
 Tree [interface](#)
 Max. Instances 32
 Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *reference*

Synopsis Interface name

Context **configure** [service vprn](#) *string* [pcp server](#) *string* [interface](#) *reference*

Tree [interface](#)

Reference **configure** [service vprn](#) *string* [interface](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis PCP server policy

Context **configure** [service vprn](#) *string* [pcp server](#) *string* [policy](#) *reference*

Tree [policy](#)

Reference **configure** [service nat](#) [pcp-server-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pim

Synopsis Enable the **pim** context

Context **configure** [service vprn](#) *string* [pim](#)

Tree [pim](#)

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of PIM

Context **configure** [service vprn](#) *string* [pim](#) **admin-state** *keyword*

Tree [admin-state](#)

Default enable

| | |
|------------|-----------------|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

apply-to *keyword*

| | |
|------------|---|
| Synopsis | IES and non-IES interfaces to create in PIM |
| Context | configure service vprn <i>string</i> pim apply-to <i>keyword</i> |
| Tree | apply-to |
| Default | none |
| Options | all, none |
| Introduced | 16.0.R1 |
| Platforms | All |

bgp-nh-override *boolean*

| | |
|-------------|--|
| Synopsis | Disable VRF import EC support for next-hop resolution |
| Context | configure service vprn <i>string</i> pim bgp-nh-override <i>boolean</i> |
| Tree | bgp-nh-override |
| Description | When configured to true , the RPF check is performed using IPv4 VPN AF next-hop instead of IPv4 AF VRF import extended community (EC).
When configured to false , the RPF check is performed using IPv4 AF VRF import EC. |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | All |

import

| | |
|------------|--|
| Synopsis | Enter the import context |
| Context | configure service vprn <i>string</i> pim import |
| Tree | import |
| Introduced | 16.0.R1 |
| Platforms | All |

join-policy *reference*

| | |
|----------------|---|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> pim import join-policy <i>reference</i> |
| Tree | join-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

register-policy *reference*

| | |
|----------------|---|
| Synopsis | Policy name |
| Context | configure service vprn <i>string</i> pim import register-policy <i>reference</i> |
| Tree | register-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|----------|---|
| Synopsis | Interface name |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> |

| | |
|---------------|-------------------------------------|
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the PIM interface |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

assert-period *number*

| | |
|------------|---|
| Synopsis | Time for periodic refreshes of PIM Assert messages on an interface |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> assert-period <i>number</i> |
| Tree | assert-period |
| Range | 1 to 300 |
| Default | 60 |
| Introduced | 16.0.R1 |
| Platforms | All |

bfd-liveness

| | |
|------------|--|
| Synopsis | Enter the bfd-liveness context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> bfd-liveness |
| Tree | bfd-liveness |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4 boolean

| | |
|------------|---|
| Synopsis | Use Bidirectional Forwarding Detection for IPv4 on PIM interface |
| Context | configure service vprn string pim interface string bfd-liveness ipv4 boolean |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 boolean

| | |
|------------|---|
| Synopsis | Use Bidirectional Forwarding Detection for IPv6 on PIM interface |
| Context | configure service vprn string pim interface string bfd-liveness ipv6 boolean |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bsm-check-rtr-alert boolean

| | |
|------------|---|
| Synopsis | Check router alert option in bootstrap messages received |
| Context | configure service vprn string pim interface string bsm-check-rtr-alert boolean |
| Tree | bsm-check-rtr-alert |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-interval number

| | |
|------------|---|
| Synopsis | Frequency at which PIM Hello messages are sent over this interface |
| Context | configure service vprn string pim interface string hello-interval number |
| Tree | hello-interval |
| Range | 0 to 255 |
| Default | 30 |
| Introduced | 16.0.R1 |
| Platforms | All |

hello-multiplier *number*

| | |
|------------|---|
| Synopsis | Multiplier to determine the hold time for PIM neighbor |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> hello-multiplier <i>number</i> |
| Tree | hello-multiplier |
| Range | 20 to 100 |
| Default | 35 |
| Introduced | 16.0.R1 |
| Platforms | All |

improved-assert *boolean*

| | |
|------------|---|
| Synopsis | Allow improved assert processing on interface |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> improved-assert <i>boolean</i> |
| Tree | improved-assert |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

instant-prune-echo *boolean*

| | |
|------------|--|
| Synopsis | Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> instant-prune-echo <i>boolean</i> |
| Tree | instant-prune-echo |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |

Platforms All

monitor-oper-group

Synopsis Enter the **monitor-oper-group** context

Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group](#)

Tree [monitor-oper-group](#)

Introduced 16.0.R1

Platforms All

name *reference*

Synopsis Operational group identifier

Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group name reference](#)

Tree [name](#)

Reference **configure** [service oper-group string](#)

Introduced 16.0.R1

Platforms All

operation *keyword*

Synopsis Operation performed when operational group is active

Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group operation keyword](#)

Tree [operation](#)

Options add, subtract, set

Introduced 16.0.R1

Platforms All

priority-delta *number*

Synopsis Delta priority with operation when operational group is active

Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group priority-delta number](#)

Tree [priority-delta](#)

| | |
|------------|-----------------|
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast *boolean*

| | |
|------------|---|
| Synopsis | Enable PIM interface operation |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv4 multicast <i>boolean</i> |
| Tree | multicast |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

monitor-oper-group

| | |
|------------|---|
| Synopsis | Enter the monitor-oper-group context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv6 monitor-oper-group |
| Tree | monitor-oper-group |
| Introduced | 16.0.R1 |
| Platforms | All |

name *reference*

| | |
|----------|---|
| Synopsis | Operational group identifier |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv6 monitor-oper-group <i>name reference</i> |
| Tree | name |

| | |
|------------|---|
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

operation *keyword*

| | |
|------------|--|
| Synopsis | Operation performed when operational group is active |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv6 monitor-oper-group operation <i>keyword</i> |
| Tree | operation |
| Options | add, subtract, set |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-delta *number*

| | |
|------------|--|
| Synopsis | Delta priority with operation when operational group is active |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv6 monitor-oper-group priority-delta <i>number</i> |
| Tree | priority-delta |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast *boolean*

| | |
|------------|---|
| Synopsis | Enable PIM interface operation |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> ipv6 multicast <i>boolean</i> |
| Tree | multicast |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

max-groups *number*

| | |
|----------|--|
| Synopsis | Maximum number of groups for the interface |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> pim interface <i>string</i> max-groups <i>number</i> |
| Tree | max-groups |
| Range | 0 1 to 16000 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

mcac

| | |
|------------|--|
| Synopsis | Enter the mcac context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth

| | |
|------------|--|
| Synopsis | Enter the bandwidth context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | All |

mandatory (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac bandwidth mandatory (<i>number</i> <i>keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

total (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum allowed bandwidth |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-policy *reference*

| | |
|------------|--|
| Synopsis | Name of multicast CAC interface policy |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac interface-policy <i>reference</i> |
| Tree | interface-policy |
| Reference | configure mcac interface-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-constraints

| | |
|------------|---|
| Synopsis | Enter the mc-constraints context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints |
| Tree | mc-constraints |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the multicast CAC constraints |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |

| | |
|------------|-----------------|
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

level [*level-id*] *number*

| | |
|------------|---|
| Synopsis | Enter the level list instance |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i> |
| Tree | level |
| Introduced | 16.0.R1 |
| Platforms | All |

[level-id] *number*

| | |
|------------|---|
| Synopsis | Bandwidth level ID for an MCAC constraint |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i> |
| Tree | level |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

bandwidth *number*

| | |
|------------|---|
| Synopsis | Bandwidth available for this level |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints level <i>number</i> bandwidth <i>number</i> |
| Tree | bandwidth |
| Range | 0 to 2147483647 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

number-down [**number-lag-port-down**] *number*

| | |
|------------|--|
| Synopsis | Enter the number-down list instance |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |
| Introduced | 16.0.R1 |
| Platforms | All |

[number-lag-port-down] *number*

| | |
|------------|--|
| Synopsis | Number of ports that are down in this LAG link |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

level *number*

| | |
|-------------|---|
| Synopsis | Level ID to associate with number of down LAG ports |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints number-down <i>number</i> level <i>number</i> |
| Tree | level |
| Description | This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority. |
| Range | 1 to 8 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

use-lag-port-weight *boolean*

| | |
|----------|---|
| Synopsis | Use LAG port weight in calculating MCAC constraints |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac mc-constraints use-lag-port-weight <i>boolean</i> |
| Tree | use-lag-port-weight |
| Description | When configured to true , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

policy reference

| | |
|-------------|--|
| Synopsis | Multicast CAC policy name |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> mcac policy reference |
| Tree | policy |
| Description | <p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> • subscriber level and redirected interface when redirection is configured • subscriber level and group-interface level when redirection is unconfigured <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p> |
| Reference | configure mcac policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast-senders *keyword*

| | |
|----------|--|
| Synopsis | Subnet matching for the incoming data packets |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> multicast-senders <i>keyword</i> |

| | |
|------------|-----------------------------------|
| Tree | multicast-senders |
| Default | auto |
| Options | auto, always, never |
| Introduced | 16.0.R1 |
| Platforms | All |

p2mp-ldp-tree-join

| | |
|------------|---|
| Synopsis | Enter the p2mp-ldp-tree-join context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join |
| Tree | p2mp-ldp-tree-join |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv4 boolean

| | |
|------------|--|
| Synopsis | Allow dynamic mLDP in-band signaling for IPv4 PIM joins |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv6 boolean

| | |
|------------|--|
| Synopsis | Allow dynamic mLDP in-band signaling for IPv6 PIM joins |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> p2mp-ldp-tree-join ipv6 <i>boolean</i> |
| Tree | ipv6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority number

| | |
|----------|---|
| Synopsis | DR election priority for this interface |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> pim interface <i>string</i> priority <i>number</i> |
| Tree | priority |
| Range | 1 to 4294967295 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

sticky-dr

| | |
|------------|---|
| Synopsis | Enable the sticky-dr context |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> sticky-dr |
| Tree | sticky-dr |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|------------|---|
| Synopsis | DR election priority for this interface |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> sticky-dr priority <i>number</i> |
| Tree | priority |
| Range | 1 to 4294967295 |
| Default | 1024 |
| Introduced | 16.0.R1 |
| Platforms | All |

three-way-hello *boolean*

| | |
|------------|--|
| Synopsis | Allow three-way hello compatibility mode |
| Context | configure service vprn <i>string</i> pim interface <i>string</i> three-way-hello <i>boolean</i> |
| Tree | three-way-hello |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tracking-support *boolean*

| | |
|------------|--|
| Synopsis | Allow upstream routers to explicitly track join membership |
| Context | configure service vprn string pim interface string tracking-support boolean |
| Tree | tracking-support |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn string pim ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of PIM operation for IPv4 |
| Context | configure service vprn string pim ipv4 admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

grt-extranet

| | |
|------------|--|
| Synopsis | Enter the grt-extranet context |
| Context | configure service vprn string pim ipv4 grt-extranet |
| Tree | grt-extranet |
| Introduced | 16.0.R1 |
| Platforms | All |

any

| | |
|------------|---|
| Synopsis | GRT or VRF extranet for this instance |
| Context | configure service vprn <i>string</i> pim ipv4 grt-extranet any |
| Tree | any |
| Notes | The following elements are part of a choice: any or group-prefix . |
| Introduced | 16.0.R1 |
| Platforms | All |

group-prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Enter the group-prefix list instance |
| Context | configure service vprn <i>string</i> pim ipv4 grt-extranet group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Notes | The following elements are part of a choice: any or group-prefix . |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | IP address and mask length |
| Context | configure service vprn <i>string</i> pim ipv4 grt-extranet group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

starg *boolean*

| | |
|------------|--|
| Synopsis | Add a static (*,G) entry |
| Context | configure service vprn <i>string</i> pim ipv4 grt-extranet group-prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
starg <i>boolean</i> |
| Tree | starg |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rpf-table *keyword*

| | |
|------------|---|
| Synopsis | Route table for RPF lookup |
| Context | configure service vprn <i>string</i> pim ipv4 rpf-table <i>keyword</i> |
| Tree | rpf-table |
| Default | rtable-u |
| Options | rtable-m, rtable-u, both |
| Introduced | 16.0.R1 |
| Platforms | All |

source-address

| | |
|-------------|---|
| Synopsis | Enter the source-address context |
| Context | configure service vprn <i>string</i> pim ipv4 source-address |
| Tree | source-address |
| Description | Commands in this context configure the source IP address for PIM messages. |
| Introduced | 23.3.R1 |
| Platforms | All |

register-message *string*

| | |
|-------------|---|
| Synopsis | Source IPv4 address for PIM register messages |
| Context | configure service vprn <i>string</i> pim ipv4 source-address register-message <i>string</i> |
| Tree | register-message |
| Description | <p>This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p> |
| Introduced | 23.3.R1 |
| Platforms | All |

ssm-assert-compatible-mode *boolean*

| | |
|----------|-----------------------------------|
| Synopsis | Enable SSM assert compatible mode |
|----------|-----------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> pim ipv4 ssm-assert-compatible-mode <i>boolean</i> |
| Tree | ssm-assert-compatible-mode |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ssm-default-range *boolean*

| | |
|------------|--|
| Synopsis | SSM default range |
| Context | configure service vprn <i>string</i> pim ipv4 ssm-default-range <i>boolean</i> |
| Tree | ssm-default-range |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|---|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn <i>string</i> pim ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of PIM operation for IPv6 |
| Context | configure service vprn <i>string</i> pim ipv6 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

rpf-table *keyword*

| | |
|------------|--|
| Synopsis | Route table for RPF lookup |
| Context | configure service vprn <i>string</i> pim ipv6 rpf-table <i>keyword</i> |
| Tree | rpf-table |
| Default | rtable-u |
| Options | rtable-m, rtable-u, both |
| Introduced | 16.0.R1 |
| Platforms | All |

source-address

| | |
|-------------|--|
| Synopsis | Enter the source-address context |
| Context | configure service vprn <i>string</i> pim ipv6 source-address |
| Tree | source-address |
| Description | Commands in this context configure the source IP address for PIM messages. |
| Introduced | 23.3.R1 |
| Platforms | All |

register-message *string*

| | |
|-------------|---|
| Synopsis | Source IPv6 address for PIM register messages |
| Context | configure service vprn <i>string</i> pim ipv6 source-address register-message <i>string</i> |
| Tree | register-message |
| Description | <p>This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p> |
| Introduced | 23.3.R1 |
| Platforms | All |

ssm-default-range *boolean*

| | |
|----------|--|
| Synopsis | SSM default range |
| Context | configure service vprn <i>string</i> pim ipv6 ssm-default-range <i>boolean</i> |

| | |
|------------|-----------------------------------|
| Tree | ssm-default-range |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-ecmp-balance *boolean*

| | |
|------------|--|
| Synopsis | Enable multicast balancing of traffic over ECMP links |
| Context | configure service vprn <i>string</i> pim mc-ecmp-balance <i>boolean</i> |
| Tree | mc-ecmp-balance |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-ecmp-balance-hold *number*

| | |
|------------|--|
| Synopsis | Hold time for multicast balancing over ECMP links |
| Context | configure service vprn <i>string</i> pim mc-ecmp-balance-hold <i>number</i> |
| Tree | mc-ecmp-balance-hold |
| Range | 2 to 600 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-ecmp-hashing

| | |
|------------|---|
| Synopsis | Enable the mc-ecmp-hashing context |
| Context | configure service vprn <i>string</i> pim mc-ecmp-hashing |
| Tree | mc-ecmp-hashing |
| Introduced | 16.0.R1 |
| Platforms | All |

rebalance *boolean*

| | |
|----------|---|
| Synopsis | Rebalance flows to newly added links immediately instead of waiting until they are pruned |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> pim mc-ecmp-hashing rebalance <i>boolean</i> |
| Tree | rebalance |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

mtu-over-head *number*

| | |
|-------------|---|
| Synopsis | MVPN tunnel MTU size reduction to allow for BIER header |
| Context | configure service vprn <i>string</i> pim mtu-over-head <i>number</i> |
| Tree | mtu-over-head |
| Description | This command subtracts the specified value from the MVPN tunnel MTU to allow a BIER header to be added without exceeding the network MTU. |
| Range | 0 44 76 140 268 536 |
| Default | 0 |
| Introduced | 20.5.R1 |
| Platforms | All |

non-dr-attract-traffic *boolean*

| | |
|------------|--|
| Synopsis | Attract traffic when the router is not the designated one |
| Context | configure service vprn <i>string</i> pim non-dr-attract-traffic <i>boolean</i> |
| Tree | non-dr-attract-traffic |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

rp

| | |
|------------|---|
| Synopsis | Enter the rp context |
| Context | configure service vprn <i>string</i> pim rp |
| Tree | rp |
| Introduced | 16.0.R1 |
| Platforms | All |

bootstrap

| | |
|------------|--|
| Synopsis | Enter the bootstrap context |
| Context | configure service vprn <i>string</i> pim rp bootstrap |
| Tree | bootstrap |
| Introduced | 16.0.R1 |
| Platforms | All |

export *reference*

| | |
|----------------|--|
| Synopsis | Export policy to control the flow of bootstrap messages |
| Context | configure service vprn <i>string</i> pim rp bootstrap export <i>reference</i> |
| Tree | export |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

import *reference*

| | |
|----------------|--|
| Synopsis | Import policy to control the flow of bootstrap messages |
| Context | configure service vprn <i>string</i> pim rp bootstrap import <i>reference</i> |
| Tree | import |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv4

| | |
|----------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> pim rp ipv4 |

| | |
|------------|----------------------|
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | All |

anycast [[ipv4-address](#)] *string rp-set-peer string*

| | |
|------------|--|
| Synopsis | Add a list entry for anycast |
| Context | configure service vprn string pim rp ipv4 anycast string rp-set-peer string |
| Tree | anycast |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-address] *string*

| | |
|------------|--|
| Synopsis | Loopback IP address shared by routes in RP set |
| Context | configure service vprn string pim rp ipv4 anycast string rp-set-peer string |
| Tree | anycast |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

rp-set-peer *string*

| | |
|------------|--|
| Synopsis | Configure a peer in the anycast rp-set. |
| Context | configure service vprn string pim rp ipv4 anycast string rp-set-peer string |
| Tree | anycast |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-rp-discovery *boolean*

| | |
|----------|--|
| Synopsis | Enable auto RP discovery |
| Context | configure service vprn string pim rp ipv4 auto-rp-discovery boolean |
| Tree | auto-rp-discovery |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

bsr-candidate

| | |
|------------|--|
| Synopsis | Enter the bsr-candidate context |
| Context | configure service vprn string pim rp ipv4 bsr-candidate |
| Tree | bsr-candidate |
| Introduced | 16.0.R1 |
| Platforms | All |

address string

| | |
|------------|---|
| Synopsis | Candidate BSR IP address for Bootstrap Router election |
| Context | configure service vprn string pim rp ipv4 bsr-candidate address string |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of the Candidate BSR |
| Context | configure service vprn string pim rp ipv4 bsr-candidate admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

hash-mask-len number

| | |
|----------|---|
| Synopsis | Length for bootstrap hash mask |
| Context | configure service vprn string pim rp ipv4 bsr-candidate hash-mask-len number |
| Tree | hash-mask-len |

| | |
|------------|---------|
| Range | 0 to 32 |
| Default | 30 |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|------------|---|
| Synopsis | Bootstrap priority of the router |
| Context | configure service vpn <i>string</i> pim rp ipv4 bsr-candidate <i>priority number</i> |
| Tree | priority |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

candidate *boolean*

| | |
|-------------|--|
| Synopsis | Enable auto-RP to advertise candidate RP information |
| Context | configure service vpn <i>string</i> pim rp ipv4 candidate <i>boolean</i> |
| Tree | candidate |
| Description | When configured to true , the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.

When configured to false , the candidate RP information is not specified. |
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

mapping-agent *boolean*

| | |
|-------------|--|
| Synopsis | Enable the mapping agent on the node |
| Context | configure service vpn <i>string</i> pim rp ipv4 mapping-agent <i>boolean</i> |
| Tree | mapping-agent |
| Description | When configured to true , the mapping agent is enabled on the node. The auto-RP MA observes the auto-rp-announcement messages, selects the RP and generates the RP |

discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.

| | |
|------------|----------|
| Default | false |
| Introduced | 20.10.R1 |
| Platforms | All |

rp-candidate

| | |
|------------|---|
| Synopsis | Enter the rp-candidate context |
| Context | configure service vprn string pim rp ipv4 rp-candidate |
| Tree | rp-candidate |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|-------------|--|
| Synopsis | Local RP address |
| Context | configure service vprn string pim rp ipv4 rp-candidate address string |
| Tree | address |
| Description | This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the Candidate RP |
| Context | configure service vprn string pim rp ipv4 rp-candidate admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

group-range [ipv4-prefix] *string*

| | |
|------------|---|
| Synopsis | Add a list entry for group-range |
| Context | configure service vprn <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i> |
| Tree | group-range |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv4-prefix] *string*

| | |
|------------|--|
| Synopsis | IPv4 address and prefix length |
| Context | configure service vprn <i>string</i> pim rp ipv4 rp-candidate group-range <i>string</i> |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

holdtime *number*

| | |
|------------|--|
| Synopsis | Time during which the neighboring router considers this router to be up |
| Context | configure service vprn <i>string</i> pim rp ipv4 rp-candidate holdtime <i>number</i> |
| Tree | holdtime |
| Range | 5 to 255 |
| Default | 150 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|------------|--|
| Synopsis | Candidate RP priority |
| Context | configure service vprn <i>string</i> pim rp ipv4 rp-candidate priority <i>number</i> |
| Tree | priority |
| Range | 0 to 255 |
| Default | 192 |
| Introduced | 16.0.R1 |

Platforms All

static

Synopsis Enter the **static** context
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv4](#) [static](#)
 Tree [static](#)
 Introduced 16.0.R1
 Platforms All

address [[ipv4-address](#)] *string*

Synopsis Enter the **address** list instance
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv4](#) [static](#) [address](#) *string*
 Tree [address](#)
 Introduced 16.0.R1
 Platforms All

[\[ipv4-address\]](#) *string*

Synopsis IPv4 address for the static RP
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv4](#) [static](#) [address](#) *string*
 Tree [address](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

group-prefix [[ipv4-prefix](#)] *string*

Synopsis Add a list entry for **group-prefix**
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv4](#) [static](#) [address](#) *string* [group-prefix](#) *string*
 Tree [group-prefix](#)
 Introduced 16.0.R1
 Platforms All

[ipv4-prefix] string

| | |
|------------|--|
| Synopsis | IPv4 address and prefix length |
| Context | configure service vprn string pim rp ipv4 static address string group-prefix string |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

override boolean

| | |
|------------|---|
| Synopsis | Change the precedence for static RP over dynamically learnt RP |
| Context | configure service vprn string pim rp ipv4 static address string override boolean |
| Tree | override |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn string pim rp ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

anycast [[ipv6-address](#)] string [rp-set-peer string](#)

| | |
|------------|--|
| Synopsis | Add a list entry for anycast |
| Context | configure service vprn string pim rp ipv6 anycast string rp-set-peer string |
| Tree | anycast |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-address] string

| | |
|------------|--|
| Synopsis | Loopback IP address shared by routes in RP set |
| Context | configure service vprn string pim rp ipv6 anycast string rp-set-peer string |
| Tree | anycast |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

rp-set-peer string

| | |
|------------|--|
| Synopsis | Peer in the anycast RP set |
| Context | configure service vprn string pim rp ipv6 anycast string rp-set-peer string |
| Tree | anycast |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

bsr-candidate

| | |
|------------|--|
| Synopsis | Enter the bsr-candidate context |
| Context | configure service vprn string pim rp ipv6 bsr-candidate |
| Tree | bsr-candidate |
| Introduced | 16.0.R1 |
| Platforms | All |

address string

| | |
|------------|---|
| Synopsis | Candidate BSR IP address for Bootstrap Router election |
| Context | configure service vprn string pim rp ipv6 bsr-candidate address string |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the Candidate BSR |
| Context | configure service vprn <i>string</i> pim rp ipv6 bsr-candidate admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

hash-mask-len *number*

| | |
|------------|--|
| Synopsis | Length for bootstrap hash mask |
| Context | configure service vprn <i>string</i> pim rp ipv6 bsr-candidate hash-mask-len <i>number</i> |
| Tree | hash-mask-len |
| Range | 0 to 128 |
| Default | 126 |
| Introduced | 16.0.R1 |
| Platforms | All |

priority *number*

| | |
|------------|---|
| Synopsis | Bootstrap priority of the router |
| Context | configure service vprn <i>string</i> pim rp ipv6 bsr-candidate priority <i>number</i> |
| Tree | priority |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | All |

embedded-rp

| | |
|------------|--|
| Synopsis | Enable the embedded-rp context |
| Context | configure service vprn <i>string</i> pim rp ipv6 embedded-rp |
| Tree | embedded-rp |
| Introduced | 16.0.R1 |

Platforms All

admin-state *keyword*

Synopsis Administrative state of embedded RP

Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [embedded-rp](#) **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

group-range [[ipv6-prefix](#)] *string*

Synopsis Add a list entry for **group-range**

Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [embedded-rp](#) **group-range** *string*

Tree [group-range](#)

Introduced 16.0.R1

Platforms All

[ipv6-prefix] *string*

Synopsis IPv6 address and prefix length

Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [embedded-rp](#) **group-range** *string*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

rp-candidate

Synopsis Enter the **rp-candidate** context

Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) **rp-candidate**

Tree [rp-candidate](#)

Introduced 16.0.R1

Platforms All

address *string*

Synopsis Local RP address
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [address](#) *string*
 Tree [address](#)
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the Candidate RP
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [admin-state](#) *keyword*
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms All

group-range [[ipv6-prefix](#)] *string*

Synopsis Add a list entry for **group-range**
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [group-range](#) *string*
 Tree [group-range](#)
 Introduced 16.0.R1
 Platforms All

[ipv6-prefix] *string*

Synopsis IPv6 address and prefix length
 Context **configure** [service](#) [vprn](#) *string* [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [group-range](#) *string*
 Tree [group-range](#)
 Notes This element is part of a list key.
 Introduced 16.0.R1

Platforms All

holdtime *number*

Synopsis Time during which the neighboring router considers this router to be up

Context **configure** [service vprn](#) *string* [pim rp ipv6 rp-candidate](#) [holdtime](#) *number*

Tree [holdtime](#)

Range 5 to 255

Default 150

Units seconds

Introduced 16.0.R1

Platforms All

priority *number*

Synopsis Candidate RP priority

Context **configure** [service vprn](#) *string* [pim rp ipv6 rp-candidate](#) [priority](#) *number*

Tree [priority](#)

Range 0 to 255

Default 192

Introduced 16.0.R1

Platforms All

static

Synopsis Enter the **static** context

Context **configure** [service vprn](#) *string* [pim rp ipv6](#) [static](#)

Tree [static](#)

Introduced 16.0.R1

Platforms All

address [[ipv6-address](#)] *string*

Synopsis Enter the **address** list instance

Context **configure** [service vprn](#) *string* [pim rp ipv6](#) [static](#) [address](#) *string*

| | |
|------------|-------------------------|
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-address] *string*

| | |
|------------|--|
| Synopsis | Static IP address of the RP |
| Context | configure service vprn string pim rp ipv6 static address string |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

group-prefix [[ipv6-prefix](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for group-prefix |
| Context | configure service vprn string pim rp ipv6 static address string group-prefix string |
| Tree | group-prefix |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipv6-prefix] *string*

| | |
|------------|--|
| Synopsis | IPv6 address and prefix length |
| Context | configure service vprn string pim rp ipv6 static address string group-prefix string |
| Tree | group-prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

override *boolean*

| | |
|----------|---|
| Synopsis | Change the precedence for static RP over dynamically learnt RP |
| Context | configure service vprn string pim rp ipv6 static address string override boolean |
| Tree | override |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

spt-switchover [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Enter the spt-switchover list instance |
| Context | configure service vprn <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | spt-switchover |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | IP address and mask length |
| Context | configure service vprn <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | spt-switchover |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

threshold (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | SPT switchover threshold |
| Context | configure service vprn <i>string</i> pim spt-switchover (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) threshold (<i>number</i> <i>keyword</i>) |
| Tree | threshold |
| Range | 1 to 4294967294 |
| Units | kilobps |
| Options | infinity |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

ssm-groups

| | |
|------------|--|
| Synopsis | Enter the ssm-groups context |
| Context | configure service vprn <i>string</i> pim ssm-groups |
| Tree | ssm-groups |
| Introduced | 16.0.R1 |
| Platforms | All |

group-range [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | Add a list entry for group-range |
| Context | configure service vprn <i>string</i> pim ssm-groups group-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-range |
| Introduced | 16.0.R1 |
| Platforms | All |

[[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | IP address and mask length |
| Context | configure service vprn <i>string</i> pim ssm-groups group-range (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | group-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

radius

| | |
|------------|--|
| Synopsis | Enter the radius context |
| Context | configure service vprn <i>string</i> radius |
| Tree | radius |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy [[name](#)] *string*

| | |
|----------|--------------------------------------|
| Synopsis | Enter the proxy list instance |
|----------|--------------------------------------|

| | |
|----------------|--|
| Context | configure service vprn string radius proxy string |
| Tree | proxy |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] string

| | |
|---------------|--|
| Synopsis | RADIUS proxy name |
| Context | configure service vprn string radius proxy string |
| Tree | proxy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|--|
| Synopsis | Administrative state of RADIUS proxy |
| Context | configure service vprn string radius proxy string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-matching

| | |
|------------|---|
| Synopsis | Enter the attribute-matching context |
| Context | configure service vprn string radius proxy string attribute-matching |
| Tree | attribute-matching |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [*index*] *number*

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[index] *number*

| | |
|------------|---|
| Synopsis | Index of this entry |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i> |
| Tree | entry |
| Range | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accounting-server-policy *string*

| | |
|---------------|---|
| Synopsis | Accounting server policy |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i>
accounting-server-policy <i>string</i> |
| Tree | accounting-server-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication-server-policy *string*

| | |
|---------------|---|
| Synopsis | Authentication server policy |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> attribute-matching entry <i>number</i>
authentication-server-policy <i>string</i> |
| Tree | authentication-server-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis Prefix string

Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [entry](#) *number* [prefix-string](#) *string*

Tree [prefix-string](#)

String Length 1 to 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix-string *string*

Synopsis Prefix string

Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [entry](#) *number* [suffix-string](#) *string*

Tree [suffix-string](#)

String Length 1 to 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Matching attribute type to RADIUS server policy

Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [type](#) *number*

Tree [type](#)

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vendor (*number* | *keyword*)

Synopsis Matching Vendor ID to RADIUS server policy

Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [attribute-matching](#) [vendor](#) (*number* | *keyword*)

| | |
|------------|---|
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cache

| | |
|------------|---|
| Synopsis | Enter the cache context |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache |
| Tree | cache |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the RADIUS proxy cache |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

key

| | |
|------------|--|
| Synopsis | Enable the key context |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache key |
| Tree | key |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-type *number*

| | |
|----------|---|
| Synopsis | RADIUS attribute type to cache for this RADIUS proxy server |
|----------|---|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache key attribute-type <i>number</i> |
| Tree | attribute-type |
| Range | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

packet-type *keyword*

| | |
|------------|---|
| Synopsis | Packet type of the RADIUS messages |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache key packet-type <i>keyword</i> |
| Tree | packet-type |
| Options | access-request, access-accept |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | RADIUS Vendor ID |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache key vendor (<i>number</i> <i>keyword</i>) |
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|----------|--|
| Synopsis | Idle timeout value |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache timeout <i>number</i> |
| Tree | timeout |
| Range | 60 to 3600 |
| Default | 300 |
| Units | seconds |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

track-accounting

Synopsis Enter the **track-accounting** context
Context **configure service vprn string radius proxy string cache track-accounting**
Tree [track-accounting](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-off *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client
Context **configure service vprn string radius proxy string cache track-accounting accounting-off boolean**
Tree [accounting-off](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-on *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client
Context **configure service vprn string radius proxy string cache track-accounting accounting-on boolean**
Tree [accounting-on](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interim-update *boolean*

Synopsis Update the ESM host with the RADIUS client that generated the interim update
Context **configure service vprn string radius proxy string cache track-accounting interim-update boolean**

| | |
|------------|---|
| Tree | interim-update |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start *boolean*

| | |
|------------|---|
| Synopsis | Update host with client that generated accounting-start |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache track-accounting start <i>boolean</i> |
| Tree | start |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stop *boolean*

| | |
|------------|--|
| Synopsis | Remove ESM host and forward accounting-stop packet |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache track-accounting stop <i>boolean</i> |
| Tree | stop |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-authentication

| | |
|------------|---|
| Synopsis | Enter the track-authentication context |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache track-authentication |
| Tree | track-authentication |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accept *boolean*

| | |
|----------|--|
| Synopsis | Track Access-Accept message for mobility |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache track-authentication accept <i>boolean</i> |

| | |
|------------|---|
| Tree | accept |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-delete-hold-time *number*

| | |
|------------|--|
| Synopsis | Delete hold time |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> cache track-delete-hold-time <i>number</i> |
| Tree | track-delete-hold-time |
| Range | 0 to 6000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|--|
| Synopsis | Enter the defaults context |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> defaults |
| Tree | defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accounting-server-policy *string*

| | |
|---------------|--|
| Synopsis | Default accounting RADIUS server policy |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> defaults accounting-server-policy <i>string</i> |
| Tree | accounting-server-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication-server-policy *string*

| | |
|---------------|--|
| Synopsis | Default authentication RADIUS server policy |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> defaults authentication-server-policy <i>string</i> |
| Tree | authentication-server-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface [[interface-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Add a list entry for interface |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> interface <i>reference</i> |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[interface-name] *reference*

| | |
|------------|---|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> interface <i>reference</i> |
| Tree | interface |
| Reference | configure service vprn <i>string</i> interface <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

load-balance-key

| | |
|------------|---|
| Synopsis | Enter the load-balance-key context |
| Context | configure service vprn string radius proxy string load-balance-key |
| Tree | load-balance-key |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-1

| | |
|------------|---|
| Synopsis | Enter the attribute-1 context |
| Context | configure service vprn string radius proxy string load-balance-key attribute-1 |
| Tree | attribute-1 |
| Notes | The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *number*

| | |
|------------|--|
| Synopsis | Attribute type to cache for this RADIUS Proxy server |
| Context | configure service vprn string radius proxy string load-balance-key attribute-1 type <i>number</i> |
| Tree | type |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Vendor-Id attribute |
| Context | configure service vprn string radius proxy string load-balance-key attribute-1 vendor (<i>number</i> <i>keyword</i>) |
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-2

| | |
|------------|--|
| Synopsis | Enter the attribute-2 context |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 |
| Tree | attribute-2 |
| Notes | The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *number*

| | |
|------------|---|
| Synopsis | Attribute type to cache for this RADIUS Proxy server |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 type <i>number</i> |
| Tree | type |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Vendor-Id attribute |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-2 vendor (<i>number</i> <i>keyword</i>) |
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-3

| | |
|------------|--|
| Synopsis | Enter the attribute-3 context |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 |
| Tree | attribute-3 |
| Notes | The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *number*

| | |
|------------|---|
| Synopsis | Attribute type to cache for this RADIUS Proxy server |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 type <i>number</i> |
| Tree | type |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Vendor-Id attribute |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-3 vendor (<i>number</i> <i>keyword</i>) |
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-4

| | |
|----------|--|
| Synopsis | Enter the attribute-4 context |
| Context | configure service vpn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-4 |
| Tree | attribute-4 |

| | |
|------------|---|
| Notes | The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type number

| | |
|------------|---|
| Synopsis | Attribute type to cache for this RADIUS Proxy server |
| Context | configure service vprn string radius proxy string load-balance-key attribute-4 type number |
| Tree | type |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor (number | keyword)

| | |
|------------|---|
| Synopsis | Vendor-Id attribute |
| Context | configure service vprn string radius proxy string load-balance-key attribute-4 vendor (number keyword) |
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

attribute-5

| | |
|------------|---|
| Synopsis | Enter the attribute-5 context |
| Context | configure service vprn string radius proxy string load-balance-key attribute-5 |
| Tree | attribute-5 |
| Notes | The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *number*

| | |
|------------|---|
| Synopsis | Attribute type to cache for this RADIUS Proxy server |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5 type <i>number</i> |
| Tree | type |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Vendor-Id attribute |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key attribute-5 vendor (<i>number</i> <i>keyword</i>) |
| Tree | vendor |
| Range | 1 to 16777215 |
| Options | nokia |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip-udp

| | |
|------------|---|
| Synopsis | Key to consist of the source IP address and source UDP port of the RADIUS message |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> load-balance-key source-ip-udp |
| Tree | source-ip-udp |
| Notes | The following elements are part of a choice: (attribute-1 , attribute-2 , attribute-3 , attribute-4 , and attribute-5) or source-ip-udp . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

purpose *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Purpose of the RADIUS proxy |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> purpose <i>keyword</i> |
| Tree | purpose |
| Options | accounting, authentication, accounting-authentication |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|---|
| Synopsis | Python policy |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

secret *string*

| | |
|---------------|---|
| Synopsis | Format of the secret key to access the RADIUS proxy server |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> secret <i>string</i> |
| Tree | secret |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

send-accounting-response *boolean*

| | |
|------------|--|
| Synopsis | Allow RADIUS proxy server to respond to Accounting-Response messages |
| Context | configure service vprn <i>string</i> radius proxy <i>string</i> send-accounting-response <i>boolean</i> |
| Tree | send-accounting-response |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw

| | |
|------------|--|
| Synopsis | Enter the wlan-gw context |
| Context | configure service vprn string radius proxy string wlan-gw |
| Tree | wlan-gw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

address string

| | |
|-------------|---|
| Synopsis | IPv4 address of the distributed RADIUS proxy server |
| Context | configure service vprn string radius proxy string wlan-gw address string |
| Tree | address |
| Description | This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address string

| | |
|-------------|---|
| Synopsis | IPv6 address of the distributed RADIUS proxy server |
| Context | configure service vprn string radius proxy string wlan-gw ipv6-address string |
| Tree | ipv6-address |
| Description | This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group reference**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | ISA WLAN gateway group |
| Context | configure service vprn string radius proxy string wlan-gw-group reference |

| | |
|------------|--|
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

server [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the server list instance |
| Context | configure service vprn <i>string</i> radius server <i>string</i> |
| Tree | server |
| Max. Instances | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | External RADIUS server name |
| Context | configure service vprn <i>string</i> radius server <i>string</i> |
| Tree | server |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accept-coa *boolean*

| | |
|------------|--|
| Synopsis | Process Change of Authorization (CoA) messages |
| Context | configure service vprn <i>string</i> radius server <i>string</i> accept-coa <i>boolean</i> |
| Tree | accept-coa |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

acct-port number

| | |
|------------|--|
| Synopsis | UDP port number of the RADIUS for accounting events |
| Context | configure service vprn string radius server string acct-port number |
| Tree | acct-port |
| Range | 1 to 65535 |
| Default | 1813 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address (ipv4-address-no-zone | ipv6-address-no-zone)

| | |
|------------|---|
| Synopsis | IP address of the RADIUS server |
| Context | configure service vprn string radius server string address (ipv4-address-no-zone ipv6-address-no-zone) |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auth-port number

| | |
|------------|--|
| Synopsis | UDP port number of the RADIUS to be used as match criteria |
| Context | configure service vprn string radius server string auth-port number |
| Tree | auth-port |
| Range | 1 to 65535 |
| Default | 1812 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string radius server string description string |
| Tree | description |
| String Length | 1 to 80 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pending-requests-limit *number*

Synopsis Limit of the number for pending RADIUS requests
 Context **configure** [service vprn](#) *string* [radius server](#) *string* **pending-requests-limit** *number*
 Tree [pending-requests-limit](#)
 Range 1 to 4096
 Default 4096
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python script policy to modify CoA messages
 Context **configure** [service vprn](#) *string* [radius server](#) *string* **python-policy** *reference*
 Tree [python-policy](#)
 Reference **configure** [python](#) **python-policy** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secret *string*

Synopsis Secret key associated with this RADIUS server
 Context **configure** [service vprn](#) *string* [radius server](#) *string* **secret** *string*
 Tree [secret](#)
 String Length 1 to 115
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reassembly

Synopsis Enable the **reassembly** context

| | |
|------------|---|
| Context | configure service vprn string reassembly |
| Tree | reassembly |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nat-group *number*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | NAT group (including WLAN Gateway group) that executes the reassembly |
| Context | configure service vprn string reassembly nat-group number |
| Tree | nat-group |
| Max. Range | 0 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

to-base-network *boolean*

| | |
|------------|---|
| Synopsis | Allow reassembled traffic sent to network interface |
| Context | configure service vprn string reassembly to-base-network boolean |
| Tree | to-base-network |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

redundant-interface [[interface-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the redundant-interface list instance |
| Context | configure service vprn string redundant-interface string |
| Tree | redundant-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[interface-name] string

| | |
|---------------|---|
| Synopsis | Interface name |
| Context | configure service vprn string redundant-interface string |
| Tree | redundant-interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the interface |
| Context | configure service vprn string redundant-interface string admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string redundant-interface string description string |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time

| | |
|------------|---|
| Synopsis | Enter the hold-time context |
| Context | configure service vprn string redundant-interface string hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn string redundant-interface string hold-time ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure service vprn string redundant-interface string hold-time ipv4 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the init-only command. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

init-only *boolean*

| | |
|-------------|---|
| Synopsis | Apply delay only at interface configuration or reboot |
| Context | configure service vprn string redundant-interface string hold-time ipv4 down init-only boolean |
| Tree | init-only |
| Description | This command applies a delay only when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|----------|--|
| Synopsis | Down hold time for the IP interface |
| Context | configure service vprn string redundant-interface string hold-time ipv4 down seconds number |

| | |
|------------|---|
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service vprn string redundant-interface string hold-time ipv4 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|--|
| Synopsis | Up hold time for the IP interface |
| Context | configure service vprn string redundant-interface string hold-time ipv4 up seconds number |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-mtu *number*

| | |
|------------|---|
| Synopsis | IP MTU applied to outgoing packets |
| Context | configure service vprn string redundant-interface string ip-mtu number |
| Tree | ip-mtu |
| Range | 512 to 9786 |
| Units | bytes |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure service vprn string redundant-interface string ipv4**

Tree [ipv4](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary

Synopsis Enable the **primary** context

Context **configure service vprn string redundant-interface string ipv4 primary**

Tree [primary](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis IPv4 address to be assigned to the interface

Context **configure service vprn string redundant-interface string ipv4 primary address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-length *number*

Synopsis IPv4 address prefix length

Context **configure service vprn string redundant-interface string ipv4 primary prefix-length number**

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-ip *string*

Synopsis Remote IP address for the interface
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [ipv4](#) [primary](#) [remote-ip](#) *string*
 Tree [remote-ip](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*
 Tree [spoke-sdp](#)
 Max. Instances 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sdp-bind-id] *string*

Synopsis SDP binding ID
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*
 Tree [spoke-sdp](#)
 String Length 3 to 16
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the SDP binding to the service
 Context **configure** [service](#) [vpn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [admin-state](#) *keyword*

| | |
|------------|---|
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

control-word *boolean*

| | |
|------------|--|
| Synopsis | Use the control word as preferred |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> control-word <i>boolean</i> |
| Tree | control-word |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|---|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Egress MPLS VC label to send packets to the far end |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> egress vc-label <i>number</i> |
| Tree | vc-label |
| Range | 16 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|----------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> redundant-interface <i>string</i> spoke-sdp <i>string</i> ingress |
| Tree | ingress |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
 Context **configure** [service](#) [vprn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)
 Tree [filter](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
 Context **configure** [service](#) [vprn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) [reference](#)
 Tree [ip](#)
 Reference **configure** [filter](#) [ip-filter](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vc-label number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end
 Context **configure** [service](#) [vprn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*
 Tree [vc-label](#)
 Range 1 to 1048575
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip

| | |
|------------|--|
| Synopsis | Enable the rip context |
| Context | configure service vprn <i>string</i> rip |
| Tree | rip |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the RIP instance |
| Context | configure service vprn <i>string</i> rip admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication password passed between RIP neighbors |
| Context | configure service vprn <i>string</i> rip authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | <p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> |
| String Length | 1 to 51 |
| Introduced | 16.0.R4 |
| Platforms | All |

authentication-type *keyword*

| | |
|----------|--|
| Synopsis | Authentication type used between RIP neighbors |
|----------|--|

| | |
|-------------|--|
| Context | configure service vprn <i>string rip authentication-type keyword</i> |
| Tree | authentication-type |
| Description | This command sets the type of authentication to be used between RIP neighbors.
The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.
When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication. |
| Default | none |
| Options | none, password, md5, md20 |
| Introduced | 16.0.R4 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|-------------|--|
| Synopsis | Enable BFD to control the state of protocol adjacency |
| Context | configure service vprn <i>string rip bfd-liveness boolean</i> |
| Tree | bfd-liveness |
| Description | When configured to true , this command enables BFD to control the state of the associated protocol adjacency.
When configured to false , this command removes BFD from the associated protocol adjacency. |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

check-zero *boolean*

| | |
|-------------|---|
| Synopsis | Enable checking of mandatory zero fields |
| Context | configure service vprn <i>string rip check-zero boolean</i> |
| Tree | check-zero |
| Description | When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Default | false |
| Introduced | 16.0.R4 |

Platforms All

description *string*

Synopsis Text description
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R4
 Platforms All

export-limit

Synopsis Enable the **export-limit** context
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-limit](#)
 Tree [export-limit](#)
 Introduced 16.0.R4
 Platforms All

log-percent *number*

Synopsis Export limit before warning and SNMP notification sent
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-limit](#) [log-percent](#) *number*
 Tree [log-percent](#)
 Range 1 to 100
 Introduced 16.0.R4
 Platforms All

number *number*

Synopsis Maximum routes or prefixes exported from route table
 Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-limit](#) [number](#) *number*
 Tree [number](#)
 Range 1 to 4294967295
 Notes This element is mandatory.

Introduced 16.0.R4
Platforms All

export-policy *reference*

Synopsis Policies to determine exported routes
Context **configure** [service](#) [vprn](#) *string* [rip](#) [export-policy](#) *reference*
Tree [export-policy](#)
Reference **configure** [policy-options](#) [policy-statement](#) *string*
Max. Instances 5
Notes This element is ordered by the user.
Introduced 16.0.R4
Platforms All

group [[group-name](#)] *string*

Synopsis Enter the **group** list instance
Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string*
Tree [group](#)
Introduced 16.0.R4
Platforms All

[[group-name](#)] *string*

Synopsis RIP group name
Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string*
Tree [group](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R4
Platforms All

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of RIP neighbor interface group |
| Context | configure service vprn <i>string</i> rip group <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication password passed between RIP neighbors |
| Context | configure service vprn <i>string</i> rip group <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | <p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> |
| String Length | 1 to 51 |
| Introduced | 16.0.R4 |
| Platforms | All |

authentication-type *keyword*

| | |
|-------------|---|
| Synopsis | Authentication type |
| Context | configure service vprn <i>string</i> rip group <i>string</i> authentication-type <i>keyword</i> |
| Tree | authentication-type |
| Description | <p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p> |
| Options | none, password, md5, md20 |

Introduced 16.0.R4
 Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD to control the state of protocol adjacency
 Context **configure** [service vprn](#) *string* [rip group](#) *string* [bfd-liveness](#) *boolean*
 Tree [bfd-liveness](#)
 Description When configured to **true**, this command enables BFD to control the state of the associated protocol adjacency.
 When configured to **false**, this command removes BFD from the associated protocol adjacency.
 Introduced 16.0.R4
 Platforms All

check-zero *boolean*

Synopsis Enable checking of mandatory zero fields
 Context **configure** [service vprn](#) *string* [rip group](#) *string* [check-zero](#) *boolean*
 Tree [check-zero](#)
 Description When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
 When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
 Introduced 16.0.R4
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [service vprn](#) *string* [rip group](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R4
 Platforms All

export-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies used to rule which routes are exported to RIP |
| Context | configure service vprn <i>string</i> rip group <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Description | This command specifies the export route policies used to determine which routes are exported to RIP.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies to decide routes accepted from RIP neighbors |
| Context | configure service vprn <i>string</i> rip group <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Description | This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

message-size *number*

| | |
|----------|---|
| Synopsis | Maximum number of routes per RIP update message |
| Context | configure service vprn <i>string</i> rip group <i>string</i> message-size <i>number</i> |
| Tree | message-size |

| | |
|------------|-----------|
| Range | 25 to 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-in *number*

| | |
|------------|---|
| Synopsis | Metric added to routes received from a RIP neighbor |
| Context | configure service vprn <i>string</i> rip group <i>string</i> metric-in <i>number</i> |
| Tree | metric-in |
| Range | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-out *number*

| | |
|------------|--|
| Synopsis | Metric added to routes exported into RIP |
| Context | configure service vprn <i>string</i> rip group <i>string</i> metric-out <i>number</i> |
| Tree | metric-out |
| Range | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | All |

neighbor [[interface-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the neighbor list instance |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> |
| Tree | neighbor |
| Introduced | 16.0.R4 |
| Platforms | All |

[interface-name] *string*

| | |
|----------|--|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> |
| Tree | neighbor |

| | |
|---------------|-------------------------------------|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the RIP neighbor interface |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | Authentication password passed between RIP neighbors |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | <p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p> |
| String Length | 1 to 51 |
| Introduced | 16.0.R4 |
| Platforms | All |

authentication-type *keyword*

| | |
|----------|--|
| Synopsis | Authentication type |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> authentication-type <i>keyword</i> |

| | |
|-------------|--|
| Tree | authentication-type |
| Description | This command configures the type of authentication to be used.
The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.
When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication. |
| Options | none, password, md5, md20 |
| Introduced | 16.0.R4 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|-------------|--|
| Synopsis | Enable BFD to control the state of protocol adjacency |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Description | When configured to true , this command enables BFD to control the state of the associated protocol adjacency.
When configured to false , this command removes BFD from the associated protocol adjacency. |
| Introduced | 16.0.R4 |
| Platforms | All |

check-zero *boolean*

| | |
|-------------|---|
| Synopsis | Enable checking of mandatory zero fields |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> check-zero <i>boolean</i> |
| Tree | check-zero |
| Description | When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|---|
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies used to rule which routes are exported to RIP |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Description | This command specifies the export route policies used to determine which routes are exported to RIP.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies to decide routes accepted from RIP neighbors |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Description | This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |

Platforms All

message-size *number*

Synopsis Maximum number of routes per RIP update message

Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* [message-size](#) *number*

Tree [message-size](#)

Range 25 to 255

Introduced 16.0.R4

Platforms All

metric-in *number*

Synopsis Metric added to routes received from a RIP neighbor

Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* [metric-in](#) *number*

Tree [metric-in](#)

Range 1 to 16

Introduced 16.0.R4

Platforms All

metric-out *number*

Synopsis Metric added to routes exported into RIP

Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* [metric-out](#) *number*

Tree [metric-out](#)

Range 1 to 16

Introduced 16.0.R4

Platforms All

preference *number*

Synopsis Route preference

Context **configure** [service vprn](#) *string* [rip group](#) *string* [neighbor](#) *string* [preference](#) *number*

Tree [preference](#)

Range 1 to 255

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

receive *keyword*

| | |
|------------|---|
| Synopsis | Accepted version on received packets |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> receive <i>keyword</i> |
| Tree | receive |
| Options | version-1, version-2, both, none |
| Introduced | 16.0.R4 |
| Platforms | All |

send *keyword*

| | |
|------------|--|
| Synopsis | RIP version and method used to send RIP updates |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> send <i>keyword</i> |
| Tree | send |
| Options | none, version-1, broadcast, multicast, unicast |
| Introduced | 16.0.R4 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|---|
| Synopsis | Enable split horizon and poison reverse |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | <p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

timers

| | |
|------------|--|
| Synopsis | Enable the timers context |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers |
| Tree | timers |
| Introduced | 16.0.R4 |
| Platforms | All |

flush number

| | |
|-------------|--|
| Synopsis | RIP flush timer |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers flush <i>number</i> |
| Tree | flush |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout number

| | |
|-------------|--|
| Synopsis | RIP timeout timer |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers timeout <i>number</i> |
| Tree | timeout |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

update *number*

| | |
|------------|--|
| Synopsis | Timer that controls the frequency of updates |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> timers update <i>number</i> |
| Tree | update |
| Range | 1 to 600 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

unicast-address [[address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for unicast-address |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i> |
| Tree | unicast-address |
| Introduced | 16.0.R4 |
| Platforms | All |

[address] *string*

| | |
|------------|--|
| Synopsis | Unicast IPv6 address for the neighbor |
| Context | configure service vprn <i>string</i> rip group <i>string</i> neighbor <i>string</i> unicast-address <i>string</i> |
| Tree | unicast-address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | Route preference |
| Context | configure service vprn <i>string</i> rip group <i>string</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Introduced | 16.0.R4 |

Platforms All

receive *keyword*

Synopsis Accepted version on received packets
 Context **configure** *service vprn string rip group string receive keyword*
 Tree [receive](#)
 Options version-1, version-2, both, none
 Introduced 16.0.R4
 Platforms All

send *keyword*

Synopsis RIP version and method used to send RIP updates
 Context **configure** *service vprn string rip group string send keyword*
 Tree [send](#)
 Options none, version-1, broadcast, multicast
 Introduced 16.0.R4
 Platforms All

split-horizon *boolean*

Synopsis Enable split horizon and poison reverse
 Context **configure** *service vprn string rip group string split-horizon boolean*
 Tree [split-horizon](#)
 Description When configured to **true**, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).
 When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.
 Introduced 16.0.R4
 Platforms All

timers

| | |
|------------|--|
| Synopsis | Enable the timers context |
| Context | configure service vprn string rip group string timers |
| Tree | timers |
| Introduced | 16.0.R4 |
| Platforms | All |

flush number

| | |
|-------------|--|
| Synopsis | RIP flush timer |
| Context | configure service vprn string rip group string timers flush number |
| Tree | flush |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout number

| | |
|-------------|--|
| Synopsis | RIP timeout timer |
| Context | configure service vprn string rip group string timers timeout number |
| Tree | timeout |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

update *number*

| | |
|------------|---|
| Synopsis | Timer that controls the frequency of updates |
| Context | configure service vprn <i>string</i> rip group <i>string</i> timers update <i>number</i> |
| Tree | update |
| Range | 1 to 600 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|--|
| Synopsis | Import policies to decide routes for routing table |
| Context | configure service vprn <i>string</i> rip import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

message-size *number*

| | |
|------------|--|
| Synopsis | Maximum number of routes in the RIP message |
| Context | configure service vprn <i>string</i> rip message-size <i>number</i> |
| Tree | message-size |
| Range | 25 to 255 |
| Default | 25 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-in *number*

| | |
|----------|---|
| Synopsis | Metric added to routes received from a RIP neighbor |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string rip metric-in number</i> |
| Tree | metric-in |
| Range | 1 to 16 |
| Default | 1 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-out *number*

| | |
|------------|---|
| Synopsis | Metric added to routes exported into RIP |
| Context | configure service vprn <i>string rip metric-out number</i> |
| Tree | metric-out |
| Range | 1 to 16 |
| Default | 1 |
| Introduced | 16.0.R4 |
| Platforms | All |

preference *number*

| | |
|------------|---|
| Synopsis | Route preference |
| Context | configure service vprn <i>string rip preference number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Default | 100 |
| Introduced | 16.0.R4 |
| Platforms | All |

propagate-metric *boolean*

| | |
|-------------|---|
| Synopsis | Enable the BGP MED used to configure the RIP metric |
| Context | configure service vprn <i>string rip propagate-metric boolean</i> |
| Tree | propagate-metric |
| Description | <p>When configured to true, this command enables the BGP MED to be used to configure the RIP metric at the BGP to RIP transition on egress routers.</p> <p>When configured to false, this command sets the RIP metric to the optional value configured with the metric-out command plus one.</p> |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

receive *keyword*

| | |
|------------|--|
| Synopsis | Accepted version on received packets |
| Context | configure service vprn <i>string</i> rip receive <i>keyword</i> |
| Tree | receive |
| Default | both |
| Options | version-1, version-2, both, none |
| Introduced | 16.0.R4 |
| Platforms | All |

send *keyword*

| | |
|------------|---|
| Synopsis | RIP version and method used to send RIP updates |
| Context | configure service vprn <i>string</i> rip send <i>keyword</i> |
| Tree | send |
| Default | broadcast |
| Options | none, version-1, broadcast, multicast |
| Introduced | 16.0.R4 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|---|
| Synopsis | Enable split horizon and poison reverse |
| Context | configure service vprn <i>string</i> rip split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | <p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |

| | |
|------------|---------|
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

timers

| | |
|------------|---|
| Synopsis | Enable the timers context |
| Context | configure service vprn string rip timers |
| Tree | timers |
| Introduced | 16.0.R4 |
| Platforms | All |

flush number

| | |
|-------------|--|
| Synopsis | RIP flush timer |
| Context | configure service vprn string rip timers flush number |
| Tree | flush |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout number

| | |
|-------------|--|
| Synopsis | RIP timeout timer |
| Context | configure service vprn string rip timers timeout number |
| Tree | timeout |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range | 1 to 1200 |
| Units | seconds |

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

update *number*

| | |
|------------|---|
| Synopsis | Timer that controls the frequency of updates |
| Context | configure service vprn <i>string</i> rip timers update <i>number</i> |
| Tree | update |
| Range | 1 to 600 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

ripng

| | |
|------------|---|
| Synopsis | Enable the ripng context |
| Context | configure service vprn <i>string</i> ripng |
| Tree | ripng |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the RIPng instance |
| Context | configure service vprn <i>string</i> ripng admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|-------------|--|
| Synopsis | Enable BFD to control the state of protocol adjacency |
| Context | configure service vprn <i>string</i> ripng bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Description | When configured to true , this command enables BFD to control the state of the associated protocol adjacency.
When configured to false , this command removes BFD from the associated protocol adjacency. |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

check-zero *boolean*

| | |
|-------------|---|
| Synopsis | Enable checking of mandatory zero fields |
| Context | configure service vprn <i>string</i> ripng check-zero <i>boolean</i> |
| Tree | check-zero |
| Description | When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> ripng description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

export-limit

| | |
|------------|---|
| Synopsis | Enable the export-limit context |
| Context | configure service vprn string ripng export-limit |
| Tree | export-limit |
| Introduced | 16.0.R4 |
| Platforms | All |

log-percent number

| | |
|------------|--|
| Synopsis | Export limit before warning and SNMP notification sent |
| Context | configure service vprn string ripng export-limit log-percent number |
| Tree | log-percent |
| Range | 1 to 100 |
| Introduced | 16.0.R4 |
| Platforms | All |

number number

| | |
|------------|---|
| Synopsis | Maximum routes or prefixes exported from route table |
| Context | configure service vprn string ripng export-limit number number |
| Tree | number |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

export-policy reference

| | |
|----------------|--|
| Synopsis | Policies to determine exported routes |
| Context | configure service vprn string ripng export-policy reference |
| Tree | export-policy |
| Reference | configure policy-options policy-statement string |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |

Introduced 16.0.R4
 Platforms All

group [group-name] *string*

Synopsis Enter the **group** list instance
 Context **configure** *service vprn string ripng group string*
 Tree *group*
 Introduced 16.0.R4
 Platforms All

[group-name] *string*

Synopsis RIP group name
 Context **configure** *service vprn string ripng group string*
 Tree *group*
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R4
 Platforms All

admin-state *keyword*

Synopsis Administrative state of RIPng neighbor interface group
 Context **configure** *service vprn string ripng group string admin-state keyword*
 Tree *admin-state*
 Default enable
 Options enable, disable
 Introduced 16.0.R4
 Platforms All

bfd-liveness *boolean*

Synopsis Enable BFD to control the state of protocol adjacency
 Context **configure** *service vprn string ripng group string bfd-liveness boolean*

| | |
|-------------|--|
| Tree | bfd-liveness |
| Description | When configured to true , this command enables BFD to control the state of the associated protocol adjacency.
When configured to false , this command removes BFD from the associated protocol adjacency. |
| Introduced | 16.0.R4 |
| Platforms | All |

check-zero *boolean*

| | |
|-------------|---|
| Synopsis | Enable checking of mandatory zero fields |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> check-zero <i>boolean</i> |
| Tree | check-zero |
| Description | When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

export-policy *reference*

| | |
|-------------|---|
| Synopsis | Policies used to rule which routes are exported to RIP |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> export-policy <i>reference</i> |
| Tree | export-policy |
| Description | This command specifies the export route policies used to determine which routes are exported to RIP. |

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

| | |
|----------------|--|
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies to decide routes accepted from RIP neighbors |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Description | This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

message-size *number*

| | |
|------------|---|
| Synopsis | Maximum number of routes in the message |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> message-size <i>number</i> |
| Tree | message-size |
| Range | 25 to 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-in *number*

| | |
|------------|--|
| Synopsis | Metric added to routes received from the neighbor |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> metric-in <i>number</i> |
| Tree | metric-in |
| Range | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-out *number*

| | |
|------------|---|
| Synopsis | Metric added to routes exported into RIPng |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> metric-out <i>number</i> |
| Tree | metric-out |
| Range | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | All |

neighbor [**interface-name**] *reference*

| | |
|------------|--|
| Synopsis | Enter the neighbor list instance |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> |
| Tree | neighbor |
| Introduced | 16.0.R4 |
| Platforms | All |

[interface-name] *reference*

| | |
|------------|--|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> |
| Tree | neighbor |
| Reference | configure service vprn <i>string</i> interface <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the RIPng neighbor |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|-------------|--|
| Synopsis | Enable BFD to control the state of protocol adjacency |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Description | When configured to true , this command enables BFD to control the state of the associated protocol adjacency.
When configured to false , this command removes BFD from the associated protocol adjacency. |
| Introduced | 16.0.R4 |
| Platforms | All |

check-zero *boolean*

| | |
|-------------|---|
| Synopsis | Enable checking of mandatory zero fields |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference check-zero <i>boolean</i> |
| Tree | check-zero |
| Description | When configured to true , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.
When configured to false , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero. |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

export-policy *reference*

| | |
|----------------|---|
| Synopsis | Policies used to rule which routes are exported to RIP |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference export-policy <i>reference</i> |
| Tree | export-policy |
| Description | This command specifies the export route policies used to determine which routes are exported to RIP.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

import-policy *reference*

| | |
|-------------|---|
| Synopsis | Policies to decide routes accepted from RIP neighbors |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference import-policy <i>reference</i> |
| Tree | import-policy |
| Description | This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied. |
| Reference | configure policy-options policy-statement <i>string</i> |

| | |
|----------------|--------------------------------------|
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

message-size *number*

| | |
|------------|--|
| Synopsis | Maximum number of routes in the message |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> message-size <i>number</i> |
| Tree | message-size |
| Range | 25 to 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-in *number*

| | |
|------------|---|
| Synopsis | Metric added to routes received from the neighbor |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> metric-in <i>number</i> |
| Tree | metric-in |
| Range | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-out *number*

| | |
|------------|--|
| Synopsis | Metric added to routes exported into RIPng |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> metric-out <i>number</i> |
| Tree | metric-out |
| Range | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | Route preference |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

receive *keyword*

| | |
|------------|--|
| Synopsis | Accepted version on received packets |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> receive <i>keyword</i> |
| Tree | receive |
| Options | none, ripng |
| Introduced | 16.0.R4 |
| Platforms | All |

send *keyword*

| | |
|------------|---|
| Synopsis | RIPng version and method used to send RIPng updates |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> send <i>keyword</i> |
| Tree | send |
| Options | none, ripng, unicast |
| Introduced | 16.0.R4 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|---|
| Synopsis | Enable split horizon and poison reverse |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor <i>reference</i> split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | When configured to true , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity). |

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

timers

| | |
|------------|--|
| Synopsis | Enable the timers context |
| Context | configure service vprn string ripng group string neighbor reference timers |
| Tree | timers |
| Introduced | 16.0.R4 |
| Platforms | All |

flush *number*

| | |
|-------------|--|
| Synopsis | RIP flush timer |
| Context | configure service vprn string ripng group string neighbor reference timers flush <i>number</i> |
| Tree | flush |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout *number*

| | |
|----------|--|
| Synopsis | RIP timeout timer |
| Context | configure service vprn string ripng group string neighbor reference timers timeout <i>number</i> |
| Tree | timeout |

| | |
|-------------|--|
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

update *number*

| | |
|------------|--|
| Synopsis | Timer that controls the frequency of updates |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference timers update <i>number</i> |
| Tree | update |
| Range | 1 to 600 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

unicast-address [[address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for unicast-address |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference unicast-address <i>string</i> |
| Tree | unicast-address |
| Introduced | 16.0.R4 |
| Platforms | All |

[address] *string*

| | |
|----------|--|
| Synopsis | Unicast IPv6 address for the neighbor |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> neighbor reference unicast-address <i>string</i> |
| Tree | unicast-address |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | Route preference |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

receive *keyword*

| | |
|------------|--|
| Synopsis | Accepted version on received packets |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> receive <i>keyword</i> |
| Tree | receive |
| Options | none, ripng |
| Introduced | 16.0.R4 |
| Platforms | All |

send *keyword*

| | |
|------------|---|
| Synopsis | RIPng version and method used to send RIPng updates |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> send <i>keyword</i> |
| Tree | send |
| Options | none, ripng |
| Introduced | 16.0.R4 |
| Platforms | All |

split-horizon *boolean*

| | |
|----------|--|
| Synopsis | Enable split horizon and poison reverse |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> split-horizon <i>boolean</i> |

| | |
|-------------|---|
| Tree | split-horizon |
| Description | <p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

timers

| | |
|------------|---|
| Synopsis | Enable the timers context |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> timers |
| Tree | timers |
| Introduced | 16.0.R4 |
| Platforms | All |

flush number

| | |
|-------------|--|
| Synopsis | RIP flush timer |
| Context | configure service vprn <i>string</i> ripng group <i>string</i> timers flush <i>number</i> |
| Tree | flush |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout number

| | |
|----------|-------------------|
| Synopsis | RIP timeout timer |
|----------|-------------------|

| | |
|-------------|--|
| Context | configure service vprn <i>string ripng group string timers timeout number</i> |
| Tree | timeout |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

update *number*

| | |
|------------|---|
| Synopsis | Timer that controls the frequency of updates |
| Context | configure service vprn <i>string ripng group string timers update number</i> |
| Tree | update |
| Range | 1 to 600 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

import-policy *reference*

| | |
|----------------|---|
| Synopsis | Import policies to decide routes for routing table |
| Context | configure service vprn <i>string ripng import-policy reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R4 |
| Platforms | All |

message-size *number*

| | |
|------------|---|
| Synopsis | Maximum number of routes in the message |
| Context | configure service vprn <i>string</i> ripng message-size <i>number</i> |
| Tree | message-size |
| Range | 25 to 255 |
| Default | 25 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-in *number*

| | |
|------------|--|
| Synopsis | Metric added to routes received from the neighbor |
| Context | configure service vprn <i>string</i> ripng metric-in <i>number</i> |
| Tree | metric-in |
| Range | 1 to 16 |
| Default | 1 |
| Introduced | 16.0.R4 |
| Platforms | All |

metric-out *number*

| | |
|------------|---|
| Synopsis | Metric added to routes exported into RIPng |
| Context | configure service vprn <i>string</i> ripng metric-out <i>number</i> |
| Tree | metric-out |
| Range | 1 to 16 |
| Default | 1 |
| Introduced | 16.0.R4 |
| Platforms | All |

preference *number*

| | |
|----------|---|
| Synopsis | Route preference |
| Context | configure service vprn <i>string</i> ripng preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |

| | |
|------------|---------|
| Default | 100 |
| Introduced | 16.0.R4 |
| Platforms | All |

receive *keyword*

| | |
|------------|--|
| Synopsis | Accepted version on received packets |
| Context | configure service vprn <i>string</i> ripng receive <i>keyword</i> |
| Tree | receive |
| Default | ripng |
| Options | none, ripng |
| Introduced | 16.0.R4 |
| Platforms | All |

send *keyword*

| | |
|------------|---|
| Synopsis | RIPng version and method used to send RIPng updates |
| Context | configure service vprn <i>string</i> ripng send <i>keyword</i> |
| Tree | send |
| Default | ripng |
| Options | none, ripng |
| Introduced | 16.0.R4 |
| Platforms | All |

split-horizon *boolean*

| | |
|-------------|---|
| Synopsis | Enable split horizon and poison reverse |
| Context | configure service vprn <i>string</i> ripng split-horizon <i>boolean</i> |
| Tree | split-horizon |
| Description | <p>When configured to true, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to false, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p> |

| | |
|------------|---------|
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

timers

| | |
|------------|--|
| Synopsis | Enable the timers context |
| Context | configure service vprn <i>string</i> ripng timers |
| Tree | timers |
| Introduced | 16.0.R4 |
| Platforms | All |

flush *number*

| | |
|-------------|--|
| Synopsis | RIP flush timer |
| Context | configure service vprn <i>string</i> ripng timers flush <i>number</i> |
| Tree | flush |
| Description | This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely. |
| Range | 1 to 1200 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout *number*

| | |
|-------------|--|
| Synopsis | RIP timeout timer |
| Context | configure service vprn <i>string</i> ripng timers timeout <i>number</i> |
| Tree | timeout |
| Description | This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database. |
| Range | 1 to 1200 |
| Units | seconds |

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

update *number*

| | |
|------------|---|
| Synopsis | Timer that controls the frequency of updates |
| Context | configure service vprn <i>string</i> ripng timers update <i>number</i> |
| Tree | update |
| Range | 1 to 600 |
| Units | seconds |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

router-id *string*

| | |
|------------|---|
| Synopsis | Unique router ID for the router in the AS |
| Context | configure service vprn <i>string</i> router-id <i>string</i> |
| Tree | router-id |
| Introduced | 16.0.R1 |
| Platforms | All |

segment-routing-v6 [[instance](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the segment-routing-v6 list instance |
| Context | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> |
| Tree | segment-routing-v6 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[instance] *number*

| | |
|----------|--|
| Synopsis | Segment routing IPv6 instance |
| Context | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> |

| | |
|------------|---|
| Tree | segment-routing-v6 |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

locator [[locator-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the locator list instance |
| Context | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> |
| Tree | locator |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

[locator-name] *reference*

| | |
|------------|--|
| Synopsis | SRv6 locator name |
| Context | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> |
| Tree | locator |
| Reference | configure router <i>string</i> segment-routing segment-routing-v6 locator <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

function

| | |
|-------------|---|
| Synopsis | Enter the function context |
| Context | configure service vprn <i>string</i> segment-routing-v6 <i>number</i> locator <i>reference</i> function |
| Tree | function |
| Description | Commands in this context configure the End SID functions for each SRH mode.
The end-dt4 configuration and the end-dt46 configuration are mutually exclusive.
The end-dt6 configuration and the end-dt46 configuration are mutually exclusive. |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

end-dt4

| | |
|------------|---|
| Synopsis | Enable the end-dt4 context |
| Context | configure service vprn string segment-routing-v6 number locator reference function end-dt4 |
| Tree | end-dt4 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vprn string segment-routing-v6 number locator reference function end-dt4 value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.

When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

end-dt46

| | |
|------------|--|
| Synopsis | Enable the end-dt46 context |
| Context | configure service vprn string segment-routing-v6 number locator reference function end-dt46 |
| Tree | end-dt46 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|----------|---|
| Synopsis | SRv6 function value |
| Context | configure service vprn string segment-routing-v6 number locator reference function end-dt46 value number |
| Tree | value |

| | |
|-------------|--|
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

end-dt6

| | |
|------------|---|
| Synopsis | Enable the end-dt6 context |
| Context | configure service vprn string segment-routing-v6 number locator reference function end-dt6 |
| Tree | end-dt6 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vprn string segment-routing-v6 number locator reference function end-dt6 value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 21.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

micro-segment-locator [*locator-name*] *reference*

| | |
|------------|--|
| Synopsis | Enter the micro-segment-locator list instance |
| Context | configure service vprn string segment-routing-v6 number micro-segment-locator reference |
| Tree | micro-segment-locator |
| Introduced | 22.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

[**locator-name**] *reference*

Synopsis Micro-segment SRv6 locator name

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference**

Tree [micro-segment-locator](#)

Description This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.

Reference **configure router string segment-routing segment-routing-v6 micro-segment-locator string**

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

function

Synopsis Enter the **function** context

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function**

Tree [function](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt4

Synopsis Enable the **udt4** context

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt4**

Tree [udt4](#)

Description Commands in this context configure the SRv6 uDT4 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 prefixes occur in the VPRN service.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis SRv6 function value

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt4 value number**

Tree [value](#)

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

udt46

Synopsis Enable the **udt46** context

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt46**

Tree [udt46](#)

Description The commands in this context configure the SRv6 uDT46 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 and IPv6 prefixes occur in the VPRN service.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

value number

Synopsis SRv6 function value

Context **configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt46 value number**

Tree [value](#)

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

| | |
|------------|---|
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

udt6

| | |
|-------------|---|
| Synopsis | Enable the udt6 context |
| Context | configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt6 |
| Tree | udt6 |
| Description | Commands in this context configure the SRv6 uDT6 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occur in the VPRN service. |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

value number

| | |
|-------------|--|
| Synopsis | SRv6 function value |
| Context | configure service vprn string segment-routing-v6 number micro-segment-locator reference function udt6 value number |
| Tree | value |
| Description | This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.

When unconfigured, the system allocates a value dynamically. |
| Range | 1 to 1048575 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR |

selective-fib boolean

| | |
|------------|--|
| Synopsis | Enable selective FIB |
| Context | configure service vprn string selective-fib boolean |
| Tree | selective-fib |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

service-id *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service ID |
| Context | configure service vprn <i>string</i> service-id <i>number</i> |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

sfm-overload

| | |
|------------|--|
| Synopsis | Enable the sfm-overload context |
| Context | configure service vprn <i>string</i> sfm-overload |
| Tree | sfm-overload |
| Introduced | 16.0.R2 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR |

holdoff-time *number*

| | |
|------------|---|
| Synopsis | Delay in detecting SFM failures and setting overload |
| Context | configure service vprn <i>string</i> sfm-overload holdoff-time <i>number</i> |
| Tree | holdoff-time |
| Range | 1 to 600 |
| Units | seconds |
| Introduced | 16.0.R2 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR |

sgt-qos

| | |
|----------|---|
| Synopsis | Enter the sgt-qos context |
| Context | configure service vprn <i>string</i> sgt-qos |

| | |
|------------|-------------------------|
| Tree | sgt-qos |
| Introduced | 16.0.R1 |
| Platforms | All |

dot1p

| | |
|------------|--|
| Synopsis | Enter the dot1p context |
| Context | configure service vprn string sgt-qos dot1p |
| Tree | dot1p |
| Introduced | 16.0.R1 |
| Platforms | All |

application [[dot1p-app-name](#)] *keyword*

| | |
|------------|--|
| Synopsis | Enter the application list instance |
| Context | configure service vprn string sgt-qos dot1p application keyword |
| Tree | application |
| Introduced | 16.0.R1 |
| Platforms | All |

[[dot1p-app-name](#)] *keyword*

| | |
|------------|--|
| Synopsis | Dot1p application ID that generates control traffic |
| Context | configure service vprn string sgt-qos dot1p application keyword |
| Tree | application |
| Options | arp, isis, pppoe |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

dot1p (*keyword* | *number*)

| | |
|----------|---|
| Synopsis | Dot1p value to the traffic generated by this application |
| Context | configure service vprn string sgt-qos dot1p application keyword dot1p (keyword number) |

| | |
|------------|--------------------------------|
| Tree | dot1p |
| Range | 0 to 7 |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R1 |
| Platforms | All |

dscp

| | |
|------------|--|
| Synopsis | Enter the dscp context |
| Context | configure service vprn <i>string</i> sgt-qos dscp |
| Tree | dscp |
| Introduced | 16.0.R1 |
| Platforms | All |

application [[dscp-app-name](#)] *keyword*

| | |
|-------------|--|
| Synopsis | Enter the application list instance |
| Context | configure service vprn <i>string</i> sgt-qos dscp application <i>keyword</i> |
| Tree | application |
| Description | <p>Commands in this context configure DSCP remarking for self-generated application traffic.</p> <p>All packets generated by the configured application instance use the value configured for the DSCP name or value. The instance can be Base, router, VPRN, or management.</p> <p>The system uses the DSCP value configured in this instance to:</p> <ul style="list-style-type: none"> • set the DSCP bits in the IP packet • signal from the CPM to the egress FC QoS policy to set the Ethernet 802.1p and MPLS EXP bits including, PPPoE, and IS-IS packets that do not carry DSCP bits • configure the DSCP value in the egress IP header (which the egress QoS policy does not overwrite) |
| Introduced | 16.0.R1 |
| Platforms | All |

[[dscp-app-name](#)] *keyword*

| | |
|----------|---|
| Synopsis | DSCP application ID that generates control traffic |
| Context | configure service vprn <i>string</i> sgt-qos dscp application <i>keyword</i> |

| | |
|-------------|---|
| Tree | application |
| Description | This command configures the DSCP application ID that generates control traffic. |
| Options | bgp, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, gtp, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, pfc, ibcp, bfd |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

dscp (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | DSCP value to the traffic generated by this application |
| Context | configure service vpn <i>string</i> sgt-qos dscp application <i>keyword</i> dscp (<i>keyword</i> <i>number</i>) |
| Tree | dscp |
| Range | 0 to 63 |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | All |

dscp-map [[dscp-name](#)] *keyword*

| | |
|------------|---|
| Synopsis | Enter the dscp-map list instance |
| Context | configure service vpn <i>string</i> sgt-qos dscp dscp-map <i>keyword</i> |
| Tree | dscp-map |
| Introduced | 16.0.R2 |
| Platforms | All |

[[dscp-name](#)] *keyword*

| | |
|----------|---|
| Synopsis | DSCP name mapped to forwarding class |
| Context | configure service vpn <i>string</i> sgt-qos dscp dscp-map <i>keyword</i> |
| Tree | dscp-map |

| | |
|------------|---|
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

fc keyword

| | |
|------------|---|
| Synopsis | Value for the forwarding class for this mapping |
| Context | configure service vprn string sgt-qos dscp dscp-map keyword fc keyword |
| Tree | fc |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R2 |
| Platforms | All |

snmp

| | |
|------------|---|
| Synopsis | Enter the snmp context |
| Context | configure service vprn string snmp |
| Tree | snmp |
| Introduced | 16.0.R5 |
| Platforms | All |

access boolean

| | |
|------------|--|
| Synopsis | Enable SNMP access for the VPRN service |
| Context | configure service vprn string snmp access boolean |
| Tree | access |
| Default | false |
| Introduced | 16.0.R5 |
| Platforms | All |

community [**community-string**] *string*

| | |
|-------------|--|
| Synopsis | Enter the community list instance |
| Context | configure service vprn string snmp community string |
| Tree | community |
| Description | <p>Commands in this context set the SNMP community names to be used with the associated VPRN instance. These VPRN community names are used to associate SNMP v1/v2c requests with a particular VPRN context and to return a reply that contains VPRN-specific data or limit SNMP access to data in a specific VPRN instance.</p> <p>VPRN SNMP communities configured with an access permission of 'r' are automatically associated with the default access group "snmp-vprn-ro" and the "vprn-view" view (read only). VPRN SNMP communities configured with an access permission of 'rw' are automatically associated with the default access group "snmp-vprn" and the "vprn-view" view (read/write).</p> <p>The community in an SNMP v1/v2 request determines the SNMP context (that is, the VPRN number for accessing SNMP tables) and not the VPRN of the incoming interface on which the request was received. For example, when an SNMP request arrives on VPRN 5 interface "ringo" with a destination IP address equal to the "ringo" interface, but the community in the SNMP request is the community configured against VPRN 101, the SNMP request is processed using the VPRN 101 context. (the response contains information about VPRN 101). Nokia recommends avoiding the use of a simple series of VPRN SNMP community values that are similar to each other (for example, avoid my-vprncomm-1, my-vprn-comm-2, and so on).</p> |
| Introduced | 16.0.R5 |
| Platforms | All |

[community-string] *string*

| | |
|---------------|--|
| Synopsis | SNMP v1/v2c community name associated with the VPRN |
| Context | configure service vprn string snmp community string |
| Tree | community |
| String Length | 1 to 114 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R5 |
| Platforms | All |

access-permissions *keyword*

| | |
|----------|---|
| Synopsis | Access permissions to MIB objects |
| Context | configure service vprn string snmp community string access-permissions keyword |

| | |
|------------|------------------------------------|
| Tree | access-permissions |
| Options | r, rw |
| Notes | This element is mandatory. |
| Introduced | 16.0.R5 |
| Platforms | All |

source-access-list *reference*

| | |
|-------------|---|
| Synopsis | List name used to validate the source IP address |
| Context | configure service vprn <i>string</i> snmp community <i>string</i> source-access-list <i>reference</i> |
| Tree | source-access-list |
| Description | This command specifies the SNMP source access list to use with the SNMP community. The source access list is used to validate the source IP address of all received SNMP requests that use the community. |
| Reference | configure system security snmp source-access-list <i>string</i> |
| Introduced | 16.0.R5 |
| Platforms | All |

version *keyword*

| | |
|------------|---|
| Synopsis | SNMP version |
| Context | configure service vprn <i>string</i> snmp community <i>string</i> version <i>keyword</i> |
| Tree | version |
| Default | both |
| Options | v1, v2c, both |
| Introduced | 16.0.R5 |
| Platforms | All |

source-address

| | |
|-------------|--|
| Synopsis | Enter the source-address context |
| Context | configure service vprn <i>string</i> source-address |
| Tree | source-address |
| Description | Commands in this context configure the source address and application to use in all unsolicited packets. |

Introduced 16.0.R1
 Platforms All

ipv4 [[application](#)] *keyword*

Synopsis Enter the **ipv4** list instance
 Context **configure** [service](#) [vprn](#) *string* [source-address](#) [ipv4](#) *keyword*
 Tree [ipv4](#)
 Introduced 16.0.R1
 Platforms All

[application] *keyword*

Synopsis Application that uses the source IP address
 Context **configure** [service](#) [vprn](#) *string* [source-address](#) [ipv4](#) *keyword*
 Tree [ipv4](#)
 Options telnet, ssh, snmptrap, ping, traceroute, ntp, cflowd, ptp, icmp-error
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv4 address
 Context **configure** [service](#) [vprn](#) *string* [source-address](#) [ipv4](#) *keyword* [address](#) *string*
 Tree [address](#)
 Notes The following elements are part of a mandatory choice: **address** or **interface-name**.
 Introduced 16.0.R1
 Platforms All

interface-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | IP interface name |
| Context | configure service vprn <i>string</i> source-address ipv4 <i>keyword</i> interface-name <i>string</i> |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a mandatory choice: address or interface-name . |
| Introduced | 16.0.R1 |
| Platforms | All |

ipv6 [[application](#)] *keyword*

| | |
|------------|--|
| Synopsis | Enter the ipv6 list instance |
| Context | configure service vprn <i>string</i> source-address ipv6 <i>keyword</i> |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | All |

[application] *keyword*

| | |
|------------|--|
| Synopsis | Application that uses the source IP address |
| Context | configure service vprn <i>string</i> source-address ipv6 <i>keyword</i> |
| Tree | ipv6 |
| Options | telnet, snmptrap, ping, traceroute, cflowd, ntp, icmp6-error, ssh, ptp |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Source IPv6 address |
| Context | configure service vprn <i>string</i> source-address ipv6 <i>keyword</i> address <i>string</i> |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

spoke-sdp [[sdp-bind-id](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the spoke-sdp list instance |
| Context | configure service vprn <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| Introduced | 16.0.R1 |
| Platforms | All |

[sdp-bind-id] *string*

| | |
|---------------|---|
| Synopsis | SDP binding ID |
| Context | configure service vprn <i>string</i> spoke-sdp <i>string</i> |
| Tree | spoke-sdp |
| String Length | 3 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R3 |
| Platforms | All |

description *string*

| | |
|----------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> spoke-sdp <i>string</i> description <i>string</i> |
| Tree | description |

| | |
|---------------|---------|
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

static-routes

| | |
|------------|--|
| Synopsis | Enter the static-routes context |
| Context | configure service vprn string static-routes |
| Tree | static-routes |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down

| | |
|------------|--|
| Synopsis | Enable the hold-down context |
| Context | configure service vprn string static-routes hold-down |
| Tree | hold-down |
| Introduced | 16.0.R1 |
| Platforms | All |

initial number

| | |
|------------|---|
| Synopsis | Value for the initial hold down time |
| Context | configure service vprn string static-routes hold-down initial number |
| Tree | initial |
| Range | 1 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

max-value number

| | |
|----------|---|
| Synopsis | Maximum value of the hold down time |
| Context | configure service vprn string static-routes hold-down max-value number |
| Tree | max-value |

| | |
|------------|----------------------------|
| Range | 1 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

multiplier *number*

| | |
|------------|---|
| Synopsis | Value by which the previous hold-down time is multiplied to calculate the new one |
| Context | configure <i>service vprn string static-routes hold-down multiplier number</i> |
| Tree | multiplier |
| Range | 1 to 10 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

route [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) *route-type keyword*

| | |
|------------|--|
| Synopsis | Enter the route list instance |
| Context | configure <i>service vprn string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword</i> |
| Tree | route |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|--|
| Synopsis | IP prefix and prefix length for the static routes |
| Context | configure <i>service vprn string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword</i> |
| Tree | route |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

route-type keyword

| | |
|------------|---|
| Synopsis | Static route type |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword |
| Tree | route |
| Options | unicast, multicast |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

backup-tag number

| | |
|-------------|---|
| Synopsis | Static route backup tag |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword backup-tag number |
| Tree | backup-tag |
| Description | <p>This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.</p> <p>The tag specified at this level of the static route causes the tag values that are configured under the next-hop, black-hole, and indirect contexts of the static route to be ignored.</p> |
| Range | 1 to 4294967295 |
| Introduced | 21.2.R1 |
| Platforms | All |

blackhole

| | |
|------------|---|
| Synopsis | Enable the blackhole context |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword blackhole |
| Tree | blackhole |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the static route operation |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type
<i>keyword</i> blackhole admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

community *string*

| | |
|---------------|---|
| Synopsis | Community ID associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type
<i>keyword</i> blackhole community <i>string</i> |
| Tree | community |
| String Length | 1 to 72 |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type
<i>keyword</i> blackhole description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

generate-icmp *boolean*

| | |
|----------|--|
| Synopsis | Send ICMP unreachable messages when received packets match a static route with black-hole next-hop |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type
<i>keyword</i> blackhole generate-icmp <i>boolean</i> |
| Tree | generate-icmp |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

metric *number*

| | |
|------------|---|
| Synopsis | Static route metric |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole metric <i>number</i> |
| Tree | metric |
| Range | 0 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|---|
| Synopsis | Priority of this static route over the routes from different sources |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-list

| | |
|------------|--|
| Synopsis | Enter the prefix-list context |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole prefix-list |
| Tree | prefix-list |
| Introduced | 16.0.R1 |
| Platforms | All |

flag *keyword*

| | |
|------------|---|
| Synopsis | Static route match condition from prefix list |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole prefix-list flag <i>keyword</i> |
| Tree | flag |
| Default | any |
| Options | any, all, none |
| Introduced | 16.0.R1 |
| Platforms | All |

name *reference*

| | |
|------------|---|
| Synopsis | Prefix list name |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole prefix-list name <i>reference</i> |
| Tree | name |
| Reference | configure policy-options prefix-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

tag *number*

| | |
|------------|--|
| Synopsis | Static route tag |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword blackhole tag <i>number</i> |
| Tree | tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

community *string*

| | |
|----------|---|
| Synopsis | Community ID associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword community <i>string</i> |
| Tree | community |

| | |
|----------------|--------------------------------------|
| String Length | 1 to 72 |
| Max. Instances | 12 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

grt

| | |
|------------|---|
| Synopsis | Enable the grt context |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt |
| Tree | grt |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the static route operation |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword grt description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

metric number

| | |
|------------|---|
| Synopsis | Static route metric |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type
keyword grt metric number |
| Tree | metric |
| Range | 0 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

preference number

| | |
|------------|---|
| Synopsis | Priority of this static route over the routes from different sources |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type
keyword grt preference number |
| Tree | preference |
| Range | 1 to 255 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

indirect [**ip-address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Enter the indirect list instance |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type
keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | indirect |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|----------|---|
| Synopsis | Next-hop IP address used to reach the destination |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type
keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | indirect |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the static route operation |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

community *string*

| | |
|---------------|---|
| Synopsis | Community ID associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) community string |
| Tree | community |
| String Length | 1 to 72 |
| Introduced | 16.0.R1 |
| Platforms | All |

cpe-check [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|-------------|---|
| Synopsis | Enter the cpe-check list instance |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | cpe-check |
| Description | <p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> |

Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

| | |
|----------------|---------|
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | IP address of the target CPE device |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | cpe-check |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-count *number*

| | |
|------------|---|
| Synopsis | Consecutive ping replies missed before CPE deemed down |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) drop-count <i>number</i> |
| Tree | drop-count |
| Range | 1 to 255 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|----------|--|
| Synopsis | Interval between ICMP pings to the target CPE IP address |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i> |
| Tree | interval |
| Range | 1 to 255 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

log *boolean*

| | |
|------------|--|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i> |
| Tree | log |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

padding-size *number*

| | |
|------------|--|
| Synopsis | Padding size for CPE connectivity checks |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|--|
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

destination-class *number*

| | |
|------------|---|
| Synopsis | Destination class for this static route |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) destination-class number |
| Tree | destination-class |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

metric *number*

| | |
|------------|--|
| Synopsis | Static route metric |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) metric number |
| Tree | metric |
| Range | 0 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|----------|--|
| Synopsis | Priority of this static route over the routes from different sources |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) preference number |
| Tree | preference |
| Range | 1 to 255 |
| Default | 5 |

Introduced 16.0.R1
 Platforms All

prefix-list

Synopsis Enter the **prefix-list** context
 Context **configure** [service](#) [vprn](#) *string* [static-routes](#) [route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) [keyword](#) [indirect](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [prefix-list](#)
 Tree [prefix-list](#)
 Introduced 16.0.R1
 Platforms All

flag keyword

Synopsis Static route match condition from prefix list
 Context **configure** [service](#) [vprn](#) *string* [static-routes](#) [route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) [keyword](#) [indirect](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [prefix-list](#) [flag](#) [keyword](#)
 Tree [flag](#)
 Default any
 Options any, all, none
 Introduced 16.0.R1
 Platforms All

name reference

Synopsis Prefix list name
 Context **configure** [service](#) [vprn](#) *string* [static-routes](#) [route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) [keyword](#) [indirect](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [prefix-list](#) [name](#) [reference](#)
 Tree [name](#)
 Reference **configure** [policy-options](#) [prefix-list](#) *string*
 Introduced 16.0.R1
 Platforms All

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

forwarding-class keyword

| | |
|------------|---|
| Synopsis | Forwarding class associated with the static route |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos forwarding-class keyword |
| Tree | forwarding-class |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority keyword

| | |
|------------|---|
| Synopsis | Static route priority |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) qos priority keyword |
| Tree | priority |
| Options | low, high |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

source-class number

| | |
|----------|--|
| Synopsis | Source class for this static route |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) source-class number |
| Tree | source-class |
| Range | 1 to 255 |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

tag number

| | |
|------------|--|
| Synopsis | Static route tag |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword indirect (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) tag number |
| Tree | tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

interface [**interface-name**] *string*

| | |
|------------|---|
| Synopsis | Enter the interface list instance |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword interface string |
| Tree | interface |
| Introduced | 16.0.R1 |
| Platforms | All |

[interface-name] *string*

| | |
|---------------|---|
| Synopsis | Router interface name. |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword interface string |
| Tree | interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the static route operation |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

community *string*

| | |
|---------------|---|
| Synopsis | Community ID associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> community <i>string</i> |
| Tree | community |
| String Length | 1 to 72 |
| Introduced | 16.0.R1 |
| Platforms | All |

cpe-check [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------------|--|
| Synopsis | Enter the cpe-check list instance |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | cpe-check |
| Description | <p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p>Note: A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of cpe-ping, the node paces these minor events.</p> |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |

Platforms All

[address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP address of the target CPE device

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)*

Tree [cpe-check](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

drop-count *number*

Synopsis Consecutive ping replies missed before CPE deemed down

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone | ipv6-address-no-zone) drop-count number*

Tree [drop-count](#)

Range 1 to 255

Default 3

Introduced 16.0.R1

Platforms All

interval *number*

Synopsis Interval between ICMP pings to the target CPE IP address

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone | ipv6-address-no-zone) interval number*

Tree [interval](#)

Range 1 to 255

Default 1

Units seconds

Introduced 16.0.R1

Platforms All

log *boolean*

| | |
|------------|--|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log boolean |
| Tree | log |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

padding-size *number*

| | |
|------------|--|
| Synopsis | Padding size for CPE connectivity checks |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size number |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

destination-class *number*

| | |
|----------|---|
| Synopsis | Destination class for this static route |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> destination-class <i>number</i> |
| Tree | destination-class |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

load-balancing-weight *number*

| | |
|------------|--|
| Synopsis | Load-balancing weight for all of the ECMP next hops |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> load-balancing-weight <i>number</i> |
| Tree | load-balancing-weight |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

metric *number*

| | |
|------------|---|
| Synopsis | Static route metric |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> metric <i>number</i> |
| Tree | metric |
| Range | 0 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|----------|---|
| Synopsis | Priority of this static route over the routes from different sources |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Default | 5 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-list

| | |
|------------|--|
| Synopsis | Enter the prefix-list context |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list |
| Tree | prefix-list |
| Introduced | 16.0.R1 |
| Platforms | All |

flag keyword

| | |
|------------|---|
| Synopsis | Static route match condition from prefix list |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list flag keyword |
| Tree | flag |
| Default | any |
| Options | any, all, none |
| Introduced | 16.0.R1 |
| Platforms | All |

name reference

| | |
|------------|---|
| Synopsis | Prefix list name |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> prefix-list name reference |
| Tree | name |
| Reference | configure policy-options prefix-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|----------|------------------------------|
| Synopsis | Enter the qos context |
|----------|------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

forwarding-class *keyword*

| | |
|------------|--|
| Synopsis | Forwarding class associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> qos forwarding-class keyword |
| Tree | forwarding-class |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *keyword*

| | |
|------------|--|
| Synopsis | Static route priority |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> qos priority keyword |
| Tree | priority |
| Options | low, high |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

source-class *number*

| | |
|------------|---|
| Synopsis | Source class for this static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword interface <i>string</i> source-class number |
| Tree | source-class |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

tag number

| | |
|------------|---|
| Synopsis | Static route tag |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword interface string tag number |
| Tree | tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

ipsec-tunnel [ipsec-tunnel-name] string

| | |
|------------|---|
| Synopsis | Enter the ipsec-tunnel list instance |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword ipsec-tunnel string |
| Tree | ipsec-tunnel |
| Introduced | 16.0.R1 |
| Platforms | All |

[ipsec-tunnel-name] string

| | |
|---------------|---|
| Synopsis | Ipssec tunnel name. |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword ipsec-tunnel string |
| Tree | ipsec-tunnel |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state keyword

| | |
|----------|---|
| Synopsis | Administrative state of the static route operation |
| Context | configure service vprn string static-routes route (<i>ipv4-prefix ipv6-prefix</i>) route-type keyword ipsec-tunnel string admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |

Introduced 16.0.R1
Platforms All

community *string*

Synopsis Community ID associated with the static route
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **ipsec-tunnel** *string* **community** *string*
Tree **community**
String Length 1 to 72
Introduced 16.0.R1
Platforms All

description *string*

Synopsis Text description
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **ipsec-tunnel** *string* **description** *string*
Tree **description**
String Length 1 to 80
Introduced 16.0.R1
Platforms All

destination-class *number*

Synopsis Destination class for this static route
Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type**
keyword **ipsec-tunnel** *string* **destination-class** *number*
Tree **destination-class**
Range 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

metric *number*

Synopsis Static route metric

| | |
|------------|---|
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> metric <i>number</i> |
| Tree | metric |
| Range | 0 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|---|
| Synopsis | Priority of this static route over the routes from different sources |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

forwarding-class *keyword*

| | |
|------------|---|
| Synopsis | Forwarding class associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword ipsec-tunnel <i>string</i> qos forwarding-class <i>keyword</i> |
| Tree | forwarding-class |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

priority keyword

Synopsis Static route priority

Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **ipsec-tunnel** *string* **qos priority keyword**

Tree [priority](#)

Options low, high

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-class number

Synopsis Source class for this static route

Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **ipsec-tunnel** *string* **source-class number**

Tree [source-class](#)

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

tag number

Synopsis Static route tag

Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **ipsec-tunnel** *string* **tag number**

Tree [tag](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

next-hop [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **next-hop** list instance

Context **configure service vpn** *string* **static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|------------|--------------------------|
| Tree | next-hop |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|------------|---|
| Synopsis | Next-hop IP address used to reach the destination |
| Context | configure service vprn <i>string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword next-hop (ipv4-address-with-zone ipv6-address-with-zone)</i> |
| Tree | next-hop |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the static route operation |
| Context | configure service vprn <i>string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword next-hop (ipv4-address-with-zone ipv6-address-with-zone) admin-state keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

backup-next-hop

| | |
|-------------|---|
| Synopsis | Enter the backup-next-hop context |
| Context | configure service vprn <i>string static-routes route (ipv4-prefix ipv6-prefix) route-type keyword next-hop (ipv4-address-with-zone ipv6-address-with-zone) backup-next-hop</i> |
| Tree | backup-next-hop |
| Description | Commands in this context configure static route entry fast failover. |
| Introduced | 21.2.R1 |
| Platforms | All |

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|-------------|---|
| Synopsis | Backup next-hop IP address |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) backup-next-hop address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Description | <p>This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.</p> <p>The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.</p> <p>One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.</p> <p>The configured IP address can be either on the network or the access side.</p> |
| Introduced | 21.2.R1 |
| Platforms | All |

bfd-liveness *boolean*

| | |
|------------|---|
| Synopsis | Use Bidirectional Forwarding Detection on this static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

community *string*

| | |
|---------------|---|
| Synopsis | Community ID associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) community <i>string</i> |
| Tree | community |
| String Length | 1 to 72 |
| Introduced | 16.0.R1 |

Platforms All

cpe-check [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **cpe-check** list instance

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword next-hop (ipv4-address-with-zone | ipv6-address-with-zone) cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)*

Tree [cpe-check](#)

Max. Instances 1

Introduced 16.0.R1

Platforms All

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the target CPE device

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword next-hop (ipv4-address-with-zone | ipv6-address-with-zone) cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)*

Tree [cpe-check](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

drop-count *number*

Synopsis Consecutive ping replies missed before CPE deemed down

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword next-hop (ipv4-address-with-zone | ipv6-address-with-zone) cpe-check (ipv4-address-no-zone | ipv6-address-no-zone) drop-count number*

Tree [drop-count](#)

Range 1 to 255

Default 3

Introduced 16.0.R1

Platforms All

interval *number*

| | |
|------------|---|
| Synopsis | Interval between ICMP pings to the target CPE IP address |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) interval <i>number</i> |
| Tree | interval |
| Range | 1 to 255 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

log *boolean*

| | |
|------------|---|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) log <i>boolean</i> |
| Tree | log |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

padding-size *number*

| | |
|------------|---|
| Synopsis | Padding size for CPE connectivity checks |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) cpe-check (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

destination-class *number*

| | |
|------------|---|
| Synopsis | Destination class for this static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) destination-class <i>number</i> |
| Tree | destination-class |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

load-balancing-weight *number*

| | |
|------------|---|
| Synopsis | Load-balancing weight for all of the ECMP next hops |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) load-balancing-weight <i>number</i> |
| Tree | load-balancing-weight |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

metric *number*

| | |
|----------|--|
| Synopsis | Static route metric |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) metric <i>number</i> |
| Tree | metric |

| | |
|------------|------------|
| Range | 0 to 65535 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

preference *number*

| | |
|------------|--|
| Synopsis | Priority of this static route over the routes from different sources |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) preference number |
| Tree | preference |
| Range | 1 to 255 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-list

| | |
|------------|---|
| Synopsis | Enter the prefix-list context |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list |
| Tree | prefix-list |
| Introduced | 16.0.R1 |
| Platforms | All |

flag *keyword*

| | |
|------------|--|
| Synopsis | Static route match condition from prefix list |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list flag keyword |
| Tree | flag |
| Default | any |
| Options | any, all, none |
| Introduced | 16.0.R1 |
| Platforms | All |

name *reference*

| | |
|------------|--|
| Synopsis | Prefix list name |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) prefix-list name <i>reference</i> |
| Tree | name |
| Reference | configure policy-options prefix-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

forwarding-class *keyword*

| | |
|------------|--|
| Synopsis | Forwarding class associated with the static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos forwarding-class <i>keyword</i> |
| Tree | forwarding-class |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority *keyword*

| | |
|----------|--|
| Synopsis | Static route priority |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type keyword next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) qos priority <i>keyword</i> |

| | |
|------------|--|
| Tree | priority |
| Options | low, high |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

source-class *number*

| | |
|------------|---|
| Synopsis | Source class for this static route |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) source-class <i>number</i> |
| Tree | source-class |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS |

tag *number*

| | |
|------------|--|
| Synopsis | Static route tag |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) tag <i>number</i> |
| Tree | tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

validate-next-hop *boolean*

| | |
|------------|---|
| Synopsis | Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) validate-next-hop <i>boolean</i> |
| Tree | validate-next-hop |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tag *number*

| | |
|------------|---|
| Synopsis | Static route tag |
| Context | configure service vprn <i>string</i> static-routes route (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) route-type <i>keyword</i> tag <i>number</i> |
| Tree | tag |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | All |

subscriber-interface [[interface-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the subscriber-interface list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> |
| Tree | subscriber-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[interface-name] *string*

| | |
|---------------|--|
| Synopsis | Subscriber interface name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> |
| Tree | subscriber-interface |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the subscriber interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 255
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-service *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Configure the forwarding service.
 Context **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string* [fwd-service](#) *reference*
 Tree [fwd-service](#)
 Reference **configure** [service](#) [vpn](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fwd-subscriber-interface *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Forwarding subscriber interface name
 Context **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string* [fwd-subscriber-interface](#) *reference*
 Tree [fwd-subscriber-interface](#)
 Reference **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string*
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

group-interface *[group-interface-name] string*

Synopsis Enter the **group-interface** list instance
 Context **configure service vprn string subscriber-interface string group-interface string**
 Tree **group-interface**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[group-interface-name] string

Synopsis Group interface name
 Context **configure service vprn string subscriber-interface string group-interface string**
 Tree **group-interface**
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the interface
 Context **configure service vprn string subscriber-interface string group-interface string admin-state keyword**
 Tree **admin-state**
 Default enable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bonding-parameters

Synopsis Enter the **bonding-parameters** context
 Context **configure service vprn string subscriber-interface string group-interface string bonding-parameters**

| | |
|------------|--|
| Tree | bonding-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of ESM connection bonding |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

connection [[connection-index](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the connection list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters connection <i>number</i> |
| Tree | connection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[connection-index] *number*

| | |
|------------|---|
| Synopsis | Bonding connection index |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters connection <i>number</i> |
| Tree | connection |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service string

| | |
|---------------|--|
| Synopsis | Connection service |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters connection <i>number</i> service <i>string</i> |
| Tree | service |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fpe reference**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | FPE that provisions bonding functionality |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters fpe <i>reference</i> |
| Tree | fpe |
| Reference | configure fwd-path-ext fpe <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

multicast

| | |
|------------|---|
| Synopsis | Enter the multicast context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters multicast |
| Tree | multicast |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

connection (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Multicast connection |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> bonding-parameters multicast connection (<i>number</i> <i>keyword</i>) |
| Tree | connection |
| Range | 1 to 2 |
| Default | use-incoming |
| Options | use-incoming |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

brg

| | |
|------------|--|
| Synopsis | Enter the brg context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg |
| Tree | brg |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BRG |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> brg admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authenticated-brg-only *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Allow BRGs that have been pre-authenticated |
| Context | configure <i>service vprn string subscriber-interface string group-interface string brg authenticated-brg-only boolean</i> |
| Tree | authenticated-brg-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-brg-profile *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Default BRG profile that can be overridden during authentication |
| Context | configure <i>service vprn string subscriber-interface string group-interface string brg default-brg-profile reference</i> |
| Tree | default-brg-profile |
| Reference | configure <i>subscriber-mgmt vrgw brg-profile string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cflowd-parameters

| | |
|------------|--|
| Synopsis | Enter the cflowd-parameters context |
| Context | configure <i>service vprn string subscriber-interface string group-interface string cflowd-parameters</i> |
| Tree | cflowd-parameters |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sampling [**sampling-type**] *keyword*

| | |
|------------|---|
| Synopsis | Enter the sampling list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[sampling-type] *keyword*

| | |
|-------------|---|
| Synopsis | Traffic sampling type |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> |
| Tree | sampling |
| Description | This command configures the type of traffic to be sampled on the associated IP interface. |
| Options | unicast, multicast, both |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

direction *keyword*

| | |
|-------------|---|
| Synopsis | Direction of traffic for cflowd sampling |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> direction <i>keyword</i> |
| Tree | direction |
| Description | This command configures the direction in which sampling occurs on the associated IP interfaces. |
| Default | ingress-only |
| Options | ingress-only, egress-only, both |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sample-profile (*keyword | number*)

| | |
|-------------|---|
| Synopsis | Sample profile ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> sample-profile (<i>keyword number</i>) |
| Tree | sample-profile |
| Description | This command defines the sampling rate profile associated with this interface. |
| Max. Range | 0 to 4294967295 |
| Options | 1 |
| Introduced | 19.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|-------------|--|
| Synopsis | Type of cflowd analysis |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> cflowd-parameters sampling <i>keyword</i> type <i>keyword</i> |
| Tree | type |
| Description | This command configures the cflowd sampling type on the associated IP interface. |
| Options | acl, interface |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

data-trigger

| | |
|------------|---|
| Synopsis | Enter the data-trigger context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger |
| Tree | data-trigger |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of data-triggered host creation |
|----------|--|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> data-trigger admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dynamic-routes-track-srrp

| | |
|------------|---|
| Synopsis | Enable the dynamic-routes-track-srrp context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> dynamic-routes-track-srrp |
| Tree | dynamic-routes-track-srrp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|------------|---|
| Synopsis | Delay before updating the route state after the last SRRP transition |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> dynamic-routes-track-srrp hold-time <i>number</i> |
| Tree | hold-time |
| Range | 1 to 50 |
| Units | deciseconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-parameters

Synopsis Enter the **gtp-parameters** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **gtp-parameters**

Tree **gtp-parameters**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of GTP access

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **gtp-parameters admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

fpe *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis PE that provisions the GTP user interface

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **gtp-parameters fpe** *reference*

Tree **fpe**

Reference **configure fwd-path-ext fpe** *number*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gx-policy *reference*

| | |
|------------|--|
| Synopsis | Diameter application policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> gx-policy reference |
| Tree | gx-policy |
| Reference | configure subscriber-mgmt diameter-gx-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress |
| Tree | ingress |
| Introduced | 19.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-accounting *reference*

| | |
|------------|--|
| Synopsis | Ingress policy accounting template name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress policy-accounting reference |
| Tree | policy-accounting |
| Reference | configure routing-options policy-accounting policy-acct-template <i>string</i> |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-s |

ingress-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect ingress interface statistics |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ingress-stats <i>boolean</i> |
| Tree | ingress-stats |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis Interface IP MTU

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* **ip-mtu** *number*

Tree [ip-mtu](#)

Range 512 to 9786

Units bytes

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-linking

Synopsis Enter the **ipoe-linking** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* **ipoe-linking**

Tree [ipoe-linking](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of IPoE host linking

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* **ipoe-linking** **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gratuitous-router-advertisement *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Send unsolicited router advertisement after DHCP setup |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking gratuitous-router-advertisement <i>boolean</i> |
| Tree | gratuitous-router-advertisement |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shared-circuit-id *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable circuit ID in DHCPv4 Option82 to validate DHCPv6 |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-linking shared-circuit-id <i>boolean</i> |
| Tree | shared-circuit-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session

| | |
|------------|---|
| Synopsis | Enter the ipoe-session context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session |
| Tree | ipoe-session |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of IPoE session management |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-auth

| | |
|------------|--|
| Synopsis | Enter the force-auth context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth |
| Tree | force-auth |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cid-change *boolean*

| | |
|------------|--|
| Synopsis | Ignore min-auth-interval when circuit ID changed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth cid-change <i>boolean</i> |
| Tree | cid-change |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rid-change *boolean*

| | |
|------------|--|
| Synopsis | Ignore min-auth-interval when remote ID changed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session force-auth rid-change <i>boolean</i> |
| Tree | rid-change |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session-policy *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IPoE Session policy to be used for new sessions |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session ipoe-session-policy <i>reference</i> |
| Tree | ipoe-session-policy |
| Reference | configure subscriber-mgmt ipoe-session-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval (*keyword | number*)

| | |
|------------|---|
| Synopsis | Minimum time between two authentication attempts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session min-auth-interval (<i>keyword number</i>) |
| Tree | min-auth-interval |
| Range | 1 to 32000000 |
| Default | infinite |
| Units | seconds |
| Options | infinite, always-reauthenticate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-session-timeout *keyword*

| | |
|------------|---|
| Synopsis | Session timeout attribute to be interpreted |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session radius-session-timeout <i>keyword</i> |
| Tree | radius-session-timeout |
| Options | absolute, ignore, backwards-compatible |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-session-limit *number*

| | |
|------------|---|
| Synopsis | Maximum number of sessions per SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session sap-session-limit <i>number</i> |
| Tree | sap-session-limit |
| Range | 1 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limit *number*

| | |
|------------|---|
| Synopsis | Maximum number of sessions on this group interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session session-limit <i>number</i> |
| Tree | session-limit |
| Range | 1 to 500000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stateless-redundancy *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session stateless-redundancy <i>boolean</i> |
| Tree | stateless-redundancy |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Local user database that is used to (pre-)authenticate new sessions |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipoe-session user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp-host

| | |
|------------|---|
| Synopsis | Enter the arp-host context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host |
| Tree | arp-host |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of ARP hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-limit *number*

| | |
|------------|--|
| Synopsis | Maximum number of ARP hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host host-limit <i>number</i> |
| Tree | host-limit |
| Range | 1 to 524287 |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval *number*

| | |
|------------|---|
| Synopsis | Minimum authentication interval |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host min-auth-interval <i>number</i> |
| Tree | min-auth-interval |
| Range | 1 to 6000 |
| Default | 15 |
| Units | minutes |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-host-limit *number*

| | |
|----------|-------------------------------------|
| Synopsis | Maximum number of ARP hosts per SAP |
|----------|-------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 arp-host sap-host-limit <i>number</i> |
| Tree | sap-host-limit |
| Range | 1 to 131071 |
| Default | 1 |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bfd

| | |
|-------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd |
| Tree | bfd |
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

echo-receive *number*

| | |
|----------|---|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |

| | |
|------------|---|
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

receive *number*

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd receive <i>number</i> |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transmit-interval *number*

| | |
|----------|---|
| Synopsis | BFD transmit interval over this interface |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd transmit-interval <i>number</i> |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 bfd type <i>keyword</i> |
| Tree | type |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

dhcp

| | |
|----------|---|
| Synopsis | Enter the dhcp context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp |

| | |
|------------|---|
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of DHCP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|------------|--|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications dhcp <i>boolean</i> |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|----------|--|
| Synopsis | Enable PPPoE clients to use DHCP relay or proxy server |
|----------|--|

| | |
|------------|--|
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter *reference*

| | |
|------------|--|
| Synopsis | DHCP filter ID for the group interface |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp filter <i>reference</i> |
| Tree | filter |
| Reference | configure filter dhcp-filter <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address *string*

| | |
|-------------|---|
| Synopsis | GI address for the DHCP relay |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp gi-address <i>string</i> |
| Tree | gi-address |
| Description | This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay. |

By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis Enter the **lease-populate** context
 Context **configure service vprn string subscriber-interface string group-interface string ipv4 dhcp lease-populate**
 Tree **lease-populate**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

I2-header

Synopsis Enable the **I2-header** context
 Context **configure service vprn string subscriber-interface string group-interface string ipv4 dhcp lease-populate I2-header**
 Tree **I2-header**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string

Synopsis IEEE address used in anti-spoofing entries for the SAP
 Context **configure service vprn string subscriber-interface string group-interface string ipv4 dhcp lease-populate I2-header mac string**
 Tree **mac**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases number

Synopsis Maximum number of DHCPv4 leases

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp lease-populate max-leases <i>number</i> |
| Tree | max-leases |
| Range | 1 to 511999 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-circuit-id *boolean*

| | |
|------------|---|
| Synopsis | Enable Option 82 circuit ID on relayed DHCP packets |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp match-circuit-id <i>boolean</i> |
| Tree | match-circuit-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

offer-selection

| | |
|------------|---|
| Synopsis | Enter the offer-selection context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection |
| Tree | offer-selection |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac

| | |
|------------|--|
| Synopsis | Enter the client-mac context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac |
| Tree | client-mac |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-address *keyword*

| | |
|-------------|---|
| Synopsis | Designated client MAC addresses for Offer selection |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection client-mac mac-address <i>keyword</i> |
| Tree | mac-address |
| Description | This command specifies the client MAC addresses for which the Discover delay applies. |
| Options | odd, even |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server [*ipv4-address*] *string*

| | |
|----------------|---|
| Synopsis | Enter the server list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> |
| Tree | server |
| Max. Instances | 8 |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv4-address] *string*

| | |
|------------|---|
| Synopsis | IP address of the DHCP server |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> |
| Tree | server |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay DHCP Discover messages sent to the server. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-82

| | |
|-------------|---|
| Synopsis | Enter the option-82 context |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82 |
| Tree | option-82 |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action keyword

| | |
|------------|--|
| Synopsis | Action to take with received DHCP Option 82 |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82 action keyword |
| Tree | action |
| Default | keep |
| Options | replace, drop, keep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id

| | |
|------------|--|
| Synopsis | Enter the circuit-id context |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82 circuit-id |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-tuple

| | |
|----------|--|
| Synopsis | Use the ASCII-encoded tuple for the circuit ID |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 dhcp option-82 circuit-id ascii-tuple |
| Tree | ascii-tuple |

| | |
|------------|---|
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ifindex

| | |
|------------|---|
| Synopsis | Use the interface index for the circuit ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id ifindex |
| Tree | ifindex |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

none

| | |
|------------|--|
| Synopsis | Do not include the circuit ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id

| | |
|------------|--|
| Synopsis | Use the SAP ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vlan-ascii-tuple

| | |
|-------------|---|
| Synopsis | Include the VLAN ID and dot1p bits in the ASCII tuple |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 circuit-id vlan-ascii-tuple |
| Tree | vlan-ascii-tuple |
| Description | When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.

When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty. |
| Notes | The following elements are part of a choice: ascii-tuple , ifindex , none , sap-id , or vlan-ascii-tuple . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id

| | |
|-------------|--|
| Synopsis | Enter the remote-id context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id |
| Tree | remote-id |
| Description | Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|---|
| Synopsis | User-defined ASCII string for the remote ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac

| | |
|------------|---|
| Synopsis | Use the MAC address for the remote ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id mac |
| Tree | mac |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

none

| | |
|------------|--|
| Synopsis | Do not include the remote ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 remote-id none |
| Tree | none |
| Notes | The following elements are part of a choice: ascii-string , mac , or none . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor-specific-option

| | |
|-------------|--|
| Synopsis | Enter the vendor-specific-option context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option |
| Tree | vendor-specific-option |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac-address *boolean*

| | |
|----------|--|
| Synopsis | Send the MAC address in the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i> |

| | |
|------------|---|
| Tree | client-mac-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pool-name *boolean*

| | |
|------------|--|
| Synopsis | Send the pool name in the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option pool-name <i>boolean</i> |
| Tree | pool-name |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *boolean*

| | |
|------------|---|
| Synopsis | Send SAP ID in the sub-option of the DHCP relay packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-id *boolean*

| | |
|------------|---|
| Synopsis | Send the service ID in the Vendor Specific Option |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | User-defined ASCII string for the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option <i>string</i> <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

system-id *boolean*

| | |
|------------|---|
| Synopsis | Send the system ID in the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i> |
| Tree | system-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|--|
| Synopsis | Enter the proxy-server context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the DHCP proxy server |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis IP address used as DHCP server address in SAP context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp proxy-server emulated-server](#) *string*
 Tree [emulated-server](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis Enter the **lease-time** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp proxy-server lease-time](#)
 Tree [lease-time](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp proxy-server lease-time radius-override](#) *boolean*
 Tree [radius-override](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis DHCP lease time
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp proxy-server lease-time value](#) *number*
 Tree [value](#)

| | |
|------------|---|
| Range | 300 to 315446399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|-------------|---|
| Synopsis | Python policy name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp python-policy <i>reference</i> |
| Tree | python-policy |
| Description | This command associates a Python policy name with the interface. |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

relay-proxy

| | |
|------------|--|
| Synopsis | Enable the relay-proxy context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy |
| Tree | relay-proxy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

release-update-src-ip *boolean*

| | |
|------------|---|
| Synopsis | Update the source IP address of a DHCP RELEASE message |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i> |
| Tree | release-update-src-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

siaddr-override *string*

| | |
|------------|---|
| Synopsis | DHCP server IP address for address hiding function |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i> |
| Tree | siaddr-override |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

release-include-gi-address *boolean*

| | |
|------------|--|
| Synopsis | Include gateway IP address in DHCP Release messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i> |
| Tree | release-include-gi-address |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|--|
| Synopsis | IP addresses for DHCP server requests |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 dhcp server <i>string</i> |
| Tree | server |
| Description | This command configures a list of servers that this interface forwards requests to.
The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list. |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-ip-addr *keyword*

| | |
|----------|--|
| Synopsis | Type of source address to use for DHCP relay |
|----------|--|

| | |
|------------|---|
| Context | configure service vpn <i>string subscriber-interface string group-interface string ipv4 dhcp src-ip-addr keyword</i> |
| Tree | src-ip-addr |
| Default | auto |
| Options | auto, gi-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

trusted *boolean*

| | |
|-------------|---|
| Synopsis | Relay untrusted packets |
| Context | configure service vpn <i>string subscriber-interface string group-interface string ipv4 dhcp trusted boolean</i> |
| Tree | trusted |
| Description | <p>When configured to true, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Local user database for authentication |
| Context | configure service vpn <i>string subscriber-interface string group-interface string ipv4 dhcp user-db reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis Enter the **icmp** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 icmp](#)

Tree [icmp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask-reply *boolean*

Synopsis Allow responses to ICMP mask requests on the interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 icmp](#)
[mask-reply](#) *boolean*

Tree [mask-reply](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

param-problem

Synopsis Enter the **param-problem** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 icmp](#)
[param-problem](#)

Tree [param-problem](#)

Description Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of sent Parameter Problem messages

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 icmp](#)
[param-problem](#) [admin-state](#) *keyword*

| | |
|------------|---|
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of Parameter Problem messages to send |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem <i>number</i> <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit number of Parameter Problem messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp param-problem <i>seconds</i> <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redirects

| | |
|----------|--|
| Synopsis | Enter the redirects context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects |
| Tree | redirects |

| | |
|-------------|--|
| Description | Commands in this context configure the settings for ICMP redirect messages generated by the interface.

The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of sending ICMP redirect messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|---|
| Synopsis | Maximum number of ICMP redirect messages to send |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|----------|--|
| Synopsis | Time used to limit the number of ICMP redirect messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |

| | |
|------------|---|
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ttl-expired

| | |
|-------------|---|
| Synopsis | Enter the ttl-expired context |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 icmp ttl-expired |
| Tree | ttl-expired |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of sending TTL expired messages |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 icmp ttl-expired admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number number

| | |
|------------|---|
| Synopsis | Maximum number of TTL expired messages to send |
| Context | configure service vprn string subscriber-interface string group-interface string ipv4 icmp ttl-expired number number |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit the number of TTL expired messages |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp ttl-expired seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-matching-address *boolean*

| | |
|-------------|--|
| Synopsis | Use the subscriber interface address as source address |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp ttl-expired use-matching-address <i>boolean</i> |
| Tree | use-matching-address |
| Description | <p>When configured to true, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.</p> <p>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.</p> <p>When configured to false, the system uses the first configured address.</p> |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unreachables

| | |
|-------------|--|
| Synopsis | Enter the unreachables context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 icmp unreachables |
| Tree | unreachables |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of sending unreachable messages

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 icmp unreachable** **admin-state** *keyword*

Tree **admin-state**

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

number *number*

Synopsis Maximum number of unreachable messages to send

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 icmp unreachable** **number** *number*

Tree **number**

Range 10 to 2000

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis Time to limit the number of ICMP unreachable messages

Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 icmp unreachable** **seconds** *number*

Tree **seconds**

Range 1 to 60

Default 10

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ignore-df-bit *boolean*

| | |
|-------------|---|
| Synopsis | Ignore DF bit in the IPv4 header when fragmenting |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 ignore-df-bit <i>boolean</i> |
| Tree | ignore-df-bit |
| Description | When configured to true , fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.

When configured to false , the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1. |
| Default | false |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|--|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-proxy-arp *boolean*

| | |
|-------------|---|
| Synopsis | Enable local proxy ARP on interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery local-proxy-arp <i>boolean</i> |
| Tree | local-proxy-arp |
| Description | When configured to true , the router enables local proxy ARP on the interface.

When configured to false , the router does not respond to ARP requests for addresses on the same subnet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

populate *boolean*

| | |
|------------|---|
| Synopsis | Allow static and dynamic hosts to be populated in system ARP cache |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery populate <i>boolean</i> |
| Tree | populate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-arp-policy *reference*

| | |
|----------------|---|
| Synopsis | Proxy ARP policy name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i> |
| Tree | proxy-arp-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-proxy-arp *boolean*

| | |
|------------|---|
| Synopsis | Enable remote proxy ARP on the interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i> |
| Tree | remote-proxy-arp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|----------|---|
| Synopsis | Timeout for an ARP entry learned on the interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 neighbor-discovery timeout <i>number</i> |

| | |
|------------|---|
| Tree | timeout |
| Range | 0 to 65535 |
| Default | 14400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos-route-lookup *keyword*

| | |
|------------|--|
| Synopsis | QoS route lookup |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mode *keyword*

| | |
|------------|--|
| Synopsis | Unicast RPF check mode |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv4 urpf-check mode <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enable the ipv6 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-multiple-wan-addresses *boolean*

| | |
|------------|---|
| Synopsis | Allow multiple WAN addresses |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i> |
| Tree | allow-multiple-wan-addresses |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-reply

| | |
|------------|--|
| Synopsis | Enter the auto-reply context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply |
| Tree | auto-reply |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-solicitation *boolean*

| | |
|------------|--|
| Synopsis | Enable auto-reply for NS |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply neighbor-solicitation <i>boolean</i> |
| Tree | neighbor-solicitation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicitation *boolean*

| | |
|------------|---|
| Synopsis | Enable auto-reply for RS |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 auto-reply router-solicitation <i>boolean</i> |
| Tree | router-solicitation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bfd

| | |
|-------------|---|
| Synopsis | Enter the bfd context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd |
| Tree | bfd |
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

echo-receive *number*

| | |
|----------|--|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd echo-receive <i>number</i> |

| | |
|------------|---|
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

receive *number*

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd receive <i>number</i> |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transmit-interval *number*

| | |
|-------------|--|
| Synopsis | BFD transmit interval over this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd transmit-interval <i>number</i> |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 bfd type <i>keyword</i> |
| Tree | type |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

dhcp6

| | |
|------------|--|
| Synopsis | Enter the dhcp6 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter reference

| | |
|------------|---|
| Synopsis | DHCPv6 filter |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 filter reference |
| Tree | filter |
| Reference | configure filter dhcp6-filter <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option

| | |
|------------|---|
| Synopsis | Enter the option context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-id

| | |
|------------|--|
| Synopsis | Enter the interface-id context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id |
| Tree | interface-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-tuple

| | |
|------------|---|
| Synopsis | Use ASCII-encoded concatenated tuple |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id ascii-tuple |
| Tree | ascii-tuple |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

if-index

| | |
|------------|--|
| Synopsis | Use interface index in interface ID option in DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id if-index |
| Tree | if-index |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id

| | |
|------------|--|
| Synopsis | Use SAP ID in interface ID option in DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|----------|--|
| Synopsis | String for interface ID option in DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option interface-id string <i>string</i> |
| Tree | string |

| | |
|---------------|--|
| String Length | 1 to 80 |
| Notes | The following elements are part of a choice: ascii-tuple , if-index , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id *boolean*

| | |
|------------|--|
| Synopsis | Allow remote ID option to be sent in the DHCPv6 relay packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 option remote-id <i>boolean</i> |
| Tree | remote-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

override-slaac *boolean*

| | |
|------------|--|
| Synopsis | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 override-slaac <i>boolean</i> |
| Tree | override-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-managed-route

| | |
|------------|---|
| Synopsis | Enable the pd-managed-route context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 pd-managed-route |
| Tree | pd-managed-route |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-hop *keyword*

| | |
|------------|--|
| Synopsis | Next hop type |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 pd-managed-route next-hop <i>keyword</i> |
| Tree | next-hop |
| Default | ipv6 |
| Options | ipv4, ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|--|
| Synopsis | Enter the proxy-server context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCPv6 proxy server |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|----------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications |
| Tree | client-applications |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp boolean

Synopsis Enable IPoE clients to use DHCP relay or proxy server
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 proxy-server client-applications dhcp](#) *boolean*
 Tree [dhcp](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp boolean

Synopsis Allow the PPP application to use DHCP relay functionality
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 proxy-server client-applications ppp](#) *boolean*
 Tree [ppp](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (*number* | *keyword*)

Synopsis Time for prefix to remain preferred on this interface
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 dhcp6 proxy-server preferred-lifetime](#) (*number* | *keyword*)
 Tree [preferred-lifetime](#)
 Range 300 to 4294967294
 Default 3600
 Units seconds
 Options infinite
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rebind-timer *number*

| | |
|------------|---|
| Synopsis | Rebind timer (T2) for this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server rebind-timer <i>number</i> |
| Tree | rebind-timer |
| Range | 0 to 1209600 |
| Default | 2880 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew-timer *number*

| | |
|------------|--|
| Synopsis | Renew timer (T1) |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server renew-timer <i>number</i> |
| Tree | renew-timer |
| Range | 0 to 604800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server-id

| | |
|------------|--|
| Synopsis | Enter the server-id context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id |
| Tree | server-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-ascii *string*

| | |
|----------|---|
| Synopsis | Vendor-assigned ID based on Enterprise Number (DUID-EN) |
|----------|---|

| | |
|---------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-ascii <i>string</i> |
| Tree | duid-en-ascii |
| String Length | 1 to 58 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-II . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-hex *string*

| | |
|---------------|--|
| Synopsis | DUID system ID in hexadecimal format |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-hex <i>string</i> |
| Tree | duid-en-hex |
| String Length | 1 to 118 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-II . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-II

| | |
|------------|--|
| Synopsis | Use link-layer address (DUID-LL) as DUID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-II |
| Tree | duid-II |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-II . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Time for prefix to remain valid on this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 proxy-server valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 300 to 4294967294 |

| | |
|------------|---|
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|---|
| Synopsis | Python policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 python-policy reference |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

relay

| | |
|------------|---|
| Synopsis | Enter the relay context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay |
| Tree | relay |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 Relay |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

advertise-selection

| | |
|------------|--|
| Synopsis | Enter the advertise-selection context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection |
| Tree | advertise-selection |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac

| | |
|------------|---|
| Synopsis | Enter the client-mac context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac |
| Tree | client-mac |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-address *keyword*

| | |
|------------|--|
| Synopsis | Designated client MAC addresses for Advertise selection |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac mac-address <i>keyword</i> |
| Tree | mac-address |
| Options | odd, even |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|----------|---|
| Synopsis | Enter the preference-option context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option |
| Tree | preference-option |

| | |
|-------------|---|
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|---|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac preference-option value <i>number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|-------------|--|
| Synopsis | Enter the preference-option context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value *number*

Synopsis Preference option value for DHCPv6 Advertise messages

Context **configure** *service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection preference-option value number*

Tree *value*

Range 0 to 255

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [*ipv6-address*] *string*

Synopsis Enter the **server** list instance

Context **configure** *service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection server string*

Tree *server*

Max. Instances 8

Notes The following elements are part of a choice: **client-mac** or **server**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis IP address of the DHCPv6 server

Context **configure** *service vprn string subscriber-interface string group-interface string ipv6 dhcp6 relay advertise-selection server string*

Tree *server*

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

| | |
|-------------|--|
| Synopsis | Enter the preference-option context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|---|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> preference-option value <i>number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay *number*

| | |
|-------------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection server <i>string</i> solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent to the server. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay *number*

| | |
|----------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
|----------|--|

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay advertise-selection solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the server instance or the client-mac context. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|------------|--|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications dhcp <i>boolean</i> |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|----------|---|
| Synopsis | Allow the PPP application to use DHCP relay functionality |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-split

| | |
|-------------|---|
| Synopsis | Enter the lease-split context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split |
| Tree | lease-split |
| Description | <p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> • the renew time T1 committed by the server (long renew time) • half of the preferred lifetime committed by the server when T1 committed by the server equals zero |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of DHCPv6 lease split |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|---|
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime *number*

| | |
|------------|--|
| Synopsis | DHCPv6 lease split valid lifetime (short lease time) |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay lease-split valid-lifetime <i>number</i> |
| Tree | valid-lifetime |
| Range | 300 to 315446399 |
| Default | 3600 |
| Units | seconds |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|--|
| Synopsis | Link address for the DHCPv6 relay messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay link-address <i>string</i> |
| Tree | link-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|--|
| Synopsis | DHCP6 server(s) to which the DHCP6 requests are forwarded |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay server <i>string</i> |
| Tree | server |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-address *string*

| | |
|------------|--|
| Synopsis | Source IPv6 address for the DHCPv6 relay messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 relay source-address <i>string</i> |
| Tree | source-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

snooping

| | |
|------------|--|
| Synopsis | Enter the snooping context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping |
| Tree | snooping |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of DHCPv6 snooping |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 snooping admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

user-db *reference*

| | |
|------------|--|
| Synopsis | Local user database used for authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 dhcp6 user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-ident *keyword*

Synopsis DHCP6 user identification for this interface

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 user-ident** *keyword*

Tree [user-ident](#)

Default mac

Options mac, mac-interface-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis Enable IPv6 IPoE bridged mode

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 ipoe-bridged-mode** *boolean*

Tree [ipoe-bridged-mode](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

neighbor-discovery

Synopsis Enter the **neighbor-discovery** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 neighbor-discovery**

Tree [neighbor-discovery](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dad-snooping *boolean*

Synopsis Populate table via duplicate address detection packets

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 neighbor-discovery dad-snooping** *boolean*

| | |
|------------|---|
| Tree | dad-snooping |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-limit *number*

| | |
|------------|---|
| Synopsis | Maximum number of neighbor entries learned per SLAAC host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 neighbor-discovery neighbor-limit <i>number</i> |
| Tree | neighbor-limit |
| Range | 1 to 8 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos-route-lookup *keyword*

| | |
|------------|---|
| Synopsis | QoS route lookup |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 qos-route-lookup <i>keyword</i> |
| Tree | qos-route-lookup |
| Options | destination |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

router-advertisements

| | |
|------------|---|
| Synopsis | Enter the router-advertisements context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements |
| Tree | router-advertisements |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of router advertisements |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-mcast *keyword*

| | |
|------------|---|
| Synopsis | Protocol with forced multicast |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements force-mcast <i>keyword</i> |
| Tree | force-mcast |
| Options | ip, ip-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-advertisement-interval *number*

| | |
|------------|---|
| Synopsis | Maximum advertisement interval |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i> |
| Tree | max-advertisement-interval |
| Range | 900 to 1800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-advertisement-interval *number*

| | |
|----------|--------------------------------|
| Synopsis | Minimum advertisement interval |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i> |
| Tree | min-advertisement-interval |
| Range | 900 to 1350 |
| Default | 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|--|
| Synopsis | Enter the options context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

current-hop-limit *number*

| | |
|------------|--|
| Synopsis | Hop limit to be advertised |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i> |
| Tree | current-hop-limit |
| Range | 0 to 255 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dns

| | |
|------------|--|
| Synopsis | Enter the dns context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options dns |
| Tree | dns |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 router-advertisements options dns include-rdnss](#) *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 router-advertisements options dns rdnss-lifetime](#) (*number* | *keyword*)

Tree [rdnss-lifetime](#)

Range 900 to 3600

Default 3600

Units seconds

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

managed-configuration *boolean*

Synopsis Managed address configuration flag

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 router-advertisements options managed-configuration](#) *boolean*

Tree [managed-configuration](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Advertised MTU value |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options mtu (<i>number</i> <i>keyword</i>) |
| Tree | mtu |
| Range | 1280 to 9212 |
| Default | not-included |
| Units | bytes |
| Options | not-included |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

other-stateful-configuration *boolean*

| | |
|------------|---|
| Synopsis | Other stateful configuration flag |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options other-stateful-configuration <i>boolean</i> |
| Tree | other-stateful-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reachable-time *number*

| | |
|------------|--|
| Synopsis | Neighbor discovery reachable time that is advertised for this group interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i> |
| Tree | reachable-time |
| Range | 0 to 3600000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retransmit-timer *number*

| | |
|------------|--|
| Synopsis | Neighbor discovery retransmit timer that is advertised for this group interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i> |
| Tree | retransmit-timer |
| Range | 0 to 1800000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-lifetime (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Router lifetime |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | router-lifetime |
| Range | 2700 to 9000 |
| Default | 4500 |
| Units | seconds |
| Options | no-default-router |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-options

| | |
|------------|--|
| Synopsis | Enter the prefix-options context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-advertisements prefix-options |
| Tree | prefix-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

autonomous *boolean*

| | |
|----------|------------------------------|
| Synopsis | Value of the autonomous flag |
|----------|------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6
router-advertisements prefix-options autonomous <i>boolean</i> |
| Tree | autonomous |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-link *boolean*

| | |
|------------|--|
| Synopsis | Assign the prefix to an interface on the specified link |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6
router-advertisements prefix-options on-link <i>boolean</i> |
| Tree | on-link |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain preferred |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6
router-advertisements prefix-options preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time for a prefix to remain valid |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6
router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |

| | |
|------------|---|
| Range | 0 to 4294967294 |
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicit

| | |
|------------|---|
| Synopsis | Enter the router-solicit context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit |
| Tree | router-solicit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of router-solicit based authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inactivity-timer (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Time before an inactive host is removed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>) |
| Tree | inactivity-timer |
| Range | 1 to 31536000 |
| Default | 300 |
| Units | seconds |

| | |
|------------|---|
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval *number*

| | |
|------------|---|
| Synopsis | Minimum interval between two consecutive authentication attempts for the same host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit min-auth-interval <i>number</i> |
| Tree | min-auth-interval |
| Range | 1 to 360000 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|--|
| Synopsis | Local user-database that is used for router solicit based authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 router-solicit user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check |
| Tree | urpf-check |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mode *keyword*

| | |
|------------|--|
| Synopsis | Unicast RPF check mode |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> ipv6 urpf-check mode <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-address-assignment

| | |
|------------|---|
| Synopsis | Enter the local-address-assignment context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment |
| Tree | local-address-assignment |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of Local Address Assignment |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|----------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4 |
| Tree | ipv4 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#)
 Tree [client-applications](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe *boolean*

Synopsis Request local addresses for non-DHCP/managed IPoE hosts
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#) [ipoe](#) *boolean*
 Tree [ipoe](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp *boolean*

Synopsis Request local addresses for PPP IPCP hosts
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#) [ppp](#) *boolean*
 Tree [ppp](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

default-pool *string*

Synopsis Default pools
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [default-pool](#) *string*

| | |
|----------------|---|
| Tree | default-pool |
| String Length | 1 to 32 |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server reference

| | |
|------------|--|
| Synopsis | Local DHCP server that contains pools for local address assignment |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv4 server <i>reference</i> |
| Tree | server |
| Reference | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-slaac *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE SLAAC hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-slaac <i>boolean</i> |
| Tree | ipoe-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-wan *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE IA NA hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ipoe-wan <i>boolean</i> |
| Tree | ipoe-wan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-slaac *boolean*

| | |
|------------|---|
| Synopsis | Request local addresses for PPP SLAAC hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 client-applications ppp-slaac <i>boolean</i> |
| Tree | ppp-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *reference*

| | |
|----------|--|
| Synopsis | Local DHCPv6 server that contains pools for local address assignment |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> local-address-assignment ipv6 server <i>reference</i> |
| Tree | server |

| | |
|------------|--|
| Reference | configure service vprn string dhcp-server dhcpv6 string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac string

| | |
|------------|--|
| Synopsis | MAC address for the interface |
| Context | configure service vprn string subscriber-interface string group-interface string mac string |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nasreq-auth-policy reference

| | |
|------------|--|
| Synopsis | Diameter NASREQ application policy to use for authentication |
| Context | configure service vprn string subscriber-interface string group-interface string nasreq-auth-policy reference |
| Tree | nasreq-auth-policy |
| Reference | configure subscriber-mgmt diameter-nasreq-policy string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

oper-up-while-empty boolean

| | |
|------------|---|
| Synopsis | Enable this group interface without any active SAPs |
| Context | configure service vprn string subscriber-interface string group-interface string oper-up-while-empty boolean |
| Tree | oper-up-while-empty |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe

| | |
|----------|--------------------------------|
| Synopsis | Enter the pppoe context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe |
| Tree | pppoe |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of PPPoE |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anti-spoof *keyword*

| | |
|------------|---|
| Synopsis | PPPoE anti-spoof filtering |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe
anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Default | mac-sid |
| Options | mac-sid, mac-sid-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe
description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp-client

| | |
|------------|--|
| Synopsis | Enter the dhcp-client context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client |
| Tree | dhcp-client |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-id *keyword*

| | |
|------------|---|
| Synopsis | Type of information that DHCP option 61 contains |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe dhcp-client client-id <i>keyword</i> |
| Tree | client-id |
| Options | mac-pppoe-session-id |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|------------|--|
| Synopsis | PPPoE policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe policy <i>reference</i> |
| Tree | policy |
| Reference | configure subscriber-mgmt ppp-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|-----------|---|
| Synopsis | Python policy used to modify PPPoE packets |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> pppoe python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-session-limit *number*

Synopsis Maximum PPPoE sessions per SAP
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [sap-session-limit](#) *number*
 Tree [sap-session-limit](#)
 Range 1 to 131071
 Default 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [session-limit](#) *number*
 Tree [session-limit](#)
 Range 1 to 333823
 Default 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local user database for authentication
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe](#) [user-db](#) *reference*
 Tree [user-db](#)
 Reference **configure** [subscriber-mgmt](#) [local-user-db](#) *string*
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *reference*

Synopsis RADIUS authentication policy

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [radius-auth-policy](#) *reference*

Tree [radius-auth-policy](#)

Reference **configure** [subscriber-mgmt radius-authentication-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

redundant-interface *reference*

Synopsis Redundant interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [redundant-interface](#) *reference*

Tree [redundant-interface](#)

Reference **configure** [service vprn](#) *string* [redundant-interface](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap [[sap-id](#)] *string*

Synopsis Enter the **sap** list instance

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sap-id] *string*

Synopsis SAP ID

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string*

Tree [sap](#)

String Length 1 to 45

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Accounting policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anti-spoof *keyword*

| | |
|------------|--|
| Synopsis | Type of anti-spoof filtering |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Options | source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Application profile name |
| Context | configure service vprn string subscriber-interface string group-interface string sap string app-profile reference |
| Tree | app-profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

calling-station-id *string*

| | |
|---------------|--|
| Synopsis | Calling station ID |
| Context | configure service vprn string subscriber-interface string group-interface string sap string calling-station-id string |
| Tree | calling-station-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

collect-stats *boolean*

| | |
|------------|--|
| Synopsis | Collect accounting statistics |
| Context | configure service vprn string subscriber-interface string group-interface string sap string collect-stats boolean |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpu-protection

| | |
|------------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure service vprn string subscriber-interface string group-interface string sap string cpu-protection |
| Tree | cpu-protection |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection eth-cfm-monitoring**

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection eth-cfm-monitoring aggregate**

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection eth-cfm-monitoring car**

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis Enable IP source monitoring for CPU protection

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **cpu-protection ip-src-monitoring**

Tree [ip-src-monitoring](#)

| | |
|------------|--|
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

mac-monitoring

| | |
|------------|--|
| Synopsis | Monitor MAC for CPU protection |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: eth-cfm-monitoring , ip-src-monitoring , or mac-monitoring . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

policy-id *reference*

| | |
|------------|---|
| Synopsis | CPM protection policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> cpu-protection policy-id reference |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

default-host

| | |
|------------|---|
| Synopsis | Enter the default-host context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host |
| Tree | default-host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ipv4 [**address**] *reference* **prefix-length** *number*

| | |
|------------|---|
| Synopsis | Enter the ipv4 list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv4 <i>reference</i> prefix-length <i>number</i> |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

[address] *reference*

| | |
|------------|---|
| Synopsis | IPv4 default host address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv4 <i>reference</i> prefix-length <i>number</i> |
| Tree | ipv4 |
| Reference | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv4 <i>reference</i> prefix-length <i>number</i> |
| Tree | ipv4 |
| Range | 0 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

next-hop *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Next-hop IP address used to forward traffic on the SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv4 <i>reference</i> prefix-length <i>number</i> next-hop <i>string</i> |
| Tree | next-hop |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ipv6 [**address**] *string* **prefix-length** *number*

| | |
|------------|--|
| Synopsis | Enter the ipv6 list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

[address] *string*

| | |
|------------|--|
| Synopsis | IPv6 default host address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> |
| Tree | ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv6 prefix length |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> default-host ipv6 <i>string</i> prefix-length <i>number</i> |
| Tree | ipv6 |
| Range | 0 to 128 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

next-hop *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Next-hop IP address used to forward traffic on the SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [default-host ipv6](#) *string* [prefix-length](#) *number* **next-hop** *string*

Tree [next-hop](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis Text description

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **description** *string*

Tree [description](#)

String Length 1 to 160

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **dist-cpu-protection** *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system security](#) [dist-cpu-protection](#) *policy* *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|------------|--|
| Synopsis | Enter the agg-rate context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate |
| Tree | agg-rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

adaptation-rule *keyword*

| | |
|------------|---|
| Synopsis | Adaptation rule to compute the operational PIR value when an aggregate shaper is used |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate adaptation-rule <i>keyword</i> |
| Tree | adaptation-rule |
| Default | closest |
| Options | max, min, closest |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Shaping burst size when an aggregate shaper is used |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |

| | |
|------------|----------------------|
| Units | bytes |
| Options | auto |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

limit-unused-bandwidth *boolean*

| | |
|------------|--|
| Synopsis | Enable aggregate rate overrun protection |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate limit-unused-bandwidth <i>boolean</i> |
| Tree | limit-unused-bandwidth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queue-frame-based-accounting *boolean*

| | |
|------------|--|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate *number*

| | |
|------------|---|
| Synopsis | Enforced aggregate rate for all queues |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress agg-rate rate <i>number</i> |
| Tree | rate |
| Range | 1 to 6400000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter ip reference |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6 reference

| | |
|------------|---|
| Synopsis | IPv6 filter policy name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress filter ipv6 reference |
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos policer-control-policy**

Tree [policer-control-policy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Policer control policy name

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos policer-control-policy policy-name** *reference*

Tree [policy-name](#)

Reference **configure qos policer-control-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qinq-mark-top-only *boolean*

Synopsis Mark top Q-tags

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos qinq-mark-top-only** *boolean*

Tree [qinq-mark-top-only](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-egress

Synopsis Enter the **sap-egress** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **egress qos sap-egress**

| | |
|------------|---|
| Tree | sap-egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policy ID to associate with SAP for mirrored service |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler-policy

| | |
|------------|---|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eth-cfm

| | |
|----------|----------------------------------|
| Synopsis | Enter the eth-cfm context |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

collect-lmm-fc-stats

| | |
|-------------|--|
| Synopsis | Enter the collect-lmm-fc-stats context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats |
| Tree | collect-lmm-fc-stats |
| Description | <p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands fc-in-profile and fc in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the collect-lmm-stats command are mutually exclusive when there is entity resource contention.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fc keyword

| | |
|----------------|---|
| Synopsis | Forwarding class name for profile-unaware counter |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm collect-lmm-fc-stats fc <i>keyword</i> |
| Tree | fc |
| Description | <p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the fc-in-profile command under the collect-lmm-fc-stats context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p> |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fc-in-profile *keyword*

Synopsis Forwarding class name for profile-aware counter

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **collect-lmm-fc-stats** **fc-in-profile** *keyword*

Tree **fc-in-profile**

Description This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

collect-lmm-stats *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **collect-lmm-stats** *boolean*

Tree **collect-lmm-stats**

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mep md-admin-name reference ma-admin-name reference mep-id number

| | |
|------------|--|
| Synopsis | Enter the mep list instance |
| Context | configure service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

md-admin-name reference

| | |
|------------|--|
| Synopsis | Maintenance Domain (MD) name |
| Context | configure service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ma-admin-name reference

| | |
|------------|--|
| Synopsis | Maintenance Association (MA) name |
| Context | configure service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |
| Reference | configure eth-cfm domain string association string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

mep-id number

| | |
|----------|--|
| Synopsis | Maintenance Endpoint (MEP) ID |
| Context | configure service vprn string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number |
| Tree | mep |

| | |
|------------|--|
| Range | 1 to 8191 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the MEP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ais *boolean*

| | |
|------------|---|
| Synopsis | Enable the generation and the reception of AIS messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ais <i>boolean</i> |
| Tree | ais |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

alarm-notification

| | |
|-------------|---|
| Synopsis | Enter the alarm-notification context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification |
| Tree | alarm-notification |
| Description | Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm. |

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fng-alarm-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is raised |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-alarm-time <i>number</i> |
| Tree | fng-alarm-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fng-reset-time *number*

| | |
|------------|---|
| Synopsis | Time that must expire before an FNG alarm is reset |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> alarm-notification fng-reset-time <i>number</i> |
| Tree | fng-reset-time |
| Range | 250 500 1000 |
| Units | centiseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ccm *boolean*

| | |
|----------|---|
| Synopsis | Generate CCM messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm <i>boolean</i> |
| Tree | ccm |
| Default | false |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ccm-ltm-priority *number*

| | |
|------------|---|
| Synopsis | Priority of CCM and LTM messages transmitted by the MEP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-ltm-priority <i>number</i> |
| Tree | ccm-ltm-priority |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ccm-padding-size *number*

| | |
|-------------|---|
| Synopsis | Number of octets of padding to insert in CCM packets |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> ccm-padding-size <i>number</i> |
| Tree | ccm-padding-size |
| Description | This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through configure eth-cfm domain association ccm-interval) is less than 1 second. |
| Range | 3 to 1500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

csf

| | |
|----------|--|
| Synopsis | Enable the csf context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf |

| | |
|------------|--|
| Tree | csf |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

multiplier *decimal-number*

| | |
|------------|--|
| Synopsis | Multiplication factor used to clear the CSF condition |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> csf multiplier <i>decimal-number</i> |
| Tree | multiplier |
| Range | 0.0 2.0 to 30.0 |
| Default | 3.5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

eth-test

| | |
|-------------|--|
| Synopsis | Enable the eth-test context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test |
| Tree | eth-test |
| Description | Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the oam eth-cfm eth-test command. |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

bit-error-threshold *number*

| | |
|------------|--|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test bit-error-threshold <i>number</i> |
| Tree | bit-error-threshold |
| Range | 0 to 11840 |
| Default | 1 |
| Units | bit errors |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

test-pattern

| | |
|-------------|---|
| Synopsis | Enter the test-pattern context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern |
| Tree | test-pattern |
| Description | Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

crc-tlv *boolean*

| | |
|------------|--|
| Synopsis | Generate a CRC checksum |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> eth-test test-pattern crc-tlv <i>boolean</i> |
| Tree | crc-tlv |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

pattern *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **eth-test** **test-pattern** **pattern** *keyword*

Tree **pattern**

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Default all-zeros

Options all-zeros, all-ones

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

fault-propagation *keyword*

Synopsis Fault propagation for the MEP

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **fault-propagation** *keyword*

Tree **fault-propagation**

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

grace

Synopsis Enter the **grace** context

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **grace**

Tree **grace**

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

eth-ed

Synopsis Enter the **eth-ed** context

Context **configure** *service* *vprn string* *subscriber-interface string* *group-interface string* *sap string* *eth-cfm mep md-admin-name reference* *ma-admin-name reference* *mep-id number* *grace eth-ed*

Tree [eth-ed](#)

Description Commands in this context configure the ITU-T Y.1731 ETH-ED function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

max-rx-defect-window *number*

Synopsis Maximum received ETH-ED expected defect window duration

Context **configure** *service* *vprn string* *subscriber-interface string* *group-interface string* *sap string* *eth-cfm mep md-admin-name reference* *ma-admin-name reference* *mep-id number* *grace eth-ed max-rx-defect-window number*

Tree [max-rx-defect-window](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

priority *number*

Synopsis Transmission priority for ETH-ED PDUs

Context **configure** *service* *vprn string* *subscriber-interface string* *group-interface string* *sap string* *eth-cfm mep md-admin-name reference* *ma-admin-name reference* *mep-id number* *grace eth-ed priority number*

Tree [priority](#)

Range 0 to 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

rx-eth-ed *boolean*

| | |
|-------------|---|
| Synopsis | Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed rx-eth-ed <i>boolean</i> |
| Tree | rx-eth-ed |
| Description | This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

tx-eth-ed *boolean*

| | |
|------------|---|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-ed tx-eth-ed <i>boolean</i> |
| Tree | tx-eth-ed |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

eth-vsm-grace

| | |
|-------------|---|
| Synopsis | Enter the eth-vsm-grace context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace |
| Tree | eth-vsm-grace |
| Description | Commands in this context configure the Nokia ETH-CFM Grace function. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

rx-eth-vsm-grace *boolean*

| | |
|----------|--|
| Synopsis | Receive and process Nokia ETH-CFM Grace PDU on the MEP |
|----------|--|

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace rx-eth-vsm-grace <i>boolean</i> |
| Tree | rx-eth-vsm-grace |
| Description | When configured to true , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.
When configured to false , the router disables the Nokia Grace function. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

tx-eth-vsm-grace *boolean*

| | |
|-------------|--|
| Synopsis | Transmit ETH-ED PDUs from the MEP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> grace eth-vsm-grace tx-eth-vsm-grace <i>boolean</i> |
| Tree | tx-eth-vsm-grace |
| Description | When configured to true , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.
The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.
The operator must configure the configure system eth-cfm grace command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).
When configured to false , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

low-priority-defect *keyword*

| | |
|----------|---|
| Synopsis | Lowest priority defect allowed to generate fault alarm |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> low-priority-defect <i>keyword</i> |

| | |
|------------|--|
| Tree | low-priority-defect |
| Default | mac-rem-err-xcon |
| Options | all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

one-way-delay-threshold *number*

| | |
|------------|--|
| Synopsis | Threshold time limit for the one-way delay test |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id <i>number</i> one-way-delay-threshold <i>number</i> |
| Tree | one-way-delay-threshold |
| Range | 0 to 600 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

squelch-ingress-levels *number*

| | |
|----------------|--|
| Synopsis | Levels for which ETH-CFM packets are silently discarded |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> eth-cfm squelch-ingress-levels <i>number</i> |
| Tree | squelch-ingress-levels |
| Description | <p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p> |
| Range | 0 to 7 |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

fwd-wholesale

| | |
|------------|--|
| Synopsis | Enter the fwd-wholesale context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale |
| Tree | fwd-wholesale |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-service *reference*

| | |
|------------|---|
| Synopsis | PPPoE service name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> fwd-wholesale pppoe-service <i>reference</i> |
| Tree | pppoe-service |
| Reference | configure service epipe <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-admin-state <i>keyword</i> |
| Tree | host-admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-lockout-policy *reference*

| | |
|----------|---|
| Synopsis | Host lockout policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> host-lockout-policy <i>reference</i> |
| Tree | host-lockout-policy |

| | |
|------------|--|
| Reference | configure subscriber-mgmt host-lockout-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

igmp-host-tracking

| | |
|------------|---|
| Synopsis | Enter the igmp-host-tracking context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking |
| Tree | igmp-host-tracking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

expiry-time *number*

| | |
|------------|---|
| Synopsis | Time that the system continues to track inactive hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking expiry-time <i>number</i> |
| Tree | expiry-time |
| Range | 1 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|--|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of multicast groups to be tracked per group |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum number of multicast groups to be tracked |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of multicast sources to be tracked |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|----------|---|
| Synopsis | Enable IGMP router alert check option |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> igmp-host-tracking router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#)
 Tree [ingress](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

filter

Synopsis Enter the **filter** context
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#)
 Tree [filter](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip reference

Synopsis IPv4 filter policy name
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ip](#) *reference*
 Tree [ip](#)
 Reference **configure** [filter](#) [ip-filter](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6 reference

Synopsis IPv6 filter policy name
 Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ipv6](#) *reference*

| | |
|------------|---|
| Tree | ipv6 |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-qinq-dot1p *keyword*

| | |
|------------|--|
| Synopsis | Ingress match QinQ Dot1p |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos match-qinq-dot1p <i>keyword</i> |
| Tree | match-qinq-dot1p |
| Options | top, bottom |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policer-control-policy

| | |
|------------|---|
| Synopsis | Enter the policer-control-policy context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|----------|-----------------------------|
| Synopsis | Policer control policy name |
|----------|-----------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos policer-control-policy <i>policy-name</i> <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sap-ingress

| | |
|------------|--|
| Synopsis | Enter the sap-ingress context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos sap-ingress |
| Tree | sap-ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Policy ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos sap-ingress <i>policy-name</i> <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queuing-type *keyword*

| | |
|------------|---|
| Synopsis | Queuing type |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos sap-ingress <i>queuing-type</i> <i>keyword</i> |
| Tree | queuing-type |
| Options | shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR |

scheduler-policy

| | |
|------------|---|
| Synopsis | Enter the scheduler-policy context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> ingress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lag

| | |
|------------|--|
| Synopsis | Enter the lag context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag |
| Tree | lag |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-map-profile *number*

| | |
|-------------|---|
| Synopsis | LAG link map profile for a SAP or network interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag link-map-profile <i>number</i> |
| Tree | link-map-profile |
| Description | This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator |

assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

| | |
|------------|---|
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

per-link-hash

| | |
|------------|---|
| Synopsis | Enter the per-link-hash context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash |
| Tree | per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

class *number*

| | |
|------------|---|
| Synopsis | Class used on LAG egress using weighted per-link-hash |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash class <i>number</i> |
| Tree | class |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

weight *number*

| | |
|------------|--|
| Synopsis | Weight used on LAG egress using weighted per-link-hash |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> lag per-link-hash weight <i>number</i> |
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

monitor-oper-group *reference*

Synopsis Monitor operational group

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [monitor-oper-group](#) *reference*

Tree [monitor-oper-group](#)

Reference **configure** [service](#) [oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

multi-service-site *reference*

Synopsis Multi service site name

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [multi-service-site](#) *reference*

Tree [multi-service-site](#)

Reference **configure** [service](#) [customer](#) *string* [multi-service-site](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

oper-group *reference*

Synopsis Operational group

Context **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [oper-group](#) *reference*

Tree [oper-group](#)

Reference **configure** [service](#) [oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

static-host

| | |
|------------|--|
| Synopsis | Enter the static-host context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host |
| Tree | static-host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4 [ip] string mac string

| | |
|------------|--|
| Synopsis | Enter the ipv4 list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ip] string

| | |
|------------|--|
| Synopsis | IPv4 address used by the static host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac string

| | |
|------------|--|
| Synopsis | MAC address used by the static host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> |
| Tree | ipv4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the static host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-string *string*

| | |
|---------------|--|
| Synopsis | ANCP string |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> ancp-string <i>string</i> |
| Tree | ancp-string |
| String Length | 1 to 63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile

| | |
|------------|--|
| Synopsis | Enter the app-profile context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> app-profile |
| Tree | app-profile |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

profile *reference*

| | |
|----------|--|
| Synopsis | Application profile used by the static host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> app-profile <i>profile</i> <i>reference</i> |
| Tree | profile |

| | |
|------------|---|
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scope *keyword*

| | |
|------------|--|
| Synopsis | Scope of the static host application profile |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> app-profile scope <i>keyword</i> |
| Tree | scope |
| Default | subscriber |
| Options | subscriber, mac |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id *string*

| | |
|---------------|---|
| Synopsis | Intermediate destination ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> int-dest-id <i>string</i> |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-route [[prefix](#)] *string*

| | |
|-------------|---|
| Synopsis | Enter the managed-route list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> |
| Tree | managed-route |
| Description | Commands in this context configure managed route parameters. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[prefix] string

| | |
|------------|---|
| Synopsis | Managed route prefix associated with IPv4 static host |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> |
| Tree | managed-route |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpe-check

| | |
|------------|---|
| Synopsis | Enable the cpe-check context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check |
| Tree | cpe-check |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IP address of the target CPE device |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check destination-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | destination-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop-count number

| | |
|----------|--|
| Synopsis | Consecutive ping replies missed before CPE deemed down |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check drop-count <i>number</i> |

| | |
|------------|---|
| Tree | drop-count |
| Range | 1 to 255 |
| Default | 3 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failed-action

| | |
|------------|--|
| Synopsis | Enter the failed-action context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action |
| Tree | failed-action |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric *number*

| | |
|------------|---|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action metric <i>number</i> |
| Tree | metric |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|----------|---|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action preference <i>number</i> |
| Tree | preference |
| Range | 0 to 255 |

| | |
|------------|--|
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag number

| | |
|------------|--|
| Synopsis | Route tag used if CPE check fails |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action tag number |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

withdraw boolean

| | |
|------------|--|
| Synopsis | Withdraw the route when the CPE check fails |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw boolean |
| Tree | withdraw |
| Default | false |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval number

| | |
|----------|--|
| Synopsis | Interval between ICMP pings to the target CPE IP address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check interval number |
| Tree | interval |
| Range | 1 to 255 |

| | |
|------------|---|
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

log *boolean*

| | |
|------------|--|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check log <i>boolean</i> |
| Tree | log |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

padding-size *number*

| | |
|------------|--|
| Synopsis | Padding size for CPE connectivity checks |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Source IP address used in the ICMP messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | source-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|--|
| Synopsis | Time interval determining that a ping is missed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check <i>timeout</i> <i>number</i> |
| Tree | timeout |
| Range | 1 to 10 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric *number*

| | |
|-------------|--|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i> |
| Tree | metric |
| Description | This command configures a metric to associate with the provisioned managed route. |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|-------------|--|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i> |
| Tree | preference |
| Description | This command configures the preference associated with the provisioned managed route. |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag number

| | |
|------------|---|
| Synopsis | Route tag used if CPE check fails |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rip-policy reference

| | |
|------------|---|
| Synopsis | RIP policy name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> rip-policy <i>reference</i> |
| Tree | rip-policy |
| Reference | configure subscriber-mgmt rip-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv

| | |
|------------|--|
| Synopsis | Enter the shcv context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> shcv |
| Tree | shcv |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile reference

| | |
|----------|--|
| Synopsis | SLA profile name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |

| | |
|------------|--|
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|--|
| Synopsis | Sub-profile name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|---|
| Synopsis | Enter the subscriber-id context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Subscriber identification |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id <i>string</i> string |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-sap-id

| | |
|------------|--|
| Synopsis | Use the SAP id as subscriber ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv4 <i>string</i> mac <i>string</i> subscriber-id use-sap-id |
| Tree | use-sap-id |
| Notes | The following elements are part of a choice: string or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6 [prefix] string mac string

| | |
|------------|---|
| Synopsis | Enter the ipv6 list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[prefix] string

| | |
|------------|---|
| Synopsis | IPv6 prefix |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> |
| Tree | ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac string

| | |
|------------|---|
| Synopsis | MAC address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> |
| Tree | ipv6 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the static host

Context **configure** [service vprn string](#) [subscriber-interface string](#) [group-interface string](#) [sap string](#) [static-host ipv6 string](#) [mac string](#) **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis ANCP string

Context **configure** [service vprn string](#) [subscriber-interface string](#) [group-interface string](#) [sap string](#) [static-host ipv6 string](#) [mac string](#) **ancp-string** *string*

Tree [ancp-string](#)

String Length 1 to 63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile

Synopsis Enter the **app-profile** context

Context **configure** [service vprn string](#) [subscriber-interface string](#) [group-interface string](#) [sap string](#) [static-host ipv6 string](#) [mac string](#) **app-profile**

Tree [app-profile](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis Application profile used by the static host

Context **configure** [service vprn string](#) [subscriber-interface string](#) [group-interface string](#) [sap string](#) [static-host ipv6 string](#) [mac string](#) **app-profile** *profile reference*

| | |
|------------|--|
| Tree | profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scope keyword

| | |
|------------|---|
| Synopsis | Scope of the static host application profile |
| Context | configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string app-profile scope keyword |
| Tree | scope |
| Default | subscriber |
| Options | subscriber, mac |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id string

| | |
|---------------|--|
| Synopsis | Intermediate destination ID |
| Context | configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string int-dest-id string |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-linking string

| | |
|------------|--|
| Synopsis | IPv6 host associated with the IPv4 host through the learned MAC address |
| Context | configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string mac-linking string |
| Tree | mac-linking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-route [ipv6-prefix] string

| | |
|-------------|--|
| Synopsis | Enter the managed-route list instance |
| Context | configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string |
| Tree | managed-route |
| Description | Commands in this context configure managed route parameters. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv6-prefix] string

| | |
|------------|--|
| Synopsis | Managed route prefix associated with IPv6 static host |
| Context | configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string |
| Tree | managed-route |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpe-check

| | |
|------------|--|
| Synopsis | Enable the cpe-check context |
| Context | configure service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check |
| Tree | cpe-check |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|-------------------------------------|
| Synopsis | IP address of the target CPE device |
|----------|-------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check destination-ip-address (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | destination-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop-count *number*

| | |
|------------|---|
| Synopsis | Consecutive ping replies missed before CPE deemed down |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check drop-count <i>number</i> |
| Tree | drop-count |
| Range | 1 to 255 |
| Default | 3 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failed-action

| | |
|------------|--|
| Synopsis | Enter the failed-action context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action |
| Tree | failed-action |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric *number*

| | |
|------------|---|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action metric <i>number</i> |
| Tree | metric |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |

| | |
|------------|---|
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|------------|---|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action preference <i>number</i> |
| Tree | preference |
| Range | 0 to 255 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag *number*

| | |
|------------|--|
| Synopsis | Route tag used if CPE check fails |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

withdraw *boolean*

| | |
|----------|--|
| Synopsis | Withdraw the route when the CPE check fails |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check failed-action withdraw <i>boolean</i> |
| Tree | withdraw |
| Default | false |
| Notes | The following elements are part of a choice: (metric , preference , and tag) or withdraw . |

| | |
|------------|---|
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | Interval between ICMP pings to the target CPE IP address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check interval <i>number</i> |
| Tree | interval |
| Range | 1 to 255 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

log *boolean*

| | |
|------------|---|
| Synopsis | Log CPE connectivity checks transitions |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check log <i>boolean</i> |
| Tree | log |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

padding-size *number*

| | |
|------------|---|
| Synopsis | Padding size for CPE connectivity checks |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Source IP address used in the ICMP messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check source-ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | source-ip-address |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|--|
| Synopsis | Time interval determining that a ping is missed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> cpe-check timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 10 |
| Default | 1 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

metric *number*

| | |
|-------------|--|
| Synopsis | Metric associated with the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> metric <i>number</i> |
| Tree | metric |
| Description | This command configures a metric to associate with the provisioned managed route. |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference number

| | |
|-------------|--|
| Synopsis | Preference associated to the provisioned managed route |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> preference <i>number</i> |
| Tree | preference |
| Description | This command configures the preference associated with the provisioned managed route. |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tag number

| | |
|------------|---|
| Synopsis | Route tag used if CPE check fails |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> managed-route <i>string</i> tag <i>number</i> |
| Tree | tag |
| Max. Range | 0 to 4294967295 |
| Default | 0 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retail-svc-id number**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Retail service ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> retail-svc-id <i>number</i> |
| Tree | retail-svc-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv

| | |
|------------|---|
| Synopsis | Enter the shcv context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> shcv |
| Tree | shcv |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | SLA profile name |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Sub-profile name |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host ipv6 <i>string</i> mac <i>string</i> subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis Subscriber identification

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv6](#) *string* [mac](#) *string* [subscriber-id](#) *string* *string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-sap-id

Synopsis Use the SAP id as subscriber ID

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host ipv6](#) *string* [mac](#) *string* [subscriber-id](#) [use-sap-id](#)

Tree [use-sap-id](#)

Notes The following elements are part of a choice: **string** or **use-sap-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis Enter the **mac-learning** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [static-host](#) [mac-learning](#)

Tree [mac-learning](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

data-triggered *boolean*

Synopsis Enable learning of MAC addresses from data packets

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning data-triggered <i>boolean</i> |
| Tree | data-triggered |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

single-mac *boolean*

| | |
|------------|---|
| Synopsis | Enforce single MAC address and subscriber for the SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> static-host mac-learning single-mac <i>boolean</i> |
| Tree | single-mac |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-sla-mgmt

| | |
|------------|---|
| Synopsis | Enter the sub-sla-mgmt context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt |
| Tree | sub-sla-mgmt |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of SAP subscriber management |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|--|
| Synopsis | Enter the defaults context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults |
| Tree | defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Default application profile name for this SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id

| | |
|------------|--|
| Synopsis | Enter the int-dest-id context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults int-dest-id |
| Tree | int-dest-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Use the configured string |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults int-dest-id string <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: string or top-q-tag . |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

top-q-tag

| | |
|------------|--|
| Synopsis | Use the top Q-tag of this SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults int-dest-id top-q-tag |
| Tree | top-q-tag |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | Default SLA profile for hosts on this SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Default subscriber profile used for subscribers on this SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|----------|--|
| Synopsis | Enter the subscriber-id context |
|----------|--|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-id

| | |
|------------|--|
| Synopsis | Use auto-generated subscriber identification string |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults subscriber-id auto-id |
| Tree | auto-id |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id

| | |
|------------|---|
| Synopsis | Use SAP ID as default subscriber identification string |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults subscriber-id sap-id |
| Tree | sap-id |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Default subscriber identification string for the SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt defaults subscriber-id string <i>string</i> |
| Tree | string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

single-sub-parameters

| | |
|------------|---|
| Synopsis | Enter the single-sub-parameters context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters |
| Tree | single-sub-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

non-sub-traffic

| | |
|------------|---|
| Synopsis | Enable the non-sub-traffic context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic |
| Tree | non-sub-traffic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Application profile name for all non-subscriber traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|-----------|--|
| Synopsis | SLA profile applicable for all non-subscriber traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Notes | This element is mandatory. |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|--|
| Synopsis | Subscriber ID profile applied for all non-subscriber traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Subscriber ID applied for all non-subscriber traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id <i>string</i> |
| Tree | subscriber-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

profiled-traffic-only *boolean*

| | |
|------------|--|
| Synopsis | Include all traffic in subscriber profile |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> sub-sla-mgmt single-sub-parameters profiled-traffic-only <i>boolean</i> |
| Tree | profiled-traffic-only |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis Subscriber identification policy used on this SAP

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt sub-ident-policy** *reference*

Tree **sub-ident-policy**

Reference **configure subscriber-mgmt sub-ident-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-limit (*keyword* | *number*)

Synopsis Maximum number of subscribers on this SAP

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **sub-sla-mgmt subscriber-limit** (*keyword* | *number*)

Tree **subscriber-limit**

Range 1 to 131071

Default 1

Options no-limit

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-parameters

Synopsis Enter the **sap-parameters** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap-parameters**

Tree **sap-parameters**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis Anti-spoof type of the SAP

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters anti-spoof <i>keyword</i> |
| Tree | anti-spoof |
| Default | ip-mac |
| Options | ip-mac, nh-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-sla-mgmt

| | |
|------------|---|
| Synopsis | Enter the sub-sla-mgmt context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt |
| Tree | sub-sla-mgmt |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|--|
| Synopsis | Enter the defaults context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap-parameters sub-sla-mgmt defaults |
| Tree | defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Default application profile name |
| Context | configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults app-profile reference |
| Tree | app-profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|--|
| Synopsis | Default SLA profile |
| Context | configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults sla-profile reference |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|--|
| Synopsis | Default subscriber profile |
| Context | configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults sub-profile reference |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

auto-id

Synopsis Subscriber ID that is autogenerated

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#) [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) **auto-id**

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis String to be used as default subscriber ID

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#) [sub-sla-mgmt](#) [defaults](#) [subscriber-id](#) *string* **string**

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sub-ident-policy *reference*

Synopsis Subscriber identification policy

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap-parameters](#) [sub-sla-mgmt](#) [sub-ident-policy](#) *reference*

Tree [sub-ident-policy](#)

Reference **configure** [subscriber-mgmt](#) [sub-ident-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

shcv-policy *reference*

Synopsis Subscriber host connectivity verification policy for IPv4 and IPv6

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy <i>reference</i> |
| Tree | shcv-policy |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy-ipv4 *reference*

| | |
|------------|---|
| Synopsis | Subscriber host connectivity verification policy for IPv4 |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy-ipv4 <i>reference</i> |
| Tree | shcv-policy-ipv4 |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy-ipv6 *reference*

| | |
|------------|---|
| Synopsis | Subscriber host connectivity verification policy for IPv6 |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> shcv-policy-ipv6 <i>reference</i> |
| Tree | shcv-policy-ipv6 |
| Reference | configure subscriber-mgmt shcv-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

srrp [**srrp-id**] *number*

| | |
|----------------|--|
| Synopsis | Enter the srrp list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> |
| Tree | srrp |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[srrp-id] *number*

Synopsis SRRP instance ID

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number*

Tree **srrp**

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of SRRP

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **admin-state** *keyword*

Tree **admin-state**

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd-liveness

Synopsis Enable the **bfd-liveness** context

Context **configure** **service** **vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **bfd-liveness**

Tree **bfd-liveness**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dest-ip *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Destination IPv4 prefix |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness dest-ip <i>string</i> |
| Tree | dest-ip |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Name of the interface running BFD |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness interface-name <i>string</i> |
| Tree | interface-name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-name *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Administrative service name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> bfd-liveness service-name <i>string</i> |
| Tree | service-name |

String Length 1 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **description** *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gw-mac *string*

Synopsis Gateway MAC address
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **gw-mac** *string*
Tree [gw-mac](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keep-alive-interval *number*

Synopsis Interval between SRRP advertisements
Context **configure** **service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **srrp** *number* **keep-alive-interval** *number*
Tree [keep-alive-interval](#)
Range 1 to 100
Default 10
Units deciseconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

message-path *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | SAP to use as the SRRP message path |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> message-path <i>reference</i> |
| Tree | message-path |
| Reference | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> sap <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

monitor-oper-group

| | |
|------------|--|
| Synopsis | Enter the monitor-oper-group context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group |
| Tree | monitor-oper-group |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-name *reference*

| | |
|------------|--|
| Synopsis | Operational group name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group group-name <i>reference</i> |
| Tree | group-name |
| Reference | configure service oper-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

priority-step *number*

| | |
|----------|--|
| Synopsis | Step value to change priority of SRRP instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> monitor-oper-group priority-step <i>number</i> |

| | |
|------------|---|
| Tree | priority-step |
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

one-garp-per-sap *boolean*

| | |
|------------|--|
| Synopsis | Send one gratuitous ARP to each SAP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> one-garp-per-sap <i>boolean</i> |
| Tree | one-garp-per-sap |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|----------------|--|
| Synopsis | VRRP priority control policy associated with the SRRP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> policy <i>reference</i> |
| Tree | policy |
| Reference | configure vrrp policy <i>number</i> |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preempt *boolean*

| | |
|------------|---|
| Synopsis | Allow the SRRP instance to override an existing master |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> srrp <i>number</i> preempt <i>boolean</i> |
| Tree | preempt |
| Default | true |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority *number*

Synopsis Priority for this interface at this level

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [priority](#) *number*

Tree [priority](#)

Range 1 to 254

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

send-fib-population-packets *keyword*

Synopsis Mode used to send FIB population packets (such as ARP) on switchover

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [srrp](#) *number* [send-fib-population-packets](#) *keyword*

Tree [send-fib-population-packets](#)

Default all

Options all, outer-tag-only

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suppress-aa-sub *boolean*

Synopsis Enable application assurance suppression for ESM subscribers

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [suppress-aa-sub](#) *boolean*

Tree [suppress-aa-sub](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tos-marking-state *keyword*

| | |
|------------|--|
| Synopsis | TOS marking state |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> tos-marking-state <i>keyword</i> |
| Tree | tos-marking-state |
| Default | trusted |
| Options | trusted, untrusted |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Group interface type |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> type <i>keyword</i> |
| Tree | type |
| Default | plain |
| Options | plain, lns, wlan-gw, gtp, bonding |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw

| | |
|------------|---|
| Synopsis | Enter the wlan-gw context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw |
| Tree | wlan-gw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--------------------------------------|
| Synopsis | Administrative state of WLAN Gateway |
|----------|--------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gateway-address [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|-------------------|---|
| Synopsis | Enter the gateway-address list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | gateway-address |
| Max.
Instances | 10 |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Gateway endpoint address of the WLAN Gateway tunnel |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | gateway-address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

purpose

| | |
|------------|--|
| Synopsis | Enter the purpose context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw
gateway-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) purpose |
| Tree | purpose |
| Introduced | 16.0.R4 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect *boolean*

Synopsis Use tunnel IP address for cross-connect traffic

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **purpose** **xconnect** *boolean*

Tree [xconnect](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gateway-router *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Routing instance the WLAN-GW endpoint resides in

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **gateway-router** *string*

Tree [gateway-router](#)

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-encryption

Synopsis Enter the **group-encryption** context

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **group-encryption**

Tree [group-encryption](#)

Introduced 21.10.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encryption-keygroup-inbound *reference*

| | |
|------------|--|
| Synopsis | Encryption keygroup for inbound traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-inbound <i>reference</i> |
| Tree | encryption-keygroup-inbound |
| Reference | configure group-encryption encryption-keygroup <i>number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encryption-keygroup-outbound *reference*

| | |
|------------|---|
| Synopsis | Encryption keygroup for inbound traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw group-encryption encryption-keygroup-outbound <i>reference</i> |
| Tree | encryption-keygroup-outbound |
| Reference | configure group-encryption encryption-keygroup <i>number</i> |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-ap

| | |
|------------|--|
| Synopsis | Enter the I2-ap context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap |
| Tree | I2-ap |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

access-point [[sap-id](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the access-point list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw I2-ap access-point <i>string</i> |
| Tree | access-point |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[sap-id] *string*

| | |
|---------------|---|
| Synopsis | SAP ID for the Layer 2 access point |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> |
| Tree | access-point |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the L2 access points |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encap-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Service encapsulation type of this access point |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> encap-type <i>keyword</i> |
| Tree | encap-type |
| Options | null, dot1q, qinq |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

epipe-sap-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Parameters template for the internal connections with the ISA cards |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap access-point <i>string</i> epipe-sap-template <i>reference</i> |
| Tree | epipe-sap-template |
| Reference | configure service template epipe-sap-template <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

auto-sub-id-fmt *keyword*

| | |
|------------|--|
| Synopsis | Format of the auto-generated subscriber ID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap auto-sub-id-fmt <i>keyword</i> |
| Tree | auto-sub-id-fmt |
| Default | include-ap-tags |
| Options | include-ap-tags, sap-only |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-encap-type *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Default encapsulation type for Layer 2 access points |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw l2-ap default-encap-type <i>keyword</i> |
| Tree | default-encap-type |
| Default | null |
| Options | null, dot1q, qinq |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **lanext** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) **lanext**

Tree [lanext](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-bd *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of bridge domains

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) **lanext** **max-bd** *number*

Tree [max-bd](#)

Range 1 to 131071

Default 131071

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-ap-mac

Synopsis Enable the **learn-ap-mac** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) **learn-ap-mac**

Tree [learn-ap-mac](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

delay-auth *boolean*

| | |
|------------|--|
| Synopsis | Delay authentication until ARP/ND is answered or timed out, after which AP MAC can be included |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw learn-ap-mac delay-auth <i>boolean</i> |
| Tree | delay-auth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mobility

| | |
|------------|--|
| Synopsis | Enter the mobility context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility |
| Tree | mobility |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|------------|--|
| Synopsis | Minimum time between two mobility events for a single UE |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility hold-time <i>number</i> |
| Tree | hold-time |
| Range | 0 to 255 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inter-tunnel-type *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enable mobility between terminating tunnel types |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility inter-tunnel-type <i>boolean</i> |
| Tree | inter-tunnel-type |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inter-vlan *boolean*

| | |
|------------|---|
| Synopsis | Enable mobility within different VLANs within the same range of VLAN Q-tags |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility inter-vlan <i>boolean</i> |
| Tree | inter-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

trigger

| | |
|------------|---|
| Synopsis | Enter the trigger context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger |
| Tree | trigger |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

control *boolean*

| | |
|----------|--|
| Synopsis | Use control traffic (DHCP, DHCPv6, and ICMPv6-RS messages) as mobility trigger |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger control <i>boolean</i> |

| | |
|------------|------------------------------------|
| Tree | control |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

data *boolean*

| | |
|------------|---|
| Synopsis | Use data traffic as mobility trigger |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger data <i>boolean</i> |
| Tree | data |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

iapp *boolean*

| | |
|------------|---|
| Synopsis | Use Inter Access Point Protocol (IAPP) messages as mobility trigger |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw mobility trigger iapp <i>boolean</i> |
| Tree | iapp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

oper-down-on-group-degrade *boolean*

| | |
|------------|--|
| Synopsis | Bring interface operationally down when its ISA WLAN Gateway becomes degraded |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw oper-down-on-group-degrade <i>boolean</i> |
| Tree | oper-down-on-group-degrade |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tcp-mss-adjust *number*

| | |
|------------|---|
| Synopsis | Value for the TCP Maximum Segment Size (MSS) option if not present, or if value is higher |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tcp-mss-adjust <i>number</i> |
| Tree | tcp-mss-adjust |
| Range | 160 to 10240 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel-egress-qos

| | |
|------------|--|
| Synopsis | Enter the tunnel-egress-qos context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos |
| Tree | tunnel-egress-qos |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Administrative state of egress QoS for WLAN-GW tunnels |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

agg-rate-limit (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Aggregate rate limit of each shaper associated with this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos agg-rate-limit (<i>number</i> <i>keyword</i>) |
| Tree | agg-rate-limit |
| Range | 1 to 100000000 |
| Default | max |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

granularity *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Granularity of the egress shaping for WLAN Gateway |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos granularity <i>keyword</i> |
| Tree | granularity |
| Default | per-tunnel |
| Options | per-tunnel, per-retailer |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum time that the egress QoS resources associated with a tunnel (such as a shaper) are held |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw tunnel-egress-qos hold-time (<i>number</i> <i>keyword</i>) |
| Tree | hold-time |
| Range | 1 to 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-client-only *boolean*

Synopsis Tunnel traffic to shape when multiple UEs use this tunnel

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-egress-qos](#) **multi-client-only** *boolean*

Tree [multi-client-only](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Identifier of the egress QoS policy associated with each tunnel of this interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-egress-qos](#) **qos** *reference*

Tree [qos](#)

Reference **configure** [qos sap-egress](#) *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Identifier of the egress scheduler policy associated with each tunnel of this interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [tunnel-egress-qos](#) **scheduler-policy** *reference*

Tree [scheduler-policy](#)

Reference **configure** [qos scheduler-policy](#) *string*

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

tunnel-encaps

Synopsis Enter the **tunnel-encaps** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[tunnel-encaps](#)
 Tree [tunnel-encaps](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

learn-l2tp-cookie (*keyword* | *hex-string*)

Synopsis System that learns the cookie from L2TP tunnels terminating on this interface
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[tunnel-encaps](#) [learn-l2tp-cookie](#) (*keyword* | *hex-string*)
 Tree [learn-l2tp-cookie](#)
 String Length 6
 Default never
 Options never, always
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

vlan-range [[range](#)] *string*

Synopsis Enter the **vlan-range** list instance
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)
[vlan-range](#) *string*
 Tree [vlan-range](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[[range](#)] *string*

Synopsis IEEE 802.1q VLAN tag range

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> |
| Tree | vlan-range |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authentication

| | |
|------------|---|
| Synopsis | Enter the authentication context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication |
| Tree | authentication |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|------------|---|
| Synopsis | Minimum time to hold a UE down after an authentication failure |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication hold-time <i>number</i> |
| Tree | hold-time |
| Range | 0 to 3600 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local

| | |
|------------|---|
| Synopsis | Enable the local context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local |
| Tree | local |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

coa-policy *reference*

| | |
|------------|--|
| Synopsis | RADIUS ISA policy applied to CoA or disconnect messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local coa-policy <i>reference</i> |
| Tree | coa-policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

default-ue-state *keyword*

| | |
|------------|--|
| Synopsis | UE state accepted for immediate authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication local default-ue-state <i>keyword</i> |
| Tree | default-ue-state |
| Options | portal, dsm |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

on-control-plane *boolean*

| | |
|------------|--|
| Synopsis | Trigger authentication on first control plane packet instead of first data packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication on-control-plane <i>boolean</i> |
| Tree | on-control-plane |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|----------|--|
| Synopsis | RADIUS policy for authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication policy <i>reference</i> |

| | |
|------------|--|
| Tree | policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vlan-mismatch-timeout *number*

| | |
|------------|---|
| Synopsis | Timeout value for the RADIUS proxy cache if a packet is received with a non-matching VLAN |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> authentication vlan-mismatch-timeout <i>number</i> |
| Tree | vlan-mismatch-timeout |
| Range | 5 to 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

data-triggered-ue-creation

| | |
|------------|---|
| Synopsis | Enter the data-triggered-ue-creation context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation |
| Tree | data-triggered-ue-creation |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of data-triggered UE creation |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arp *boolean*

| | |
|------------|---|
| Synopsis | Authenticate ARP packets received from an unknown UE |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation arp <i>boolean</i> |
| Tree | arp |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

create-proxy-cache-entry

| | |
|------------|---|
| Synopsis | Enter the create-proxy-cache-entry context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry |
| Tree | create-proxy-cache-entry |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|---------------|--|
| Synopsis | MAC address format |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry mac-format <i>string</i> |
| Tree | mac-format |
| String Length | 2 to 7 |
| Default | aa: |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|----------|--|
| Synopsis | Enable the proxy-server context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> data-triggered-ue-creation create-proxy-cache-entry proxy-server |
| Tree | proxy-server |

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis RADIUS Proxy server name
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [data-triggered-ue-creation](#) [create-proxy-cache-entry](#) [proxy-server](#) **name** *string*
 Tree [name](#)
 String Length 1 to 32
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance of the RADIUS proxy server
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [data-triggered-ue-creation](#) [create-proxy-cache-entry](#) [proxy-server](#) **router-instance** *string*
 Tree [router-instance](#)
 Notes This element is mandatory.
 Introduced 16.0.R4
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp4

Synopsis Enter the **dhcp4** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **dhcp4**
 Tree [dhcp4](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of DHCPv4 |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dns *string*

| | |
|----------------|--|
| Synopsis | DNS servers signaled in DHCP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 dns <i>string</i> |
| Tree | dns |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

l2-aware-ip-address (*ipv4-unicast-address* | *keyword*)

| | |
|------------|---|
| Synopsis | L2-Aware NAT inside IP address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 l2-aware-ip-address (<i>ipv4-unicast-address</i> <i>keyword</i>) |
| Tree | l2-aware-ip-address |
| Options | from-pool |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lease-time

| | |
|----------|-------------------------------------|
| Synopsis | Enter the lease-time context |
|----------|-------------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time |
| Tree | lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active number

| | |
|------------|---|
| Synopsis | IP address lease time for the UE after successful (portal) authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time active number |
| Tree | active |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|--|
| Synopsis | IP address lease time that is provided before and during (portal) authentication to the UE |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 lease-time initial number |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nbns string

| | |
|----------|--|
| Synopsis | NetBIOS servers signaled in DHCP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp4 nbns string |
| Tree | nbns |

| | |
|----------------|--------------------------------------|
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp6

| | |
|------------|--|
| Synopsis | Enter the dhcp6 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the protocol |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime

| | |
|------------|--|
| Synopsis | Enter the preferred-lifetime context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime |
| Tree | preferred-lifetime |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active number

| | |
|------------|---|
| Synopsis | Preferred signaled lifetime after full authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime active <i>number</i> |
| Tree | active |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|--|
| Synopsis | Preferred signaled lifetime when the UE is not fully authenticated |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 preferred-lifetime initial <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime

| | |
|------------|--|
| Synopsis | Enter the valid-lifetime context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 valid-lifetime |
| Tree | valid-lifetime |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active number

| | |
|----------|---|
| Synopsis | Signaled valid lifetime after full authentication |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 valid-lifetime active <i>number</i> |
| Tree | active |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|---|
| Synopsis | Valid signaled lifetime when the UE is not fully authenticated |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dhcp6 valid-lifetime initial <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dsm

| | |
|------------|--|
| Synopsis | Enter the dsm context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm |
| Tree | dsm |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-policy reference



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|----------------------------------|
| Synopsis | ISA Radius Policy for accounting |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting-update

| | |
|------------|---|
| Synopsis | Enable the accounting-update context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-update |
| Tree | accounting-update |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | Time interval between consecutive Interim accounting update messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm accounting-update interval <i>number</i> |
| Tree | interval |
| Range | 5 to 259200 |
| Units | minutes |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of DSM |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

application-assurance

Synopsis Enter the **application-assurance** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) **application-assurance**
 Tree [application-assurance](#)
 Introduced 21.10.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

accounting-statistics *boolean*

Synopsis Collect AA statistics
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) **application-assurance** **accounting-statistics** *boolean*
 Tree [accounting-statistics](#)
 Default false
 Introduced 21.10.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

profile *reference*

Synopsis AA application profile used for portal authentication
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dsm](#) **application-assurance** **profile** *reference*
 Tree [profile](#)
 Reference **configure** [application-assurance](#) **group** *number* [partition](#) *number* [policy](#) **app-profile** *string*
 Introduced 21.10.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

url-parameter *string*

Synopsis AA URL parameter included for HTTP portal redirect

| | |
|---------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm application-assurance url-parameter <i>string</i> |
| Tree | url-parameter |
| String Length | 1 to 247 |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer *reference*

| | |
|------------|--|
| Synopsis | Policer for egress traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm egress policer <i>reference</i> |
| Tree | policer |
| Reference | configure subscriber-mgmt isa-policer <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-filter reference

| | |
|------------|--|
| Synopsis | Filter for ingress traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress ip-filter <i>reference</i> |
| Tree | ip-filter |
| Reference | configure subscriber-mgmt isa-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer reference

| | |
|------------|--|
| Synopsis | Policer for ingress traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress policer <i>reference</i> |
| Tree | policer |
| Reference | configure subscriber-mgmt isa-policer <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

soft-quota-exhausted-filter reference

| | |
|-------------|---|
| Synopsis | Filter applied when soft volume quota is reached |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> dsm ingress soft-quota-exhausted-filter <i>reference</i> |
| Tree | soft-quota-exhausted-filter |
| Description | This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the ip-filter command in the configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs. |
| Reference | configure subscriber-mgmt isa-filter <i>string</i> |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

one-time-redirect

| | |
|------------|---|
| Synopsis | Enter the one-time-redirect context |
| Context | configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm one-time-redirect |
| Tree | one-time-redirect |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port number

| | |
|------------|---|
| Synopsis | Destination port of packets considered for HTTP redirect |
| Context | configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm one-time-redirect port number |
| Tree | port |
| Range | 1 to 65535 |
| Default | 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

url string

| | |
|---------------|--|
| Synopsis | URL for redirected HTTP protocol packets that can be overridden by AAA |
| Context | configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm one-time-redirect url string |
| Tree | url |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

volume-quota-direction keyword

| | |
|----------|--|
| Synopsis | Volume quota direction for WLAN GW |
| Context | configure service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string dsm volume-quota-direction keyword |
| Tree | volume-quota-direction |

| | |
|-------------|---|
| Description | This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs. |
| Default | both |
| Options | both, ingress, egress |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dynamic-service *boolean*

| | |
|-------------|---|
| Synopsis | Dynamically assign WLAN-GW subscriber to a VPLS service |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> wlan-range <i>string</i> dynamic-service <i>boolean</i> |
| Tree | dynamic-service |
| Description | When configured to true , the WLAN-GW subscriber is dynamically assigned to a VPLS service, based on RADIUS authentication reply attributes. This feature is used in conjunction with the configure service vpls wlan-gw wlan-gw-group command.

See "Dynamic VPLS service" in the <i>7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide</i> for more information about the dynamic VPLS service feature. |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

extension [**extension-range**] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for extension |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> wlan-range <i>string</i> extension <i>string</i> |
| Tree | extension |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[extension-range] *string*

| | |
|----------|--|
| Synopsis | VLAN tag range used for matching |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw <i>string</i> wlan-range <i>string</i> extension <i>string</i> |

| | |
|-------------|--|
| Tree | extension |
| Description | This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility. |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

http-redirect-policy *reference*

| | |
|------------|--|
| Synopsis | Default HTTP redirect policy for portal authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> http-redirect-policy <i>reference</i> |
| Tree | http-redirect-policy |
| Reference | configure subscriber-mgmt http-redirect-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

idle-timeout-action *keyword*

| | |
|------------|---|
| Synopsis | Action to perform when the idle timeout expires |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> idle-timeout-action <i>keyword</i> |
| Tree | idle-timeout-action |
| Default | remove |
| Options | remove, shcv |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2-service

| | |
|------------|---|
| Synopsis | Enable the I2-service context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> I2-service |
| Tree | I2-service |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of Layer 2 service for VLAN range

Context **configure** *service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string l2-service admin-state keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** *service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string l2-service description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

service *reference*

Synopsis Layer 2 service associated with the range

Context **configure** *service vprn string subscriber-interface string group-interface string wlan-gw vlan-range string l2-service service reference*

Tree [service](#)

Reference **configure** *service vpls string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-policy *reference*

| | |
|------------|---|
| Synopsis | NAT policy for DSM and ISA portal authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> nat-policy <i>reference</i> |
| Tree | nat-policy |
| Reference | configure service nat nat-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

retail-service *string*

| | |
|---------------|--|
| Synopsis | Default retail service for new UEs in this range |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> retail-service <i>string</i> |
| Tree | retail-service |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

slaac

| | |
|------------|---|
| Synopsis | Enter the slaac context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac |
| Tree | slaac |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the protocol |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime

Synopsis Enter the **preferred-lifetime** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [slaac preferred-lifetime](#)
 Tree [preferred-lifetime](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

active number

Synopsis Preferred signaled lifetime after full authentication
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [slaac preferred-lifetime active number](#)
 Tree [active](#)
 Range 300 to 3600
 Default 600
 Units seconds
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

initial number

Synopsis Preferred signaled lifetime when the UE is not fully authenticated
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [slaac preferred-lifetime initial number](#)
 Tree [initial](#)
 Range 300 to 3600
 Default 300
 Units seconds
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime

| | |
|------------|---|
| Synopsis | Enter the valid-lifetime context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime |
| Tree | valid-lifetime |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

active number

| | |
|------------|---|
| Synopsis | Signaled valid lifetime after full authentication |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime active <i>number</i> |
| Tree | active |
| Range | 300 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|------------|--|
| Synopsis | Valid signaled lifetime when the UE is not fully authenticated |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> slaac valid-lifetime initial <i>number</i> |
| Tree | initial |
| Range | 300 to 3600 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vrgw

| | |
|----------|-------------------------------|
| Synopsis | Enter the vrgw context |
|----------|-------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw |
| Tree | vrgw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of vRGW |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

brg

| | |
|------------|--|
| Synopsis | Enter the brg context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw brg |
| Tree | brg |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authenticated-brg-only *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Only allow hosts from BRGs pre-authenticated using the radius-proxy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw authenticated-brg-only <i>boolean</i> |
| Tree | authenticated-brg-only |
| Default | false |

Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

default-brg-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Default BRG profile to use if the AAA server does not specify one
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) [brg](#) [default-brg-profile](#) *reference*
 Tree [default-brg-profile](#)
 Reference **configure** [subscriber-mgmt](#) [vrgw](#) [brg-profile](#) *string*
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

lanext

Synopsis Enter the **lanext** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) [lanext](#)
 Tree [lanext](#)
 Introduced 16.0.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **access** context
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw](#) [lanext](#) [access](#)
 Tree [access](#)
 Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-mac *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of allowed MAC entries on access side

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw lanext access max-mac](#) *number*

Tree [max-mac](#)

Range 1 to 256

Default 20

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

multi-access *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Allow multiple access points

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [vrgw lanext access multi-access](#) *boolean*

Tree [multi-access](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

policer *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Policar for ingress home traffic

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext access policer <i>reference</i> |
| Tree | policer |
| Reference | configure subscriber-mgmt isa-policer <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of HLE |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

assistive-address-resolution *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | ISA assists in address resolution |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext assistive-address-resolution <i>boolean</i> |
| Tree | assistive-address-resolution |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bd-mac-prefix *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Prefix from which BD MACs for MAC translation are derived |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext bd-mac-prefix <i>string</i> |
| Tree | bd-mac-prefix |
| String Length | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-translation *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Hide MAC address of home host by translating it to BD MAC |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext mac-translation <i>boolean</i> |
| Tree | mac-translation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

network



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the network context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Administrative state of the HLE network |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-mac number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Maximum number of allowed MAC entries on network side |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network max-mac <i>number</i> |
| Tree | max-mac |
| Range | 1 to 64 |
| Default | 20 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Policer for ingress data center traffic |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> vrgw lanext network policer <i>reference</i> |

| | |
|------------|--|
| Tree | policer |
| Reference | configure subscriber-mgmt isa-policer <i>string</i> |
| Introduced | 19.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

xconnect

| | |
|------------|---|
| Synopsis | Enter the xconnect context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect |
| Tree | xconnect |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

accounting

| | |
|------------|--|
| Synopsis | Enter the accounting context |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting |
| Tree | accounting |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mobility-updates *boolean*

| | |
|------------|--|
| Synopsis | Accounting updates triggered by mobility |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting mobility-updates <i>boolean</i> |
| Tree | mobility-updates |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | ISA RADIUS accounting policy for cross-connected UEs |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting policy <i>reference</i> |
| Tree | policy |
| Reference | configure aaa radius isa-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

update-interval number

| | |
|------------|---|
| Synopsis | Time between consecutive Interim accounting update messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect accounting update-interval <i>number</i> |
| Tree | update-interval |
| Range | 5 to 259200 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the cross-connect |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw vlan-range <i>string</i> xconnect admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Identifier of the WLAN Gateway ISA group to terminate UEs for this group interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wlan-gw wlan-gw-group <i>reference</i> |
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wpp

| | |
|------------|---|
| Synopsis | Enable the wpp context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp |
| Tree | wpp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of WPP |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

initial

| | |
|----------|---|
| Synopsis | Enter the initial context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial |

| | |
|------------|---|
| Tree | initial |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Initial application profile name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | Initial SLA profile |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Initial subscriber profile |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp initial sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-time *number*

| | |
|------------|---|
| Synopsis | Lease time |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp lease-time <i>number</i> |
| Tree | lease-time |
| Range | 10 to 315446399 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal

| | |
|------------|---|
| Synopsis | Enter the portal context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal |
| Tree | portal |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | Web portal server name |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal-group *reference*

| | |
|----------|-------------------------------------|
| Synopsis | WPP portal group for this interface |
|----------|-------------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal portal-group <i>reference</i> |
| Tree | portal-group |
| Reference | configure aaa wpp portal-group <i>string</i> |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|--|
| Synopsis | The virtual router instance of the WPP portal for this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp portal router-instance <i>string</i> |
| Tree | router-instance |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

restore-to-initial-on-disconnect *boolean*

| | |
|------------|---|
| Synopsis | Restore initial profiles after a host has disconnected |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp restore-to-initial-on-disconnect <i>boolean</i> |
| Tree | restore-to-initial-on-disconnect |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

triggered-hosts *boolean*

| | |
|----------|--|
| Synopsis | Enable/disable triggered hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp triggered-hosts <i>boolean</i> |
| Tree | triggered-hosts |
| Default | false |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|---|
| Synopsis | User database |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> group-interface <i>string</i> wpp user-db <i>reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time

| | |
|------------|--|
| Synopsis | Enter the hold-time context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time |
| Tree | hold-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

down

| | |
|-------------|--|
| Synopsis | Enter the down context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv4 down |
| Tree | down |
| Description | Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system |

attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot
 Context **configure** *service vprn string subscriber-interface string hold-time ipv4 down init-only boolean*
 Tree [init-only](#)
 Description This command applies a delay only when the IP interface is first configured or after a system reboot.
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis Down hold time for the IP interface
 Context **configure** *service vprn string subscriber-interface string hold-time ipv4 down seconds number*
 Tree [seconds](#)
 Range 1 to 1200
 Units seconds
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

up

Synopsis Enter the **up** context
 Context **configure** *service vprn string subscriber-interface string hold-time ipv4 up*
 Tree [up](#)
 Description Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

seconds *number*

Synopsis Up hold time for the IP interface

Context **configure** *service vprn string subscriber-interface string hold-time ipv4 up seconds number*

Tree [seconds](#)

Range 1 to 1200

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context

Context **configure** *service vprn string subscriber-interface string hold-time ipv6*

Tree [ipv6](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

down

Synopsis Enter the **down** context

Context **configure** *service vprn string subscriber-interface string hold-time ipv6 down*

Tree [down](#)

Description Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the **init-only** command.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

init-only *boolean*

Synopsis Apply delay only at interface configuration or reboot

| | |
|-------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 down <i>init-only</i> <i>boolean</i> |
| Tree | init-only |
| Description | This command applies the delay only when when the IP interface is first configured or after a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Down hold time for the IP interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 down <i>seconds</i> <i>number</i> |
| Tree | seconds |
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up

| | |
|-------------|---|
| Synopsis | Enter the up context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up |
| Tree | up |
| Description | Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|----------|---|
| Synopsis | Up hold time for the IP interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> hold-time ipv6 up <i>seconds</i> <i>number</i> |
| Tree | seconds |

| | |
|------------|---|
| Range | 1 to 1200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-linking

| | |
|------------|---|
| Synopsis | Enter the ipoe-linking context |
| Context | configure service vprn string subscriber-interface string ipoe-linking |
| Tree | ipoe-linking |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gratuitous-router-advertisement *boolean*

| | |
|------------|---|
| Synopsis | Send unsolicited router advertisement after DHCP setup |
| Context | configure service vprn string subscriber-interface string ipoe-linking gratuitous-router-advertisement boolean |
| Tree | gratuitous-router-advertisement |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-session

| | |
|------------|---|
| Synopsis | Enter the ipoe-session context |
| Context | configure service vprn string subscriber-interface string ipoe-session |
| Tree | ipoe-session |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limit *number*

| | |
|----------|--|
| Synopsis | Maximum number of sessions on this group interface |
| Context | configure service vprn string subscriber-interface string ipoe-session session-limit number |

| | |
|------------|---|
| Tree | session-limit |
| Range | 1 to 500000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure service vprn string subscriber-interface string ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address [[ipv4-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the address list instance |
| Context | configure service vprn string subscriber-interface string ipv4 address string |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[ipv4-address](#)] *string*

| | |
|------------|--|
| Synopsis | IP address associated with the subscriber subnet |
| Context | configure service vprn string subscriber-interface string ipv4 address string |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gateway *string*

| | |
|----------|---|
| Synopsis | Gateway IP address within the subnet for SRRP routing |
| Context | configure service vprn string subscriber-interface string ipv4 address string gateway string |

| | |
|------------|---|
| Tree | gateway |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

holdup-time *number*

| | |
|------------|--|
| Synopsis | Wait time before accepting new state attribute |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i> holdup-time <i>number</i> |
| Tree | holdup-time |
| Range | 100 to 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

populate-host-routes *boolean*

| | |
|------------|--|
| Synopsis | Populate subscriber host routes in local FIB |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i> populate-host-routes <i>boolean</i> |
| Tree | populate-host-routes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 address prefix length |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-srrp *number*

| | |
|------------|--|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 address <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-unmatching-subnets *boolean*

| | |
|------------|---|
| Synopsis | Allow subscriber hosts without a matching subnet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 allow-unmatching-subnets <i>boolean</i> |
| Tree | allow-unmatching-subnets |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp-host

| | |
|------------|--|
| Synopsis | Enter the arp-host context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 arp-host |
| Tree | arp-host |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of ARP hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 arp-host admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R6 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit *number*

Synopsis Maximum number of ARP hosts

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 arp-host](#) **host-limit** *number*

Tree [host-limit](#)

Range 1 to 524287

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bfd

Synopsis Enter the **bfd** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 bfd](#)

Tree [bfd](#)

Description Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of BFD sessions

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 bfd](#) **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

echo-receive *number*

Synopsis Minimum echo interval over this interface

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 bfd](#) **echo-receive** *number*

| | |
|------------|---|
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

receive *number*

| | |
|-------------|--|
| Synopsis | BFD receive interval over this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd receive <i>number</i> |
| Tree | receive |
| Description | This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

transmit-interval *number*

| | |
|----------|---|
| Synopsis | BFD transmit interval over this interface |
|----------|---|

| | |
|-------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd transmit-interval <i>number</i> |
| Tree | transmit-interval |
| Description | This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the type command is configured to cpm-np . |
| Range | 10 to 100000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|-------------|---|
| Synopsis | Local termination point for the BFD session |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 bfd type <i>keyword</i> |
| Tree | type |
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

default-dns *string*

| | |
|----------|---|
| Synopsis | Default DNS server addresses |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 default-dns <i>string</i> |
| Tree | default-dns |

| | |
|----------------|---|
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp

| | |
|------------|--|
| Synopsis | Enter the dhcp context |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCP |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp admin-state keyword |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *boolean*

| | |
|----------|---|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp client-applications dhcp boolean |

| | |
|------------|---|
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp boolean

| | |
|------------|--|
| Synopsis | Enable PPPoE clients to use DHCP relay or proxy server |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp client-applications
ppp boolean |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address string

| | |
|-------------|---|
| Synopsis | GI address for the DHCP relay |
| Context | configure service vprn string subscriber-interface string ipv4 dhcp gi-address string |
| Tree | gi-address |
| Description | <p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p> |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-populate

Synopsis Enter the **lease-populate** context
Context **configure service vprn string subscriber-interface string ipv4 dhcp lease-populate**
Tree [lease-populate](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-leases *number*

Synopsis Maximum number of DHCPv4 leases
Context **configure service vprn string subscriber-interface string ipv4 dhcp lease-populate max-leases number**
Tree [max-leases](#)
Range 0 to 511999
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

offer-selection

Synopsis Enter the **offer-selection** context
Context **configure service vprn string subscriber-interface string ipv4 dhcp offer-selection**
Tree [offer-selection](#)
Introduced 20.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-mac

Synopsis Enter the **client-mac** context
Context **configure service vprn string subscriber-interface string ipv4 dhcp offer-selection client-mac**
Tree [client-mac](#)
Notes The following elements are part of a choice: **client-mac** or **server**.

| | |
|------------|---|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection client-mac discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-address *keyword*

| | |
|-------------|---|
| Synopsis | Designated client MAC addresses for Offer selection |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection client-mac mac-address <i>keyword</i> |
| Tree | mac-address |
| Description | This command specifies the client MAC addresses for which the Discover delay applies. |
| Options | odd, even |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|--|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured. |
| Range | 1 to 100 |

| | |
|------------|---|
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server [*ipv4-address*] *string*

| | |
|----------------|--|
| Synopsis | Enter the server list instance |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> |
| Tree | server |
| Max. Instances | 8 |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv4-address] *string*

| | |
|------------|--|
| Synopsis | IP address of the DHCP server |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> |
| Tree | server |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

discover-delay *number*

| | |
|-------------|--|
| Synopsis | Delay before sending DHCP Discover messages |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp offer-selection server <i>string</i> discover-delay <i>number</i> |
| Tree | discover-delay |
| Description | This command configures the time to delay DHCP Discover messages sent to the server. |
| Range | 1 to 100 |
| Units | deciseconds |

| | |
|------------|---|
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-82

| | |
|-------------|---|
| Synopsis | Enter the option-82 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 |
| Tree | option-82 |
| Description | Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor-specific-option

| | |
|-------------|---|
| Synopsis | Enter the vendor-specific-option context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option |
| Tree | vendor-specific-option |
| Description | Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac-address *boolean*

| | |
|------------|---|
| Synopsis | Send the MAC address in the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i> |
| Tree | client-mac-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *boolean*

| | |
|------------|---|
| Synopsis | Send SAP ID in the sub-option of the DHCP relay packet |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-id *boolean*

| | |
|------------|---|
| Synopsis | Send the service ID in the Vendor Specific Option |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | User-defined ASCII string for the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option string <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

system-id *boolean*

| | |
|----------|--|
| Synopsis | Send the system ID in the VSO |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp option-82 vendor-specific-option system-id <i>boolean</i> |
| Tree | system-id |
| Default | false |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis Enter the **proxy-server** context
 Context **configure service vprn string subscriber-interface string ipv4 dhcp proxy-server**
 Tree [proxy-server](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCP proxy server
 Context **configure service vprn string subscriber-interface string ipv4 dhcp proxy-server admin-state keyword**
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

emulated-server *string*

Synopsis IP address used as DHCP server address in SAP context
 Context **configure service vprn string subscriber-interface string ipv4 dhcp proxy-server emulated-server string**
 Tree [emulated-server](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-time

Synopsis Enter the **lease-time** context
 Context **configure service vprn string subscriber-interface string ipv4 dhcp proxy-server lease-time**

| | |
|------------|---|
| Tree | lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-override *boolean*

| | |
|------------|---|
| Synopsis | Use lease time information provided by RADIUS server |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server lease-time radius-override <i>boolean</i> |
| Tree | radius-override |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|--|
| Synopsis | DHCP lease time |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp proxy-server lease-time value <i>number</i> |
| Tree | value |
| Range | 300 to 315446399 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp python-policy reference |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

relay-proxy

| | |
|------------|--|
| Synopsis | Enable the relay-proxy context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp relay-proxy |
| Tree | relay-proxy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

release-update-src-ip *boolean*

| | |
|------------|---|
| Synopsis | Update the source IP address of a DHCP RELEASE message |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp relay-proxy release-update-src-ip <i>boolean</i> |
| Tree | release-update-src-ip |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

siaddr-override *string*

| | |
|------------|--|
| Synopsis | DHCP server IP address for address hiding function |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp relay-proxy siaddr-override <i>string</i> |
| Tree | siaddr-override |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

release-include-gi-address *boolean*

| | |
|------------|--|
| Synopsis | Include the GI address in DHCP relay messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp release-include-gi-address <i>boolean</i> |
| Tree | release-include-gi-address |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------------|---|
| Synopsis | DHCP server IP addresses |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp server <i>string</i> |
| Tree | server |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-ip-addr *keyword*

| | |
|------------|---|
| Synopsis | Type of source address to use for DHCP relay |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp src-ip-addr <i>keyword</i> |
| Tree | src-ip-addr |
| Default | auto |
| Options | auto, gi-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

virtual-subnet *boolean*

| | |
|------------|--|
| Synopsis | Enable a virtual subnet for DHCPv4 hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 dhcp virtual-subnet <i>boolean</i> |
| Tree | virtual-subnet |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

export-host-routes *boolean*

| | |
|----------|---|
| Synopsis | Allow export of subscriber management host routes |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv4 export-host-routes <i>boolean</i> |
| Tree | export-host-routes |

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unnumbered

| | |
|------------|--|
| Synopsis | Enter the unnumbered context |
| Context | configure service vprn string subscriber-interface string ipv4 unnumbered |
| Tree | unnumbered |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-address string

| | |
|------------|--|
| Synopsis | IP address for the subscriber interface |
| Context | configure service vprn string subscriber-interface string ipv4 unnumbered ip-address string |
| Tree | ip-address |
| Notes | The following elements are part of a choice: ip-address or ip-int-name . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-int-name string

| | |
|---------------|---|
| Synopsis | Interface name from which an IPv4 address is borrowed |
| Context | configure service vprn string subscriber-interface string ipv4 unnumbered ip-int-name string |
| Tree | ip-int-name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ip-address or ip-int-name . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|----------|--------------------------------|
| Synopsis | Enable the ipv6 context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address [**ipv6-address**] *string*

| | |
|------------|---|
| Synopsis | Enter the address list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ipv6-address] *string*

| | |
|------------|---|
| Synopsis | IPv6 address for the subscriber interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Host type for subscriber interface prefixes |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> host-type <i>keyword</i> |
| Tree | host-type |
| Default | pd |
| Options | pd, wan, pd-wan |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-length *number*

| | |
|------------|---|
| Synopsis | IPv6 address prefix length |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 address <i>string</i> prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 0 to 128 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-multiple-wan-addresses *boolean*

| | |
|------------|---|
| Synopsis | Allow multiple WAN addresses |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 allow-multiple-wan-addresses <i>boolean</i> |
| Tree | allow-multiple-wan-addresses |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-unmatching-prefixes *boolean*

| | |
|------------|--|
| Synopsis | Allow subscriber hosts without a matching prefix |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 allow-unmatching-prefixes <i>boolean</i> |
| Tree | allow-unmatching-prefixes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bfd

| | |
|----------|---|
| Synopsis | Enter the bfd context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 bfd |
| Tree | bfd |

| | |
|-------------|---|
| Description | Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of BFD sessions |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv6 bfd admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

echo-receive *number*

| | |
|------------|---|
| Synopsis | Minimum echo interval over this interface |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv6 bfd echo-receive <i>number</i> |
| Tree | echo-receive |
| Range | 100 to 100000 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Number of consecutive BFD messages missed from the peer |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv6 bfd multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments. |
| Range | 1 to 20 |
| Default | 3 |
| Introduced | 21.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

receive number

Synopsis BFD receive interval over this interface

Context **configure service vprn** *string subscriber-interface string ipv6 bfd receive number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

transmit-interval number

Synopsis BFD transmit interval over this interface

Context **configure service vprn** *string subscriber-interface string ipv6 bfd transmit-interval number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Default 100

Units milliseconds

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis Local termination point for the BFD session

Context **configure service vprn** *string subscriber-interface string ipv6 bfd type keyword*

Tree [type](#)

| | |
|-------------|---|
| Description | This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.
The options to specify where the BFD session runs are: <ul style="list-style-type: none"> • auto (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the cpm-np. • cpm-np – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems. • fp – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms. |
| Default | auto |
| Options | cpm-np, auto, fp |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

default-dns *string*

| | |
|----------------|---|
| Synopsis | Default DNS server addresses |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 default-dns <i>string</i> |
| Tree | default-dns |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delegated-prefix-length (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | IPv6 delegated prefix length |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 delegated-prefix-length (<i>number</i> <i>keyword</i>) |
| Tree | delegated-prefix-length |
| Range | 48 to 64 |
| Default | 64 |
| Options | variable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp6

| | |
|------------|---|
| Synopsis | Enter the dhcp6 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 |
| Tree | dhcp6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

override-slaac *boolean*

| | |
|------------|---|
| Synopsis | Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 override-slaac <i>boolean</i> |
| Tree | override-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-managed-route

| | |
|------------|--|
| Synopsis | Enable the pd-managed-route context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 pd-managed-route |
| Tree | pd-managed-route |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-hop *keyword*

| | |
|------------|--|
| Synopsis | Next hop type |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 pd-managed-route next-hop <i>keyword</i> |
| Tree | next-hop |
| Default | ipv6 |
| Options | ipv4, ipv6 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

proxy-server

Synopsis Enter the **proxy-server** context

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 proxy-server**

Tree [proxy-server](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCPv6 proxy server

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 proxy-server admin-state keyword**

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 proxy-server client-applications**

Tree [client-applications](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp *boolean*

Synopsis Enable IPoE clients to use DHCP relay or proxy server

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean**

Tree [dhcp](#)

| | |
|------------|---|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|------------|--|
| Synopsis | Allow the PPP application to use DHCP relay functionality |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for prefix to remain preferred on this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 300 to 4294967294 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rebind-timer *number*

| | |
|----------|--|
| Synopsis | Rebind timer (T2) for this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server rebind-timer <i>number</i> |
| Tree | rebind-timer |
| Range | 0 to 1209600 |
| Default | 2880 |
| Units | seconds |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew-timer *number*

| | |
|------------|---|
| Synopsis | Renew timer (T1) |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server renew-timer <i>number</i> |
| Tree | renew-timer |
| Range | 0 to 604800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server-id

| | |
|------------|---|
| Synopsis | Enter the server-id context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id |
| Tree | server-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-ascii *string*

| | |
|---------------|--|
| Synopsis | Vendor-assigned ID based on Enterprise Number (DUID-EN) |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-ascii <i>string</i> |
| Tree | duid-en-ascii |
| String Length | 1 to 58 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-en-hex *string*

| | |
|---------------|--|
| Synopsis | DUID system ID in hexadecimal format |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-en-hex <i>string</i> |
| Tree | duid-en-hex |
| String Length | 1 to 118 |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duid-ll

| | |
|------------|--|
| Synopsis | Use link-layer address (DUID-LL) as DUID |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server server-id duid-ll |
| Tree | duid-ll |
| Notes | The following elements are part of a choice: duid-en-ascii , duid-en-hex , or duid-ll . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for prefix to remain valid on this interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 proxy-server valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 300 to 4294967294 |
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|----------|---------------|
| Synopsis | Python policy |
|----------|---------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

relay

| | |
|------------|---|
| Synopsis | Enter the relay context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay |
| Tree | relay |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of DHCPv6 Relay |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

advertise-selection

| | |
|------------|---|
| Synopsis | Enter the advertise-selection context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection |
| Tree | advertise-selection |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac

| | |
|------------|--|
| Synopsis | Enter the client-mac context |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection client-mac |
| Tree | client-mac |
| Notes | The following elements are part of a choice: client-mac or server . |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-address *keyword*

| | |
|------------|--|
| Synopsis | Designated client MAC addresses for Advertise selection |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection client-mac mac-address keyword |
| Tree | mac-address |
| Options | odd, even |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|-------------|--|
| Synopsis | Enter the preference-option context |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection client-mac preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|----------|---|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection client-mac preference-option value number |
| Tree | value |

| | |
|------------|---|
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay *number*

| | |
|-------------|---|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection client-mac solicit-delay <i>number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference-option

| | |
|-------------|---|
| Synopsis | Enter the preference-option context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option |
| Tree | preference-option |
| Description | Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|--|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 dhcp6 relay advertise-selection preference-option value <i>number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server [*ipv6-address*] *string*

Synopsis Enter the **server** list instance

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv6 dhcp6 relay advertise-selection server** *string*

Tree [server](#)

Max. Instances 8

Notes The following elements are part of a choice: **client-mac** or **server**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[ipv6-address] *string*

Synopsis IP address of the DHCPv6 server

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv6 dhcp6 relay advertise-selection server** *string*

Tree [server](#)

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preference-option

Synopsis Enter the **preference-option** context

Context **configure service vprn** *string* **subscriber-interface** *string* **ipv6 dhcp6 relay advertise-selection server** *string* **preference-option**

Tree [preference-option](#)

Description Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

| | |
|------------|--|
| Synopsis | Preference option value for DHCPv6 Advertise messages |
| Context | configure service vprn <i>string subscriber-interface</i> <i>string ipv6 dhcp6 relay advertise-selection server</i> <i>string preference-option value number</i> |
| Tree | value |
| Range | 0 to 255 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay number

| | |
|-------------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service vprn <i>string subscriber-interface</i> <i>string ipv6 dhcp6 relay advertise-selection server</i> <i>string solicit-delay number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages sent to the server. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

solicit-delay number

| | |
|-------------|--|
| Synopsis | Delay before sending DHCPv6 Solicit messages |
| Context | configure service vprn <i>string subscriber-interface</i> <i>string ipv6 dhcp6 relay advertise-selection solicit-delay number</i> |
| Tree | solicit-delay |
| Description | This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the server instance or the client-mac context. |
| Range | 1 to 100 |
| Units | deciseconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|---|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp boolean

| | |
|------------|--|
| Synopsis | Enable IPoE clients to use DHCP relay or proxy server |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay client-applications dhcp boolean |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp boolean

| | |
|------------|---|
| Synopsis | Allow the PPP application to use DHCP relay functionality |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay client-applications ppp boolean |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string subscriber-interface string ipv6 dhcp6 relay description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lease-split

Synopsis Enter the **lease-split** context

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 relay lease-split**

Tree **lease-split**

Description Commands in this context configure DHCPv6 lease split.

DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of DHCPv6 lease split

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 relay lease-split admin-state keyword**

Tree **admin-state**

Default disable

Options enable, disable

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

valid-lifetime *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)

Context **configure service vprn string subscriber-interface string ipv6 dhcp6 relay lease-split valid-lifetime number**

Tree **valid-lifetime**

Range 300 to 315446399

Default 3600

Units seconds

Introduced 21.2.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis Link address for the DHCPv6 relay messages
 Context **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 relay link-address](#) *string*
 Tree [link-address](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis DHCP6 server(s) to which the DHCP6 requests are forwarded
 Context **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 relay server](#) *string*
 Tree [server](#)
 Max. Instances 8
 Notes This element is ordered by the user.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

source-address *string*

Synopsis Source IPv6 address for the DHCPv6 relay messages
 Context **configure** [service](#) [vpn](#) *string* [subscriber-interface](#) *string* [ipv6 dhcp6 relay source-address](#) *string*
 Tree [source-address](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-bridged-mode *boolean*

Synopsis Enable IPv6 IPoE bridged mode

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 ipoe-bridged-mode <i>boolean</i> |
| Tree | ipoe-bridged-mode |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-local-address

| | |
|------------|--|
| Synopsis | Enter the link-local-address context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address |
| Tree | link-local-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address *string*

| | |
|------------|---|
| Synopsis | IPv6 link local address |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 link-local-address <i>address</i> <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix [[ipv6-prefix](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the prefix list instance |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> |
| Tree | prefix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[ipv6-prefix](#)] *string*

| | |
|----------|--|
| Synopsis | IPv6 address for a router interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> |

| | |
|------------|---|
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

holdup-time *number*

| | |
|------------|--|
| Synopsis | Time to wait before route accepts new state attribute |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> holdup-time <i>number</i> |
| Tree | holdup-time |
| Range | 100 to 5000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Host type for subscriber interface prefixes |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> host-type <i>keyword</i> |
| Tree | host-type |
| Default | pd |
| Options | pd, wan, pd-wan |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

track-srrp *number*

| | |
|----------|---|
| Synopsis | SRRP instance whose state is tracked on this IP address |
| Context | configure service vpn <i>string</i> subscriber-interface <i>string</i> ipv6 prefix <i>string</i> track-srrp <i>number</i> |
| Tree | track-srrp |

| | |
|------------|---|
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-advertisements

| | |
|------------|--|
| Synopsis | Enter the router-advertisements context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements |
| Tree | router-advertisements |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of router advertisements |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-mcast *keyword*

| | |
|------------|--|
| Synopsis | Protocol with forced multicast |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements
force-mcast <i>keyword</i> |
| Tree | force-mcast |
| Options | ip, ip-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-advertisement-interval *number*

| | |
|----------|--------------------------------|
| Synopsis | Maximum advertisement interval |
|----------|--------------------------------|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements max-advertisement-interval <i>number</i> |
| Tree | max-advertisement-interval |
| Range | 900 to 1800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-advertisement-interval *number*

| | |
|------------|--|
| Synopsis | Minimum advertisement interval |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements min-advertisement-interval <i>number</i> |
| Tree | min-advertisement-interval |
| Range | 900 to 1350 |
| Default | 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|---|
| Synopsis | Enter the options context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

current-hop-limit *number*

| | |
|----------|---|
| Synopsis | Hop limit to be advertised |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options current-hop-limit <i>number</i> |
| Tree | current-hop-limit |

| | |
|------------|---|
| Range | 0 to 255 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dns

| | |
|------------|---|
| Synopsis | Enter the dns context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns |
| Tree | dns |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-rdnss *boolean*

| | |
|------------|--|
| Synopsis | Include the RDNSS server option 25 |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns include-rdnss <i>boolean</i> |
| Tree | include-rdnss |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rdnss-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum time for the RDNSS address to remain valid |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options dns rdnss-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | rdnss-lifetime |
| Range | 900 to 3600 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-configuration *boolean*

| | |
|------------|--|
| Synopsis | Managed address configuration flag |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options managed-configuration <i>boolean</i> |
| Tree | managed-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mtu (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Advertised MTU value |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options mtu (<i>number</i> <i>keyword</i>) |
| Tree | mtu |
| Range | 1280 to 9212 |
| Default | not-included |
| Units | bytes |
| Options | not-included |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

other-stateful-configuration *boolean*

| | |
|------------|---|
| Synopsis | Other stateful configuration flag |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options other-stateful-configuration <i>boolean</i> |
| Tree | other-stateful-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reachable-time *number*

| | |
|----------|---|
| Synopsis | Neighbor discovery reachable time that is advertised for this group interface |
|----------|---|

| | |
|------------|--|
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options reachable-time <i>number</i> |
| Tree | reachable-time |
| Range | 0 to 3600000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retransmit-timer *number*

| | |
|------------|--|
| Synopsis | Neighbor discovery retransmit timer that is advertised for this group interface |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options retransmit-timer <i>number</i> |
| Tree | retransmit-timer |
| Range | 0 to 1800000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-lifetime (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Router lifetime |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements options router-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | router-lifetime |
| Range | 2700 to 9000 |
| Default | 4500 |
| Units | seconds |
| Options | no-default-router |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-options

| | |
|------------|--|
| Synopsis | Enter the prefix-options context |
| Context | configure service vprn string subscriber-interface string ipv6 router-advertisements prefix-options |
| Tree | prefix-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

autonomous *boolean*

| | |
|------------|---|
| Synopsis | Value of the autonomous flag |
| Context | configure service vprn string subscriber-interface string ipv6 router-advertisements prefix-options autonomous boolean |
| Tree | autonomous |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-link *boolean*

| | |
|------------|--|
| Synopsis | Assign the prefix to an interface on the specified link |
| Context | configure service vprn string subscriber-interface string ipv6 router-advertisements prefix-options on-link boolean |
| Tree | on-link |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number | keyword*)

| | |
|----------|--|
| Synopsis | Time for a prefix to remain preferred |
| Context | configure service vprn string subscriber-interface string ipv6 router-advertisements prefix-options preferred-lifetime (number keyword) |
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 3600 |

| | |
|------------|---|
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain valid |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-advertisements prefix-options valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 0 to 4294967294 |
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-solicit

| | |
|------------|---|
| Synopsis | Enter the router-solicit context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit |
| Tree | router-solicit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inactivity-timer (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time before an inactive host is removed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> ipv6 router-solicit inactivity-timer (<i>number</i> <i>keyword</i>) |
| Tree | inactivity-timer |
| Range | 1 to 31536000 |
| Default | 300 |
| Units | seconds |
| Options | infinite |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-address-assignment

Synopsis Enter the **local-address-assignment** context
Context **configure service vprn string subscriber-interface string local-address-assignment**
Tree [local-address-assignment](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of Local Address Assignment
Context **configure service vprn string subscriber-interface string local-address-assignment admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure service vprn string subscriber-interface string local-address-assignment ipv4**
Tree [ipv4](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

client-applications

Synopsis Enter the **client-applications** context
Context **configure service vprn string subscriber-interface string local-address-assignment ipv4 client-applications**
Tree [client-applications](#)

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for PPP IPCP hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv4 client-applications ppp <i>boolean</i> |
| Tree | ppp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-pool *string*

| | |
|----------------|---|
| Synopsis | Default pools |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv4 default-pool <i>string</i> |
| Tree | default-pool |
| String Length | 1 to 32 |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *reference*

| | |
|------------|--|
| Synopsis | Local DHCP server that contains pools for local address assignment |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv4 server <i>reference</i> |
| Tree | server |
| Reference | configure service vprn <i>string</i> dhcp-server dhcpv4 <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-applications

| | |
|------------|--|
| Synopsis | Enter the client-applications context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6
client-applications |
| Tree | client-applications |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-slaac *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE SLAAC hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6
client-applications ipoe-slaac <i>boolean</i> |
| Tree | ipoe-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-wan *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for IPoE IA NA hosts |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> local-address-assignment ipv6
client-applications ipoe-wan <i>boolean</i> |
| Tree | ipoe-wan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-slaac *boolean*

| | |
|------------|--|
| Synopsis | Request local addresses for PPP SLAAC hosts |
| Context | configure service vprn string subscriber-interface string local-address-assignment ipv6 client-applications ppp-slaac boolean |
| Tree | ppp-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *reference*

| | |
|------------|---|
| Synopsis | Local DHCPv6 server that contains pools for local address assignment |
| Context | configure service vprn string subscriber-interface string local-address-assignment ipv6 server reference |
| Tree | server |
| Reference | configure service vprn string dhcp-server dhcpv6 string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe

| | |
|------------|--|
| Synopsis | Enter the pppoe context |
| Context | configure service vprn string subscriber-interface string pppoe |
| Tree | pppoe |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn string subscriber-interface string pppoe description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-limit *number*

Synopsis Maximum PPPoE sessions
 Context **configure** *service* *vprn* *string* *subscriber-interface* *string* *pppoe* **session-limit** *number*
 Tree [session-limit](#)
 Range 1 to 333823
 Default 1
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

private-retail-subnets *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Export subnets to the forwarding service
 Context **configure** *service* *vprn* *string* *subscriber-interface* *string* **private-retail-subnets** *boolean*
 Tree [private-retail-subnets](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wan-mode *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Mode of operation for hosts with /128 WAN IPv6 address
 Context **configure** *service* *vprn* *string* *subscriber-interface* *string* **wan-mode** *keyword*
 Tree [wan-mode](#)
 Default mode64
 Options mode64, mode128
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wlan-gw

Synopsis Enable the **wlan-gw** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw](#)

Tree [wlan-gw](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-manager

Synopsis Enter the **pool-manager** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw](#) [pool-manager](#)

Tree [pool-manager](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-client

Synopsis Enter the **dhcp6-client** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw](#) [pool-manager](#) [dhcp6-client](#)

Tree [dhcp6-client](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcpv4-nat

Synopsis Enter the **dhcpv4-nat** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw](#) [pool-manager](#) [dhcp6-client](#) [dhcpv4-nat](#)

Tree [dhcpv4-nat](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the DHCPv6 client entity |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|--|
| Synopsis | IPv6 address in the link address field of relay header |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address <i>string</i> |
| Tree | link-address |
| Default | :: |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool-name *string*

| | |
|---------------|---|
| Synopsis | Pool name to be sent in the DHCPv6 messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name <i>string</i> |
| Tree | pool-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ia-na

| | |
|----------|--|
| Synopsis | Enter the ia-na context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na |

| | |
|------------|------------------------------------|
| Tree | ia-na |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCPv6 client entity |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|---|
| Synopsis | IPv6 address in the link address field of relay header |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na link-address <i>string</i> |
| Tree | link-address |
| Default | :: |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool-name *string*

| | |
|---------------|--|
| Synopsis | Pool name to be sent in the DHCPv6 messages |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client ia-na pool-name <i>string</i> |
| Tree | pool-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lease-query

| | |
|------------|--|
| Synopsis | Enable the lease-query context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query |
| Tree | lease-query |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-retries *number*

| | |
|------------|--|
| Synopsis | Maximum number of retries before the lease query assumes that no existing subnets were allocated |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client lease-query max-retries <i>number</i> |
| Tree | max-retries |
| Range | 0 to 10 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

servers *string*

| | |
|----------------|--|
| Synopsis | DHCPv6 servers that are used for requesting addresses |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client servers <i>string</i> |
| Tree | servers |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

slaac

| | |
|----------|--|
| Synopsis | Enter the slaac context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client slaac |
| Tree | slaac |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the DHCPv6 client entity
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw pool-manager dhcp6-client slaac](#) **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

link-address *string*

Synopsis IPv6 address in the link address field of relay header
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw pool-manager dhcp6-client slaac](#) **link-address** *string*
Tree [link-address](#)
Default ::
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pool-name *string*

Synopsis Pool name to be sent in the DHCPv6 messages
Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [wlan-gw pool-manager dhcp6-client slaac](#) **pool-name** *string*
Tree [pool-name](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

source-ip (*keyword* | *ipv6-address*)

| | |
|------------|--|
| Synopsis | Source IP address that is used by the DHCPv6 client |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager dhcp6-client source-ip (<i>keyword</i> <i>ipv6-address</i>) |
| Tree | source-ip |
| Default | use-interface-ip |
| Options | use-interface-ip |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

watermarks

| | |
|------------|--|
| Synopsis | Enter the watermarks context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager watermarks |
| Tree | watermarks |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high *number*

| | |
|------------|--|
| Synopsis | New prefix that is used when the ISA level reaches high watermark |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager watermarks high <i>number</i> |
| Tree | high |
| Range | 51 to 99 |
| Default | 95 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low *number*

| | |
|----------|---|
| Synopsis | Prefix that is released if the usage level without this prefix is below the low watermark |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager watermarks low <i>number</i> |
| Tree | low |

| | |
|------------|------------------------------------|
| Range | 50 to 98 |
| Default | 90 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*

| | |
|------------|--|
| Synopsis | Identifier of the WLAN Gateway ISA group on which the prefixes are installed |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw pool-manager wlan-gw-group <i>reference</i> |
| Tree | wlan-gw-group |
| Reference | configure isa wlan-gw-group <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

redundancy

| | |
|------------|---|
| Synopsis | Enter the redundancy context |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw redundancy |
| Tree | redundancy |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of WLAN-GW redundancy |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw redundancy admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

export string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Route to export to peer |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw redundancy export <i>string</i> |
| Tree | export |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

monitor string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Peer route to monitor |
| Context | configure service vprn <i>string</i> subscriber-interface <i>string</i> wlan-gw redundancy monitor <i>string</i> |
| Tree | monitor |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

subscriber-mgmt

| | |
|------------|---|
| Synopsis | Enter the subscriber-mgmt context |
| Context | configure service vprn <i>string</i> subscriber-mgmt |
| Tree | subscriber-mgmt |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcpv4

| | |
|----------|--|
| Synopsis | Enter the dhcpv4 context |
| Context | configure service vprn <i>string</i> subscriber-mgmt dhcpv4 |

| | |
|------------|---|
| Tree | dhcpv4 |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

routed-subnet-transparent-forward *boolean*

| | |
|-------------|--|
| Synopsis | Transparently forward DHCPv4 from CPE LAN over IPoE |
| Context | configure service vprn <i>string</i> subscriber-mgmt dhcpv4 routed-subnet-transparent-forward <i>boolean</i> |
| Tree | routed-subnet-transparent-forward |
| Description | <p>When configured to true, the router transparently forwards DHCPv4 packets received on a subscriber interface with a source IP in a routed subnet that is associated with a routed IPoE session or host. </p><p></p> <p>Supported routed subnets are:</p> <ul style="list-style-type: none"> • RADIUS and NASREQ framed routes • routes learned via an ESM dynamic BGP peer • managed routes that are associated with a static IPv4 host <p>When configured to false, the system disables transparent forwarding of DHCPv4 packets.</p> |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multi-chassis-shunt-id *number*

| | |
|-------------|---|
| Synopsis | Shunt ID for a pair of resilient nodes |
| Context | configure service vprn <i>string</i> subscriber-mgmt multi-chassis-shunt-id <i>number</i> |
| Tree | multi-chassis-shunt-id |
| Description | <p>This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.</p> <p>This configuration is required for BNG CUPS inter-UPF resiliency shunting, but not for non-BNG CUPS shunting. However, when configured, it is also used for shunting non-BNG CUPS sessions in the same service.</p> |
| Range | 1 to 8191 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up-resiliency

| | |
|------------|--|
| Synopsis | Enter the up-resiliency context |
| Context | configure service vprn <i>string</i> subscriber-mgmt up-resiliency |
| Tree | up-resiliency |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

monitor-oper-group [[oper-group](#)] *reference*

| | |
|----------------|---|
| Synopsis | Enter the monitor-oper-group list instance |
| Context | configure service vprn <i>string</i> subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Description | Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).

Note:
The following is only applicable for the configure service vpls capture-sap context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups. |
| Max. Instances | 4 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[oper-group](#)] *reference*

| | |
|------------|--|
| Synopsis | Operational group name |
| Context | configure service vprn <i>string</i> subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i> |
| Tree | monitor-oper-group |
| Reference | configure service oper-group <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

health-drop *number*

Synopsis Number subtracted from the health value per failure

Context **configure** [service vprn](#) *string* [subscriber-mgmt up-resiliency monitor-oper-group reference](#) [health-drop](#) *number*

Tree [health-drop](#)

Description This command defines how the failure of an operational group member affects the health value. The base health value is 255; the value decreases with the defined number per member failure to a minimum of 0.

Range 1 to 255

Default 1

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-propagate

Synopsis Enter the **ttl-propagate** context

Context **configure** [service vprn](#) *string* [ttl-propagate](#)

Tree [ttl-propagate](#)

Introduced 16.0.R1

Platforms All

local *keyword*

Synopsis Local TTL propagation control for the VPRN

Context **configure** [service vprn](#) *string* [ttl-propagate](#) [local](#) *keyword*

Tree [local](#)

Description This command specifies the local TTL propagation control for the VPRN and overrides the global configuration of the TTL propagation for locally generated packets that are forwarded over MPLS LSPs in a given VPRN service context.

Default use-base

Options none, all, vc-only, use-base

Introduced 16.0.R1

Platforms All

transit keyword

| | |
|-------------|--|
| Synopsis | Transit TTL propagation control for the VPRN |
| Context | configure service vprn string ttl-propagate transit keyword |
| Tree | transit |
| Description | This command overrides the global configuration of the TTL propagation for in transit packets that are forwarded over MPLS LSPs in a given VPRN service context. |
| Default | use-base |
| Options | none, all, vc-only, use-base |
| Introduced | 16.0.R1 |
| Platforms | All |

twamp-light

| | |
|------------|--|
| Synopsis | Enter the twamp-light context |
| Context | configure service vprn string twamp-light |
| Tree | twamp-light |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

reflector

| | |
|------------|--|
| Synopsis | Enable the reflector context |
| Context | configure service vprn string twamp-light reflector |
| Tree | reflector |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state keyword

| | |
|----------|--|
| Synopsis | Administrative state of TWAMP Light functionality |
| Context | configure service vprn string twamp-light reflector admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|--|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

allow-ipv6-udp-checksum-zero *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Process IPv6 packets with a zero UDP checksum |
| Context | configure service vprn string twamp-light reflector allow-ipv6-udp-checksum-zero <i>boolean</i> |
| Tree | allow-ipv6-udp-checksum-zero |
| Description | When configured to true , this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.

When configured to false , IPv6 packets that arrive with a UDP checksum of zero are discarded. |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure service vprn string twamp-light reflector description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|----------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure service vprn string twamp-light reflector prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | prefix |

| | |
|----------------|--|
| Max. Instances | 50 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Source prefix for the TWAMP-Light reflector |
| Context | configure service vpn <i>string twamp-light reflector prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vpn <i>string twamp-light reflector prefix</i> (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

type *keyword*

| | |
|-------------|--|
| Synopsis | Processing behavior type for the reflector |
| Context | configure service vpn <i>string twamp-light reflector type</i> <i>keyword</i> |
| Tree | type |
| Description | <p>This command configures the processing behavior of the TWAMP Light reflector. When the value is twamp-light the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is stamp, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to stamp. When the reflector is operating in stamp mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-</p> |

Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.

| | |
|------------|--|
| Default | twamp-light |
| Options | stamp, twamp-light |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

udp-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs |
| Context | configure service vprn <i>string</i> twamp-light reflector udp-port <i>number</i> |
| Tree | udp-port |
| Range | 862 64364 to 64373 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

video-interface [[interface-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the video-interface list instance |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> |
| Tree | video-interface |
| Max. Instances | 9 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

[[interface-name](#)] *string*

| | |
|----------|---|
| Synopsis | Video interface name |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> |
| Tree | video-interface |

| | |
|---------------|--|
| String Length | 1 to 29 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

accounting-policy *reference*

| | |
|------------|---|
| Synopsis | Accounting Policy |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> accounting-policy <i>reference</i> |
| Tree | accounting-policy |
| Reference | configure log accounting-policy <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

address [[ip-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for address |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

[ip-address] *string*

| | |
|------------|--|
| Synopsis | IPv4 address for the video interface within the service |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> address <i>string</i> |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the video interface |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

channel [[mcast-address](#)] *string* [source](#) *string*

| | |
|------------|---|
| Synopsis | Enter the channel list instance |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> |
| Tree | channel |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

[mcast-address] *string*

| | |
|------------|---|
| Synopsis | Multicast channel address |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> |
| Tree | channel |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

source *string*

| | |
|------------|---|
| Synopsis | Unicast source address |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> |
| Tree | channel |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

channel-name *string*

Synopsis Channel name

Context **configure** **service** **vpn** *string* **video-interface** *string* **channel** *string* **source** *string* **channel-name** *string*

Tree **channel-name**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description

Context **configure** **service** **vpn** *string* **video-interface** *string* **channel** *string* **source** *string* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

scte35-action *keyword*

Synopsis Enable downstream forwarding of SCTE 35 cue avails

Context **configure** **service** **vpn** *string* **video-interface** *string* **channel** *string* **source** *string* **scte35-action** *keyword*

Tree **scte35-action**

Default forward

Options forward, drop

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

zone-channel [[zone-mcast-address](#)] *string* [zone-source](#) *string*

| | |
|------------|---|
| Synopsis | Enter the zone-channel list instance |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> |
| Tree | zone-channel |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

[zone-mcast-address] *string*

| | |
|------------|---|
| Synopsis | Multicast zone channel address |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> |
| Tree | zone-channel |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

zone-source *string*

| | |
|------------|---|
| Synopsis | Unicast source address |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> |
| Tree | zone-channel |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

adi-channel-name *string*

| | |
|----------|--|
| Synopsis | Zone channel name |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> channel <i>string</i> source <i>string</i> zone-channel <i>string</i> zone-source <i>string</i> adi-channel-name <i>string</i> |

| | |
|---------------|--|
| Tree | adi-channel-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

cpu-protection *reference*

| | |
|------------|---|
| Synopsis | CPU protection policy |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> cpu-protection <i>reference</i> |
| Tree | cpu-protection |
| Reference | configure system security cpu-protection <i>policy</i> <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

multicast-service *number*

| | |
|------------|---|
| Synopsis | Associated multicast service ID |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> multicast-service <i>number</i> |
| Tree | multicast-service |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

output-format *keyword*

| | |
|------------|---|
| Synopsis | Output format |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> output-format <i>keyword</i> |
| Tree | output-format |
| Default | rtp-udp |
| Options | udp, rtp-udp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

video-sap

| | |
|------------|--|
| Synopsis | Enable the video-sap context |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap |
| Tree | video-sap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

filter

| | |
|------------|--|
| Synopsis | Enter the filter context |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress filter |
| Tree | filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

ip reference

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress filter ip <i>reference</i> |
| Tree | ip |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

policy-name reference

| | |
|------------|---|
| Synopsis | SAP egress QoS policy ID |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap egress qos policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

filter

Synopsis Enter the **filter** context

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [video-sap](#) [ingress filter](#)

Tree [filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

ip reference

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [video-sap](#) [ingress filter](#) [ip reference](#)

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

qos

Synopsis Enter the **qos** context

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [video-sap](#) [ingress qos](#)

Tree [qos](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

policy-name reference

Synopsis SAP ingress QoS policy ID

Context **configure** [service vprn](#) *string* [video-interface](#) *string* [video-sap](#) [ingress qos](#) [policy-name reference](#)

Tree [policy-name](#)

| | |
|------------|--|
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

video-group-id *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Video group ID |
| Context | configure service vprn <i>string</i> video-interface <i>string</i> video-sap video-group-id <i>reference</i> |
| Tree | video-group-id |
| Reference | configure isa video-group <i>number</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s |

vprn-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | VPRN type |
| Context | configure service vprn <i>string</i> vprn-type <i>keyword</i> |
| Tree | vprn-type |
| Default | regular |
| Options | regular, hub, spoke, subscriber-split-horizon |
| Introduced | 16.0.R1 |
| Platforms | All |

vxlan

| | |
|----------|--------------------------------|
| Synopsis | Enter the vxlan context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure service vprn <i>string vxlan</i> |
| Tree | vxlan |
| Introduced | 16.0.R1 |
| Platforms | All |

tunnel-termination [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Enter the tunnel-termination list instance |
| Context | configure service vprn <i>string vxlan tunnel-termination</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | tunnel-termination |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Non-system IP address that terminates the VXLAN |
| Context | configure service vprn <i>string vxlan tunnel-termination</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) |
| Tree | tunnel-termination |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

fpe-id reference



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-----------|--|
| Synopsis | FPE id for this entry |
| Context | configure service vprn <i>string vxlan tunnel-termination</i> (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) fpe-id reference |
| Tree | fpe-id |
| Reference | configure fwd-path-ext fpe <i>number</i> |
| Notes | This element is mandatory. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

weighted-ecmp *keyword*

| | |
|------------|--|
| Synopsis | Weighted load-balancing capability for ECMP routes |
| Context | configure service vprn <i>string</i> weighted-ecmp <i>keyword</i> |
| Tree | weighted-ecmp |
| Default | false |
| Options | false, true, strict |
| Introduced | 16.0.R1 |
| Platforms | All |

wlan-gw

| | |
|------------|---|
| Synopsis | Enable the wlan-gw context |
| Context | configure service vprn <i>string</i> wlan-gw |
| Tree | wlan-gw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

distributed-subscriber-mgmt

| | |
|------------|---|
| Synopsis | Enter the distributed-subscriber-mgmt context |
| Context | configure service vprn <i>string</i> wlan-gw distributed-subscriber-mgmt |
| Tree | distributed-subscriber-mgmt |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6-tcp-mss-adjust *number*

| | |
|----------|---|
| Synopsis | TCP-MSS adjustment value in upstream direction for DSM |
| Context | configure service vprn <i>string</i> wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust <i>number</i> |
| Tree | ipv6-tcp-mss-adjust |
| Range | 160 to 10240 |

Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mobility-triggered-accounting

Synopsis Enter the **mobility-triggered-accounting** context
Context **configure service vprn string wlan-gw mobility-triggered-accounting**
Tree [mobility-triggered-accounting](#)
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of mobility triggered accounting
Context **configure service vprn string wlan-gw mobility-triggered-accounting admin-state keyword**
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

hold-down *number*

Synopsis Hold additional mobility-triggered update until this timer expires
Context **configure service vprn string wlan-gw mobility-triggered-accounting hold-down number**
Tree [hold-down](#)
Range 60 to 86400
Units seconds
Introduced 16.0.R4
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

include-counters *boolean*

Synopsis Include counters in interim updates

| | |
|------------|---|
| Context | configure service vprn <i>string</i> wlan-gw mobility-triggered-accounting include-counters <i>boolean</i> |
| Tree | include-counters |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

xconnect

| | |
|------------|---|
| Synopsis | Enter the xconnect context |
| Context | configure service vprn <i>string</i> wlan-gw xconnect |
| Tree | xconnect |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the WLAN-GW cross-connect |
| Context | configure service vprn <i>string</i> wlan-gw xconnect admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel-source-ip *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | IPv6 address and prefix for the tunnel source |
| Context | configure service vprn <i>string</i> wlan-gw xconnect tunnel-source-ip <i>string</i> |
| Tree | tunnel-source-ip |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | ISA WLAN-GW Group |
| Context | configure <i>service vprn string wlan-gw xconnect wlan-gw-group reference</i> |
| Tree | <i>wlan-gw-group</i> |
| Reference | configure <i>isa wlan-gw-group number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wpp

| | |
|------------|---|
| Synopsis | Enable the wpp context |
| Context | configure <i>service vprn string wpp</i> |
| Tree | <i>wpp</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of WPP |
| Context | configure <i>service vprn string wpp admin-state keyword</i> |
| Tree | <i>admin-state</i> |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal [*name*] *string*

| | |
|----------|---|
| Synopsis | Enter the portal list instance |
| Context | configure <i>service vprn string wpp portal string</i> |
| Tree | <i>portal</i> |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Web portal name
 Context **configure service vprn string wpp portal string**
 Tree [portal](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack-auth-retry-count *number*

Synopsis Number of retransmissions of an ACK_OUT message
 Context **configure service vprn string wpp portal string ack-auth-retry-count number**
 Tree [ack-auth-retry-count](#)
 Range 0 to 5
 Default 5
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address (*ipv4-address-no-zone | ipv6-address-no-zone*)



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis WPP portal address
 Context **configure service vprn string wpp portal string address (ipv4-address-no-zone | ipv6-address-no-zone)**
 Tree [address](#)
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the WPP portal server |
| Context | configure service vprn <i>string</i> wpp portal <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ntf-logout-retry-count *number*

| | |
|------------|--|
| Synopsis | Number of retransmissions of an NTF_LOGOUT message |
| Context | configure service vprn <i>string</i> wpp portal <i>string</i> ntf-logout-retry-count <i>number</i> |
| Tree | ntf-logout-retry-count |
| Range | 0 to 5 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

port-format *keyword*

| | |
|------------|--|
| Synopsis | Format of the port in the ACK_INO message |
| Context | configure service vprn <i>string</i> wpp portal <i>string</i> port-format <i>keyword</i> |
| Tree | port-format |
| Default | standard |
| Options | standard, vendor-specific |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retry-interval *number*

| | |
|----------|--|
| Synopsis | Time between two consecutive retransmissions |
| Context | configure service vprn <i>string</i> wpp portal <i>string</i> retry-interval <i>number</i> |
| Tree | retry-interval |

| | |
|------------|---|
| Range | 10 to 2000 |
| Default | 2000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

secret string

| | |
|---------------|--|
| Synopsis | Message authentication between portal and BRAS by applying the secret used by WPPv2 |
| Context | configure service vprn <i>string</i> wpp portal <i>string</i> secret <i>string</i> |
| Tree | secret |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

version number

| | |
|------------|---|
| Synopsis | Protocol version to be expected by the WPP portal |
| Context | configure service vprn <i>string</i> wpp portal <i>string</i> version <i>number</i> |
| Tree | version |
| Range | 1 2 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

3.44 sfm commands

```
configure
- sfm number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- sfm-type keyword
```


3.44.1 sfm command descriptions

sfm [**sfm-slot**] *number*

| | |
|------------|--|
| Synopsis | Enter the sfm list instance |
| Context | configure sfm number |
| Tree | sfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

[sfm-slot] *number*

| | |
|------------|--|
| Synopsis | Unique value to identify this SFM slot within a chassis in the system |
| Context | configure sfm number |
| Tree | sfm |
| Range | 1 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of SFM |
| Context | configure sfm number admin-state keyword |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

sfm-type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Provision the SFM type |
| Context | configure <i>sfm number sfm-type keyword</i> |
| Tree | sfm-type |
| Options | sfm-x20, sfm-x20-b, m-sfm5-7, m-sfm5-12, m-sfm5-12e, sfm-x20s-b, sfm-ixr-6, sfm-ixr-10, sfm-s, m-sfm6-12e, sfm2-x20s, sfm-2s, m-sfm6-7/12, sfm-2se, sfm2-s |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

3.45 subscriber-mgmt commands

```

configure
- subscriber-mgmt
- accu-stats-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress keyword id number
- ingress keyword id number
- ancp
- ancp-policy string
- apply-groups reference
- apply-groups-exclude reference
- egress
- rate-adjustment number
- rate-modify
- agg-rate
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- ingress
- rate-adjustment number
- rate-modify
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- port-down
- suspend-shcv
- alarm boolean
- hold-time number
- ancp-static-map
- multi-service-site-entry string customer-name reference customer-site-
name reference
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- sap-entry string sap-id string
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-origin
- overrides
- priority number
- apply-groups reference
- apply-groups-exclude reference
- source keyword
- auto-sub-id
- apply-groups reference
- apply-groups-exclude reference
- implicit-generation boolean
- ipoe-key keyword
- ppp-key keyword

```

configure subscriber-mgmt bgp-peering-policy

```

- bgp-peering-policy string
  - advertise-inactive boolean
  - aggregator-id-zero boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - as-override boolean
  - asn-4-byte boolean
  - authentication-key string
  - authentication-keychain reference
  - bfd-liveness boolean
  - client-reflect boolean
  - cluster string
  - connect-retry number
  - damping boolean
  - description string
  - export reference
  - fast-external-failover boolean
  - hold-time number
  - import reference
  - keepalive number
  - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - local-as
    - as-number number
    - private boolean
  - local-preference number
  - loop-detect keyword
  - med-out (number | keyword)
  - min-route-advertisement number
  - multihop number
  - next-hop-self boolean
  - passive boolean
  - peer-as number
  - preference number
  - remove-private
    - limited boolean
  - send-communities
    - extended boolean
    - standard boolean
  - ttl-security number
  - type keyword
- category-map string
  - activity-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - category string
    - apply-groups reference
    - apply-groups-exclude reference
    - credit-type-override keyword
    - default-credit
      - time number
      - volume
        - unit keyword
        - value number
    - description string
  - egress
    - policer number
    - queue number
  - exhausted-credit-service-level
    - egress
      - ip-filter
        - entry number
          - action
            - drop
            - forward

```

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ip-filter entry action http-redirect

```

- http-redirect
  - allow-override boolean
  - url string
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
  - dscp keyword
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
- icmp
  - code number
  - type number
- ip-option
  - mask number
  - type number
- multiple-option boolean
- option-present boolean
- protocol (number | keyword)
- src-ip string
- src-port
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- tcp-flags
  - ack boolean
  - syn boolean
- ipv6-filter
  - entry number
  - action
    - drop
    - forward
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - match
    - dscp keyword
    - dst-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - icmp
      - code number
      - type number
    - next-header (number | keyword)
    - src-ip string
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number

```

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ipv6-filter entry match src-port range start

```

    - start number
  - tcp-flags
    - ack boolean
    - syn boolean
- ingress
  - ip-filter
    - entry number
    - action
      - drop
      - forward
      - http-redirect
        - allow-override boolean
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
    - icmp
      - code number
      - type number
    - ip-option
      - mask number
      - type number
    - multiple-option boolean
    - option-present boolean
    - protocol (number | keyword)
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - tcp-flags
      - ack boolean
      - syn boolean
  - ipv6-filter
    - entry number
    - action
      - drop
      - forward
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number

```

configure subscriber-mgmt category-map category exhausted-credit-service-level ingress ipv6-filter entry match icmp

```

- icmp
  - code number
  - type number
- next-header (number | keyword)
- src-port
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- tcp-flags
  - ack boolean
  - syn boolean
- pir (number | keyword)
- ingress
  - policer number
  - queue number
- out-of-credit-action-override keyword
- rating-group number
- credit-exhaust-threshold number
- credit-type keyword
- description string
- gx-session-level-usage boolean
- credit-control-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-category-map reference
  - description string
  - error-handling-action keyword
  - out-of-credit-action keyword
- server
  - diameter reference
  - radius
- diameter-gx-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- gx
  - avp-subscription-id
    - origin keyword
    - type keyword
  - ccrt-replay
    - interval number
    - max-lifetime number
  - credit-mcs-interval number
  - destination-realm-learning boolean
  - features
    - extended-bandwidth boolean
  - include-avp
    - an-gw-address boolean
    - apn-ambr boolean
    - called-station-id boolean
    - calling-station-id
      - type keyword
    - ip-can-type boolean
    - logical-access-id boolean
  - nas-port
    - bit-spec string
  - nas-port-id
    - prefix-string string
  - suffix
    - circuit-id
    - not-included

```

configure subscriber-mgmt diameter-gx-policy gx include-avp nas-port-id suffix remote-id

```

    - remote-id
    - user-string string
  - nas-port-type
    - type number
  - pdn-connection-id boolean
  - physical-access-id boolean
  - rai boolean
  - rat-type boolean
  - sgsn-mcc-mnc boolean
  - supported-features boolean
  - user-equipment-info
    - type keyword
  - user-location-info boolean
- mac-format string
- report-ip-address-event boolean
- three-gpp-qos-mapping
  - apn-ambr-dl
    - aggregate-rate
    - arbiter string
    - hs-sla-agg-rate
    - ignore-override
    - policer number
    - queue number
    - scheduler string
  - apn-ambr-ul
    - arbiter string
    - ignore-override
    - policer number
    - queue number
    - scheduler string
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- tx-timer number
- diameter-gy-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- gy
  - avp-subscription-id
    - origin keyword
    - type keyword
  - ccrt-replay
    - interval number
    - max-lifetime number
  - destination-realm-learning boolean
  - extended-failure-handling
    - admin-state keyword
    - interim-credit
      - max-attempts (number | keyword)
      - reporting boolean
      - validity-time (number | keyword)
      - volume
        - credits number
        - units keyword
  - new-session-id boolean
- include-avp
  - aaa-user-name boolean
  - address-avp boolean
  - called-station-id
    - id string

```


configure subscriber-mgmt diameter-gy-policy gy include-avp charging-rule-base-name

```

- charging-rule-base-name
  - category-map
  - not-included
  - user-string string
- ggsn-address
  - type keyword
- pdp-context-type boolean
- ps-information boolean
- service-context-id
  - id string
- three-gpp-charging-characteristics boolean
- three-gpp-charging-id keyword
- three-gpp-ggsn-ipv4-address boolean
- three-gpp-ggsn-ipv6-address boolean
- three-gpp-gprs-negotiated-qos-profile boolean
- three-gpp-imsi keyword
- three-gpp-nsapi boolean
- three-gpp-rat-type
  - type number
- three-gpp-selection-mode boolean
- three-gpp-session-stop-indicator boolean
- three-gpp-user-location-info boolean
- user-equipment-info-type
  - type keyword
- mac-format string
- out-of-credit-reporting keyword
- vendor-support keyword
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
- tx-timer number
- diameter-nasreq-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - nasreq
    - include-avp
      - called-station-id boolean
      - calling-station-id
        - type keyword
      - circuit-id boolean
      - imei boolean
      - nas-port
        - bit-spec string
      - nas-port-id
        - prefix-string string
        - suffix
          - circuit-id
          - not-included
          - remote-id
          - user-string string
      - nas-port-type
        - type (keyword | number)
      - rat-type boolean
      - remote-id boolean
      - user-location-info boolean
    - mac-format string
    - password string
  - user-name
    - domain-name string
    - format keyword

```

configure subscriber-mgmt diameter-nasreq-policy nasreq user-name operation

- **operation** *keyword*
 - **node**
 - **destination-realm** *string*
 - **origin-host** *reference*
 - **on-failure**
 - **failover** *boolean*
 - **handling** *keyword*
 - **tx-timer** *number*
 - **explicit-subscriber-map**
 - **entry** *string*
 - **alias** *string*
 - **app-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **group-interface-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **group-interface-template** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ip-mtu** *number*
 - **ipv4**
 - **icmp**
 - **mask-reply** *boolean*
 - **param-problem**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **redirects**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **tll-expired**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **unreachables**
 - **admin-state** *keyword*
 - **number** *number*
 - **seconds** *number*
 - **neighbor-discovery**
 - **proxy-arp-policy** *reference*
 - **remote-proxy-arp** *boolean*
 - **urpf-check**
 - **mode** *keyword*
- **ipv6**
 - **urpf-check**
 - **mode** *keyword*
- **gtp**
 - **apn-policy** *string*
 - **apn** *string*
 - **ambr-qos-mapping**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **downlink**
 - **aggregate-rate**
 - **arbiter** *string*
 - **policer** *number*
 - **queue** *number*
 - **scheduler** *string*

configure subscriber-mgmt gtp apn-policy apn ambr-qos-mapping uplink

```

    - uplink
      - arbiter string
      - policer number
      - queue number
      - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - defaults
      - group-interface
        - name string
        - svc-name string
      - diameter-nasreq-policy reference
      - radius-auth-policy reference
      - skip-gtp-ipv4-allocation boolean
      - user-db reference
    - apply-groups reference
    - apply-groups-exclude reference
    - apply-groups reference
    - apply-groups-exclude reference
    - max-held-uplink-sessions number
    - peer-profile string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - interface-type keyword
      - ip-ttl number
    - keep-alive
      - admin-state keyword
      - interval number
      - retry-count number
      - timeout number
    - message-retransmit
      - retry-count number
      - timeout number
    - python-policy reference
    - sll
      - change-reporting-action (number | keyword)
      - end-marker-count number
      - ipv4-mtu number
      - qos
        - ambr
          - down-link number
          - up-link number
        - arp number
        - down-link
          - gbr number
          - mbr number
        - qci number
        - up-link
          - gbr number
          - mbr number
    - uplink
      - charging-characteristics
        - home
          - bit0 boolean
          - bit1 boolean
          - bit10 boolean
          - bit11 boolean
          - bit12 boolean
          - bit13 boolean
          - bit14 boolean
          - bit15 boolean
          - bit2 boolean
          - bit3 boolean

```

configure subscriber-mgmt gtp peer-profile uplink charging-characteristics home bit4

```

    - bit4 boolean
    - bit5 boolean
    - bit6 boolean
    - bit7 boolean
    - bit8 boolean
    - bit9 boolean
  - roaming
    - bit0 boolean
    - bit1 boolean
    - bit10 boolean
    - bit11 boolean
    - bit12 boolean
    - bit13 boolean
    - bit14 boolean
    - bit15 boolean
    - bit2 boolean
    - bit3 boolean
    - bit4 boolean
    - bit5 boolean
    - bit6 boolean
    - bit7 boolean
    - bit8 boolean
    - bit9 boolean
  - ggsn
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - up-link
        - gbr number
        - mbr number
    - pgw
      - qos
        - ambr
          - down-link number
          - up-link number
        - arp number
        - down-link
          - gbr number
          - mbr number
        - qci number
        - up-link
          - gbr number
          - mbr number
      - protocol-configuration-options keyword
      - rat-type (number | keyword)
      - report-wlan-location boolean
      - session-hold-time (number | keyword)
  - serving-network
    - mcc string
    - mnc string
  - host-lockout-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - host-key keyword
    - lockout-reset-time number
    - lockout-time
      - max number
      - min number

```

configure subscriber-mgmt host-lockout-policy max-lockout-hosts

- **max-lockout-hosts** *number*
- **host-tracking-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress-rate-modify**
 - **agg-rate**
 - **scheduler** *string*
- **http-redirect-policy** *string*
- **aa-url-parameter** *string*
- **application-assurance** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **dst-port** *number*
- **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*
- **ignore-app-profile** *boolean*
- **portal-hold-time** *number*
- **url** *string*
- **igmp-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **egress-rate-modify**
 - **agg-rate**
 - **scheduler** *string*
- **fast-leave** *boolean*
- **import-policy** *reference*
- **maximum-number-group-sources** *number*
- **maximum-number-groups** *number*
- **maximum-number-sources** *number*
- **multicast-reporter**
 - **admin-state** *keyword*
 - **destination** *reference*
 - **optional-fields**
 - **host-mac** *boolean*
 - **pppoe-session-id** *boolean*
 - **sap-id** *boolean*
 - **svc-id** *boolean*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **redirection-policy** *reference*
- **replication** *keyword*
- **router-alert-check** *boolean*
- **static**
 - **group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **source** *string*
 - **starg**
- **use-multicast-destination-mac** *boolean*
- **version** *keyword*
- **ipoe-session-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **circuit-id-from-auth** *boolean*
- **description** *string*
- **session-key**
 - **cid** *boolean*
 - **mac** *boolean*
 - **rid** *boolean*
 - **sap** *boolean*
- **session-timeout** (*number* | *keyword*)

configure subscriber-mgmt isa-filter

```

- isa-filter string
- apply-groups reference
- apply-groups-exclude reference
- description string
- ipv4
  - default-action keyword
  - entry number
    - action
      - drop
      - forward
      - http-redirect
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dst-ip string
      - dst-port
        - equals number
      - protocol keyword
  - ipv6
    - default-action keyword
    - entry number
      - action
        - drop
        - forward
        - http-redirect
          - url string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - match
        - dst-ip string
        - dst-port
          - equals number
        - protocol keyword
  - type keyword
- isa-policer string
- action keyword
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs number
- description string
- mbs number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- type keyword
- isa-service-chaining
- apply-groups reference
- apply-groups-exclude reference
- evpn string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp
    - route-distinguisher
      - rd (keyword | vpn-route-distinguisher)
    - route-target
      - export string
      - import string

```

configure subscriber-mgmt isa-service-chaining evpn description

- **description** *string*
- **export**
 - **advertise-pools**
 - **admin-state** *keyword*
 - **pool** *router-instance string name string*
 - **gateway-address-range**
 - **end** *string*
 - **start** *string*
 - **vxlan**
 - **vni** *number*
 - **import-mode** *keyword*
 - **prefix-route-resolution** *keyword*
- **mac-prefix** *string*
- **vas-filter** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fail-action** *keyword*
 - **forward**
 - **esi** *string*
 - **sf-ip** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **svc** *reference*
 - **insert-nsh**
 - **meta-data**
 - **insert-subscriber-id**
 - **opaque-data** *string*
 - **svc-path**
 - **path-id** *number*
 - **svc-index** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match**
 - **foreign-ip** (*ipv4-unicast-prefix | ipv4-unicast-address*)
 - **foreign-port** *number*
 - **protocol** *keyword*
 - **local-user-db** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **ipoe**
 - **host** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication**
 - **auth-domain-name** *string*
 - **gx-policy** *string*
 - **nasreq-auth-policy** *string*
 - **radius-auth-policy** *string*
 - **gtp-interface**
 - **name** *string*
 - **service-id** *number*
 - **host-identification**
 - **circuit-id**
 - **ascii-string** *string*
 - **hex-string** *string*
 - **derived-id** *string*

configure subscriber-mgmt local-user-db ipoe host host-identification encap-tag-range

```

- encap-tag-range
  - from string
  - to string
- encap-tag-separate-range
  - inner
    - end number
    - start number
  - outer
    - end number
    - start number
- ip-prefix (ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)
- mac string
- option60
  - ascii-string string
  - hex-string string
- remote-id
  - ascii-string string
  - hex-string string
- sap-id string
- service-id number
- string string
- system-id string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - use-pool-from-client
      - delimiter string
  - gi-address string
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
  - server string
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - link-address string
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - hex-string string

```


configure subscriber-mgmt local-user-db ipoe host ipv6 option ipv6-address

```

- ipv6-address string
- router-advertisement-policy string
- server string
- slaac-prefix string
- slaac-prefix-pool string
- timers
  - preferred-lifetime (number | keyword)
  - rebind number
  - renew number
  - valid-lifetime (number | keyword)
- match-radius-proxy-cache
  - fail-action keyword
  - mac-format string
  - match
    - circuit-id boolean
    - ipv4-option number
    - ipv6-option number
    - mac boolean
    - remote-id boolean
  - server
    - name string
    - service number
- mld-import string
- msap-defaults
  - group-interface
    - name string
    - prefix keyword
    - suffix keyword
  - policy string
  - service number
- radius-accounting-policy
  - duplicate string
  - name string
- retail-service-id number
- rip-policy string
- to-client-options
  - ipv4-option (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - ascii-string string
  - duration number
  - empty
  - hex-string string
  - ipv4-address string
  - netbios-node-type keyword
  - ipv6-option (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - ascii-string string
  - domain-string string
  - empty
  - hex-string string
  - ipv6-address string
- to-server-options
  - ipv6-option (number | keyword)
  - apply-groups reference
  - apply-groups-exclude reference
  - ascii-string string
  - domain-string string
  - empty
  - hex-string string
  - ipv6-address string
- wpp
  - initial

```

configure subscriber-mgmt local-user-db ipoe host wpp initial app-profile

```

    - app-profile string
    - sla-profile string
    - sub-profile string
  - portal
    - name string
    - portal-group string
    - router-instance (keyword | number)
    - restore-to-initial-on-disconnect keyword
- mask type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix
    - length number
    - string string
  - suffix
    - length number
    - string string
- match-list keyword
- ppp
  - host string
    - access-loop-encapsulation
      - apply-groups reference
      - apply-groups-exclude reference
      - encap-offset
        - type keyword
      - rate-down number
    - access-loop-information
      - circuit-id
        - ascii-string string
        - use-sap-id
      - remote-id
        - ascii-string string
        - use-mac-address
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - gx-policy string
      - nasreq-auth-policy string
      - padi-auth-policy string
      - pre-auth-policy string
      - radius-auth-policy string
      - user-db string
    - host-identification
      - circuit-id
        - ascii-string string
        - hex-string string
      - derived-id string
      - encap-tag-range
        - from string
        - to string
      - encap-tag-separate-range
        - inner
          - end number
          - start number
        - outer
          - end number
          - start number
    - mac string
    - remote-id
      - ascii-string string
      - hex-string string
    - sap-id string
    - service-name string

```

configure subscriber-mgmt local-user-db ppp host host-identification user-name

```

- user-name
  - format keyword
  - name string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - prefix-length number
    - use-pool-from-client
      - delimiter string
  - ignore-df-bit boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - force-ipv6cp boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - hex-string string
    - ipv6-address string
  - router-advertisement-policy string
  - slaac-prefix string
  - slaac-prefix-pool string
  - timers
    - preferred-lifetime (number | keyword)
    - rebind number
    - renew number
    - valid-lifetime (number | keyword)
- l2tp
  - group
    - name string
    - service-id number
- lns-interface
  - name string
  - service-id number
- mld-import string
- msap-defaults
  - group-interface

```

configure subscriber-mgmt local-user-db ppp host msap-defaults group-interface name

```

    - name string
    - prefix keyword
    - suffix keyword
  - policy string
  - service number
  - pado-delay number
  - password
    - chap string
    - ignore
    - pap string
  - ppp-policy-parameters
    - keepalive
      - hold-up-multiplier number
      - interval number
    - max-sessions-per-mac number
  - radius-accounting-policy
    - duplicate string
    - name string
  - retail-service-id number
  - rip-policy string
  - steering-profile string
  - to-client-options
    - ipv6-option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - domain-string string
      - empty
      - hex-string string
      - ipv6-address string
  - mask type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix
      - length number
      - string string
    - suffix
      - length number
      - string string
    - match-list keyword
  - mld-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress-rate-modify
      - agg-rate
      - scheduler string
    - fast-leave boolean
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - redirection-policy reference
    - replication keyword
    - router-alert-check boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg

```

configure subscriber-mgmt mld-policy use-multicast-destination-mac

- **use-multicast-destination-mac** *boolean*
- **version** *keyword*
- **msap-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cpu-protection**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *string*
- **ies-vprn-only-sap-parameters**
 - **anti-spoof** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **egress**
 - **qos**
 - **policy-name** *reference*
- **ingress**
 - **qos**
 - **policy-name** *reference*
 - **queuing-type** *keyword*
- **igmp-host-tracking**
 - **expiry-time** *number*
 - **import-policy** *reference*
 - **maximum-number-group-sources** *number*
 - **maximum-number-groups** *number*
 - **maximum-number-sources** *number*
- **lag-link-map-profile** *number*
- **sticky-msaps** *boolean*
- **sticky-msaps-idle-timeout** *number*
- **sub-sla-mgmt**
 - **defaults**
 - **app-profile** *reference*
 - **int-dest-id**
 - **string** *string*
 - **top-q-tag**
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id**
 - **auto-id**
 - **sap-id**
 - **string** *string*
 - **single-sub-parameters**
 - **non-sub-traffic-profiles**
 - **app-profile** *reference*
 - **sla-profile** *reference*
 - **sub-profile** *reference*
 - **subscriber-id** *string*
 - **profiled-traffic-only** *boolean*
 - **sub-ident-policy** *reference*
 - **subscriber-limit** (*keyword* | *number*)
- **vpls-only-sap-parameters**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **arp-host**
 - **host-limit** *number*
 - **min-auth-interval** *number*
 - **arp-reply-agent** *keyword*
 - **dhcp**
 - **lease-populate** *number*
 - **option-82**
 - **action** *keyword*
 - **circuit-id** *keyword*

configure subscriber-mgmt msap-policy vpls-only-sap-parameters dhcp option-82 remote-id

```

- remote-id
  - mac
  - string string
- vendor-specific-option
  - client-mac-address boolean
  - sap-id boolean
  - service-id boolean
  - string string
  - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
  - radius-override boolean
  - value number
- egress
  - qos
  - policy-name reference
- igmp-snooping
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups (keyword | number)
- mcac
  - bandwidth
  - mandatory (number | keyword)
  - total (number | keyword)
  - interface-policy reference
  - mc-constraints
  - level number
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - number-down number
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
  - use-lag-port-weight boolean
  - policy reference
- mvr
  - from-vpls reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - send-queries boolean
  - version keyword
- ingress
  - qos
  - policy-name reference
  - queuing-type keyword
- mac-da-hashing boolean
- split-horizon-group string
- pfc
  - association string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - association-release-timeout (keyword | number)
  - association-setup-retry number
  - bfd-expedited-path-down boolean
  - description string
  - heartbeat
  - interval number
  - retries number

```

configure subscriber-mgmt pfcf association heartbeat timeout

```

- timeout number
- interface
- name string
- router-instance string
- nat
- nat-group reference
- wlan-gw-group reference
- node-id
- fqdn string
- use-ip-address
- path-restoration-time number
- peer
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- python-policy reference
- tx
- retries number
- timeout number
- ttl number
- up-resiliency
- pim-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- ppp-policy string
- allow-same-circuit-id-for-dhcp boolean
- apply-groups reference
- apply-groups-exclude reference
- cookies boolean
- default-pap-password string
- default-user-name string
- description string
- force-ppp-mtu-gt-1492 boolean
- ipcp-subnet-negotiation boolean
- keepalive
- hold-up-multiplier number
- interval number
- lcp-ignore-identifier boolean
- lcp-ignore-magic-numbers boolean
- max-sessions-per-cid
- allow-sessions-without-cid boolean
- limit number
- max-sessions-per-mac number
- mlppp
- accept-mrru boolean
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- short-sequence-numbers boolean
- ncp-renegotiation keyword
- pado-ac-name string
- pado-delay number
- ppp-authentication keyword
- ppp-chap-challenge-length
- max number
- min number
- ppp-initial-delay boolean
- ppp-mtu number
- ppp-options
- custom-option protocol keyword option-number number
- address string
- apply-groups reference
- apply-groups-exclude reference

```

configure subscriber-mgmt ppp-policy ppp-options custom-option ascii-string

```

    - ascii-string string
    - empty
    - hex-string string
  - re-establish-session boolean
  - reject-unconfigured-ncp boolean
  - reply-on-padt boolean
  - session-timeout number
  - sid-allocation keyword
  - unique-sid keyword
- pppoe-client-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - keepalive
    - hold-up-multiplier number
    - interval number
  - mru number
  - mtu number
  - python-policy reference
  - restart-backoff
    - initial-time number
    - max-time number
  - stack
    - ipv4 boolean
    - ipv6-slaac boolean
- radius-accounting-policy string
  - acct-tunnel-connection-fmt string
  - apply-groups reference
  - apply-groups-exclude reference
  - custom-record
    - apply-groups reference
    - apply-groups-exclude reference
    - queue number
    - apply-groups reference
    - apply-groups-exclude reference
    - e-counters
      - in-profile-octets-discarded-count boolean
      - in-profile-octets-forwarded-count boolean
      - in-profile-packets-discarded-count boolean
      - in-profile-packets-forwarded-count boolean
      - out-profile-octets-discarded-count boolean
      - out-profile-octets-forwarded-count boolean
      - out-profile-packets-discarded-count boolean
      - out-profile-packets-forwarded-count boolean
    - i-counters
      - all-octets-offered-count boolean
      - all-packets-offered-count boolean
      - high-octets-discarded-count boolean
      - high-octets-offered-count boolean
      - high-packets-discarded-count boolean
      - high-packets-offered-count boolean
      - in-profile-octets-forwarded-count boolean
      - in-profile-packets-forwarded-count boolean
      - low-octets-discarded-count boolean
      - low-octets-offered-count boolean
      - low-packets-discarded-count boolean
      - low-packets-offered-count boolean
      - out-profile-octets-forwarded-count boolean
      - out-profile-packets-forwarded-count boolean
      - uncoloured-octets-offered-count boolean
      - uncoloured-packets-offered-count boolean
  - ref-queue
    - all
    - e-counters

```


configure subscriber-mgmt radius-accounting-policy custom-record ref-queue e-counters in-profile-octets-discarded-count

```

- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- i-counters
- all-octets-offered-count boolean
- all-packets-offered-count boolean
- high-octets-discarded-count boolean
- high-octets-offered-count boolean
- high-packets-discarded-count boolean
- high-packets-offered-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-forwarded-count boolean
- low-octets-discarded-count boolean
- low-octets-offered-count boolean
- low-packets-discarded-count boolean
- low-packets-offered-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-forwarded-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- id reference
- significant-change number
- delay-start-time number
- description string
- host-accounting
- admin-state keyword
- interim-update boolean
- include-radius-attribute
- access-loop-options boolean
- acct-authentic boolean
- acct-delay-time boolean
- acct-triggered-reason boolean
- all-authorized-session-addresses boolean
- apn boolean
- bearer-fteid boolean
- bonding-active-connections boolean
- bonding-id boolean
- brg-num-active-sessions boolean
- called-station-id boolean
- calling-station-id
- type keyword
- circuit-id boolean
- delegated-ipv6-prefix boolean
- detailed-acct-attributes boolean
- dhcp-vendor-class-id boolean
- error-code boolean
- firewall-info boolean
- framed-interface-id boolean
- framed-ip-address boolean
- framed-ip-netmask boolean
- framed-ipv6-prefix boolean
- framed-ipv6-route boolean
- framed-route boolean
- imei boolean
- imsi boolean
- ipv6-address boolean
- lanext-bridge-id boolean
- lanext-device-type boolean
- lanext-route-distinguisher boolean

```

configure subscriber-mgmt radius-accounting-policy include-radius-attribute lanext-route-target

- **lanext-route-target** *boolean*
- **lanext-vni** *boolean*
- **mac-address** *boolean*
- **msisdn** *boolean*
- **nas-identifier** *boolean*
- **nas-port**
 - **bit-spec** *string*
- **nas-port-id**
 - **prefix-string** *string*
 - **suffix** *keyword*
- **nas-port-type**
 - **type** (*keyword* | *number*)
- **nat-port-range** *boolean*
- **remote-id** *boolean*
- **sla-profile** *boolean*
- **spi-sharing-id** *boolean*
- **std-acct-attributes** *boolean*
- **steering-profile** *boolean*
- **sub-profile** *boolean*
- **subscriber-id** *boolean*
- **tunnel-client-attrs** *boolean*
- **tunnel-server-attrs** *boolean*
- **uli** *boolean*
- **user-name** *boolean*
- **v6-aggregate-stats** *boolean*
- **wifi-num-attached-ues** *boolean*
- **wifi-rssi** *boolean*
- **wifi-ssid-vlan** *boolean*
- **xconnect-tunnel-home-address** *boolean*
- **mcs-interval**
 - **interval** (*keyword* | *number*)
- **queue-instance-accounting**
 - **admin-state** *keyword*
 - **interim-update** *boolean*
- **radius-server-policy** *reference*
- **session-accounting**
 - **admin-state** *keyword*
 - **host-update** *boolean*
 - **interim-update** *boolean*
- **session-id-format** *keyword*
- **triggered-updates**
 - **gtp-change**
 - **s1-release** *boolean*
 - **service-request** *boolean*
 - **teidc-change** *boolean*
 - **teidu-change** *boolean*
 - **uli-change** *boolean*
 - **gtp-mobility** *boolean*
- **update-interval**
 - **interval** *number*
 - **jitter** (*keyword* | *number*)
- **radius-authentication-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **fallback**
 - **action**
 - **accept**
 - **user-db** *string*
 - **force-probing** *boolean*
- **include-radius-attribute**
 - **access-loop-options** *boolean*
 - **acct-session-id**
 - **type** *keyword*

configure subscriber-mgmt radius-authentication-policy include-radius-attribute apn

```

- apn boolean
- called-station-id boolean
- calling-station-id
  - type keyword
- circuit-id boolean
- dhcp-options boolean
- dhcp-vendor-class-id boolean
- dhcp6-options boolean
- gprs-negotiated-qos-profile boolean
- imei boolean
- imsi boolean
- mac-address boolean
- msisdn boolean
- nas-identifier boolean
- nas-port
  - bit-spec string
- nas-port-id
  - prefix-string string
  - suffix keyword
- nas-port-type
  - type (keyword | number)
- pppoe-service-name boolean
- rat-type boolean
- remote-id boolean
- sap-session-index boolean
- tunnel-server-attrs boolean
- uli boolean
- wifi-num-attached-ues boolean
- wifi-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- password string
- ppp-user-name
  - domain-name string
  - domain-operation keyword
- pppoe-access-method keyword
- radius-server-policy reference
- re-authentication boolean
- send-acct-stop-on-fail
  - on-accept-failure boolean
  - on-reject boolean
  - on-request-failure boolean
- user-name
  - domain-name string
  - domain-operation keyword
  - format keyword
  - gtp-format keyword
  - mac-format string
- rip-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - description string
- router-advertisement-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
  - dns
    - include-rdnss boolean
    - rdnss-lifetime (number | keyword)

```

configure subscriber-mgmt router-advertisement-policy options managed-configuration

- **managed-configuration** *boolean*
- **mtu** (*number | keyword*)
- **other-stateful-configuration** *boolean*
- **reachable-time** *number*
- **retransmit-timer** *number*
- **router-lifetime** (*number | keyword*)
- **prefix-options**
 - **stateful**
 - **auto-lifetimes** *boolean*
 - **on-link** *boolean*
 - **preferred-lifetime** (*number | keyword*)
 - **valid-lifetime** (*number | keyword*)
 - **stateless**
 - **on-link** *boolean*
 - **preferred-lifetime** (*number | keyword*)
 - **valid-lifetime** (*number | keyword*)
- **sap-template** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cpu-protection**
 - **ip-src-monitoring**
 - **mac-monitoring**
 - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *reference*
- **hold-time** (*number | keyword*)
- **shcv-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **layer-3**
 - **source-ip-origin** *keyword*
 - **unnumbered-source-ip** *string*
- **periodic**
 - **action** *keyword*
 - **admin-state** *keyword*
 - **interval** *number*
 - **retry-count** *number*
 - **timeout** *number*
- **trigger**
 - **host-limit-exceeded**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
 - **inactivity**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
 - **ip-conflict**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
- **mac-learning**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*

configure subscriber-mgmt shcv-policy trigger mobility

- **mobility**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry-count** *number*
 - **timeout** *number*
- **vpls**
 - **source-ip** *string*
 - **source-mac** *string*
- **sla-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **control**
 - **cups** *boolean*
 - **local** *boolean*
 - **credit-control-policy** *reference*
 - **def-instance-sharing** *keyword*
 - **description** *string*
- **egress**
 - **bonding-selection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **rate-thresholds**
 - **high** *number*
 - **low** *number*
 - **weight**
 - **change** *number*
 - **initial** *number*
 - **ip-filter** *reference*
 - **ipv6-filter** *reference*
 - **qos**
 - **hs-agg-rate** *number*
 - **qos-marking-from-sap** *boolean*
 - **sap-egress**
 - **overrides**
 - **hs-queue-stat-mode** *keyword*
 - **hs-wrr-group** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **hs-class-weight** *number*
 - **rate** (*number* | *keyword*)
 - **policer** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** (*number* | *keyword*)
 - **mbs** (*number* | *keyword*)
 - **packet-byte-offset** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
 - **stat-mode** *keyword*
 - **queue** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **avg-frame-overhead** *decimal-number*
 - **cbs** (*number* | *keyword*)
 - **high-prio-only** (*number* | *keyword*)
 - **hs-class-weight** *number*
 - **hs-wred-queue**
 - **policy** *reference*
 - **hs-wrr-weight** *number*
 - **mbs** (*number* | *keyword*)
 - **rate**
 - **cir** (*number* | *keyword*)

configure subscriber-mgmt sla-profile egress qos sap-egress overrides queue rate pir

```

    - pir (number | keyword)
      - stat-mode keyword
  - policy-name reference
  - port-parent-location keyword
- scheduler-policy
  - overrides
    - scheduler reference
    - apply-groups reference
    - apply-groups-exclude reference
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - use-ingress-l2tp-dscp boolean
- report-rate
  - agg-rate
  - policer number
  - pppoe-actual-rate
  - rfc5515-actual-rate
  - scheduler string
- host-limits
  - ipv4
    - arp number
    - dhcp number
    - overall number
    - ppp number
  - ipv6
    - overall number
    - pd-ipoe-dhcp number
    - pd-overall number
    - pd-ppp-dhcp number
    - wan-ipoe-dhcp number
    - wan-ipoe-slaac number
    - wan-overall number
    - wan-ppp-dhcp number
    - wan-ppp-slaac number
  - lac-overall number
  - overall number
  - remove-oldest boolean
- idle-timeout
  - apply-groups reference
  - apply-groups-exclude reference
  - category reference
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - timeout number
  - category-map-name reference
- ingress
  - ip-filter reference
  - ipv6-filter reference
  - qos
    - sap-ingress
      - overrides
        - policer reference
        - apply-groups reference
        - apply-groups-exclude reference
        - cbs (number | keyword)
        - mbs (number | keyword)
        - packet-byte-offset number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
        - stat-mode keyword

```

configure subscriber-mgmt sla-profile ingress qos sap-ingress overrides queue

```

    - queue reference
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - high-prio-only (number | keyword)
      - mbs (number | keyword)
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
        - stat-mode keyword
      - policy-name reference
      - queuing-type keyword
  - report-rate
    - agg-rate
    - policer number
    - pppoe-actual-rate
    - rfc5515-actual-rate
    - scheduler string
  - one-time-http-redirection
    - ip-filter reference
  - pfcp-mappings
    - session-qer
      - downlink
        - aggregate-rate
        - arbiter string
        - policer number
        - queue number
        - scheduler string
      - uplink
        - arbiter string
        - policer number
        - queue number
        - scheduler string
    - session-limits
      - ipoe number
      - l2tp
        - lns number
        - lts number
        - overall number
      - overall number
      - pppoe
        - lac number
        - local number
        - overall number
  - steering-profile string
    - access
      - router-instance string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - network
      - next-hop string
      - router-instance string
  - sub-ident-policy string
    - app-profile-map
      - entry string
        - app-profile reference
        - apply-groups reference
        - apply-groups-exclude reference
      - use-direct-map-as-default boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - primary

```

configure subscriber-mgmt sub-ident-policy primary admin-state

```

- admin-state keyword
- script-url string
- secondary
  - admin-state keyword
  - script-url string
- sla-profile-map
  - entry string
    - apply-groups reference
    - apply-groups-exclude reference
    - sla-profile reference
  - use-direct-map-as-default boolean
- strings-from-option number
- sub-profile-map
  - entry string
    - apply-groups reference
    - apply-groups-exclude reference
    - sub-profile reference
  - use-direct-map-as-default boolean
- tertiary
  - admin-state keyword
  - script-url string
- sub-mcac-policy string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bandwidth
  - mandatory (number | keyword)
  - total (number | keyword)
- description string
- sub-profile string
- accounting-policy reference
- accu-stats-policy reference
- ancp
  - ancp-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- control
  - cups boolean
  - local boolean
- description string
- egress
  - lag-per-link-hash
    - apply-groups reference
    - apply-groups-exclude reference
    - class number
    - weight number
- qos
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - min-resv-bw number
    - queue-frame-based-accounting boolean
    - rate number
  - encap-offset
    - type keyword
  - hs-agg-rate number
  - hs-low-burst-max-class number
  - hs-min-resv-bw number
  - policer-control-policy
    - overrides
      - root

```


configure subscriber-mgmt sub-profile egress qos policer-control-policy overrides root apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
    - policy-name reference
  - scheduler-policy
  - overrides
    - scheduler reference
    - apply-groups reference
    - apply-groups-exclude reference
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
- firewall-policy reference
- host-limits
  - ipv4
    - arp number
    - dhcp number
    - overall number
    - ppp number
  - ipv6
    - overall number
    - pd-ipoe-dhcp number
    - pd-overall number
    - pd-ppp-dhcp number
    - wan-ipoe-dhcp number
    - wan-ipoe-slaac number
    - wan-overall number
    - wan-ppp-dhcp number
    - wan-ppp-slaac number
  - lac-overall number
  - overall number
- host-tracking-policy reference
- hs-sla-mode keyword
- igmp-policy reference
- ingress
  - qos
    - policer-control-policy
      - overrides
        - root
          - apply-groups reference
          - apply-groups-exclude reference
          - max-rate (number | keyword)
          - priority-mbs-thresholds
            - min-thresh-separation (number | keyword)
            - priority number
              - apply-groups reference
              - apply-groups-exclude reference
              - mbs-contribution (number | keyword)
          - policy-name reference
        - scheduler-policy
        - overrides
          - scheduler reference
          - apply-groups reference
          - apply-groups-exclude reference
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
      - policy-name reference
    - scheduler-policy
    - overrides
      - scheduler reference
      - apply-groups reference
      - apply-groups-exclude reference
      - rate
        - cir (number | keyword)
        - pir (number | keyword)

```

configure subscriber-mgmt sub-profile ingress qos scheduler-policy policy-name

- **policy-name** *reference*
- **mld-policy** *reference*
- **nat**
 - **access-mode** *keyword*
 - **allow-bypass** *boolean*
 - **policy** *reference*
 - **prefix-list** *reference*
- **pim-policy** *reference*
- **preference** *number*
- **radius-accounting**
 - **policy** *reference*
 - **session-optimized-stop** *boolean*
- **secondary-shaper-hashing** *boolean*
- **session-limits**
 - **ipoe** *number*
 - **l2tp**
 - **lns** *number*
 - **lts** *number*
 - **overall** *number*
 - **overall** *number*
- **pppoe**
 - **lac** *number*
 - **local** *number*
 - **overall** *number*
- **sla-profile-map**
 - **entry** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **sla-profile** *reference*
 - **use-direct-map-as-default** *boolean*
- **sub-mcac-policy** *reference*
- **upnp-policy** *reference*
- **volume-stats-type** *keyword*
- **vport-hashing** *boolean*
- **subscriber-interface-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **svlan-statistics**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **system-behavior**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **legacy-dns-nbns** *boolean*
- **up-resiliency**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **fate-sharing-group-template** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **gratuitous-arp** *keyword*
 - **redundant-interface**
 - **name** *string*
 - **service** *string*
 - **uplink-forwarding-while-standby** *boolean*
- **vrgw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **brg-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure subscriber-mgmt vrgw brg-profile connectivity-verification

- **connectivity-verification**
 - **admin-state** *keyword*
 - **count** *number*
 - **retry-time** *number*
 - **timeout** *number*
 - **description** *string*
 - **hold-time** *number*
 - **home-pool**
 - **lease-time** *number*
 - **option** (*number | keyword*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ascii-string** *string*
 - **duration** *number*
 - **empty**
 - **hex-string** *string*
 - **ipv4-address** *string*
 - **netbios-node-type** *keyword*
 - **standby-ip-lifetime** *number*
 - **subnet**
 - **end** *string*
 - **prefix** *string*
 - **start** *string*
 - **initial-hold-time** *number*
 - **radius-authentication**
 - **password** *string*
 - **server-policy** *reference*
 - **radius-proxy-server** *string name string*
 - **sla-profile-string** *string*
 - **sub-profile-string** *string*
 - **uplink-initial-wait** *number*
- **lanext**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **router-target-as-number** *number*
- **wlan-gw**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **queries**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tunnel** *string*
 - **access-point-mac-address-learning-status** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **calculate-counts** *boolean*
 - **encapsulation**
 - **gre** *boolean*
 - **l2** *boolean*
 - **l2tp** *boolean*
 - **vxlan** *boolean*
 - **l2**
 - **inner-vlan** *number*
 - **outer-vlan** *number*
 - **sap** *string*
 - **l3**
 - **address-type** *keyword*
 - **local-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **remote-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **router-instance** *string*
 - **ues**
 - **maximum** *number*
 - **minimum** *number*
 - **state**

configure subscriber-mgmt wlan-gw queries tunnel ues state cross-connect

```

    - cross-connect boolean
    - dsm boolean
    - esm boolean
    - l2 boolean
    - migrant boolean
- ue string
  - address
    - dhcp6-na string
    - ipv4 string
    - slaac string
    - type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bridge-domain number
  - connection-state
    - already-signed-in boolean
    - authorized-only boolean
    - cross-connect boolean
    - data-triggered boolean
    - delete-pending boolean
    - dhcp-triggered boolean
    - dsm boolean
    - esm boolean
    - gtp-authorized boolean
    - ip-assigned boolean
    - ip-assigned-authorized boolean
    - l2 boolean
    - portal boolean
  - mac-address string
  - soft-quota-exhausted boolean
  - tunnel
    - encapsulation keyword
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - router-instance string
  - vlan number
  - wlan-gw-group
    - id number
    - member number
- virtual-chassis-identifier string

```

3.45.1 subscriber-mgmt command descriptions

subscriber-mgmt

| | |
|-------------|--|
| Synopsis | Enter the subscriber-mgmt context |
| Context | configure subscriber-mgmt |
| Tree | subscriber-mgmt |
| Description | Commands in this context configure subscriber management attributes, policies, and profiles. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

accu-stats-policy [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the accu-stats-policy list instance |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> |
| Tree | accu-stats-policy |
| Description | <p>Commands in this context configure a storage policy for cumulative statistics for subscribers.</p> <p>The policy defines the direction for the policer or the queue to be stored.</p> <p>The policy stores subscriber statistics even if the subscriber session has ended. The subscriber statistics can be viewed even if the subscriber is offline.</p> <p>When the subscriber session ends, the statistics are added to the past statistics stored in memory so that all previous session statistics are accumulated. The accumulated statistics are not persistent; they are only stored in memory and reset to zero when the chassis reboots.</p> |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[\[name\]](#) *string*

| | |
|---------------|--|
| Synopsis | Policy name |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> |
| Tree | accu-stats-policy |
| String Length | 1 to 32 |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress [[type](#)] *keyword id number*

| | |
|----------------|--|
| Synopsis | Add a list entry for egress |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> egress <i>keyword id number</i> |
| Tree | egress |
| Max. Instances | 4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[type] *keyword*

| | |
|------------|--|
| Synopsis | Type |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> egress <i>keyword id number</i> |
| Tree | egress |
| Options | queue, policer |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

id number

| | |
|------------|---|
| Synopsis | Queue or policer ID |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> egress <i>keyword</i> <i>id number</i> |
| Tree | egress |
| Range | 1 to 63 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress [[type](#)] *keyword* *id number*

| | |
|----------------|--|
| Synopsis | Add a list entry for ingress |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> ingress <i>keyword</i> <i>id number</i> |
| Tree | ingress |
| Max. Instances | 4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[type] *keyword*

| | |
|------------|--|
| Synopsis | Type |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> ingress <i>keyword</i> <i>id number</i> |
| Tree | ingress |
| Options | queue, policer |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

id number

| | |
|----------|--|
| Synopsis | Queue or policer ID |
| Context | configure subscriber-mgmt accu-stats-policy <i>string</i> ingress <i>keyword</i> <i>id number</i> |
| Tree | ingress |
| Range | 1 to 63 |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp

| | |
|-------------|--|
| Synopsis | Enter the ancp context |
| Context | configure subscriber-mgmt ancp |
| Tree | ancp |
| Description | Commands in this context configure Access Node Control Protocol (ANCP) settings. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-policy [[name](#)] *string*

| | |
|-------------|---|
| Synopsis | Enter the ancp-policy list instance |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> |
| Tree | ancp-policy |
| Description | <p>Commands in this context configure the specified ANCP policy, which can be associated with either an ANCP string (static) or a subscriber-profile (dynamic), and define the behavior of hosts belonging to these profiles.</p> <p>ANCP policies control rates and subscribers based on port-up/port-down messages from the access node. When configured, the node stops SHCV to a host that is part of a port that is down (by port-down message). When a port-up message is received for the port that was down, the node initiates the SHCV process immediately to verify connectivity.</p> <p>When ANCP is used with ESM, all hosts of a subscriber are updated with the ANCP string last associated with the subscriber.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[name](#)] *string*

| | |
|---------------|---|
| Synopsis | Policy name |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> |
| Tree | ancp-policy |
| String Length | 1 to 32 |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate-adjustment *number*

| | |
|-------------|---|
| Synopsis | Rate adjustment for the scheduler |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-adjustment <i>number</i> |
| Tree | rate-adjustment |
| Description | This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:

$\text{DSLAM_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$ |
| Range | 1 to 200 |
| Default | 100 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate-modify

| | |
|------------|--|
| Synopsis | Enter the rate-modify context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-modify |
| Tree | rate-modify |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|-------------|---|
| Synopsis | Maximum total rate for all subscriber egress queues |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-modify agg-rate |
| Tree | agg-rate |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy. |
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|--|
| Synopsis | Scheduler to be applied for rate modification |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-modify scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate-monitor

| | |
|------------|---|
| Synopsis | Enter the rate-monitor context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-monitor |
| Tree | rate-monitor |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

alarm *boolean*

| | |
|-------------|--|
| Synopsis | Generate SNMP notification when monitor event is raised |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-monitor alarm <i>boolean</i> |
| Tree | alarm |
| Description | When configured to true , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate. |

When configured to **false**, no alarm is generated.

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate number

| | |
|------------|--|
| Synopsis | Rate below which the system generates an event |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-monitor <i>rate number</i> |
| Tree | rate |
| Range | 1 to 4294967295 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate-reduction number

| | |
|-------------|--|
| Synopsis | Constant rate reduction to specified DSLAM rate |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> egress rate-reduction <i>number</i> |
| Tree | rate-reduction |
| Description | This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as:

$\text{DSLAM_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$ |
| Range | 1 to 4294967295 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-adjustment *number*

Synopsis Rate adjustment for the scheduler

Context **configure** **subscriber-mgmt ancp ancp-policy** *string* **ingress rate-adjustment** *number*

Tree [rate-adjustment](#)

Description This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:

$$\text{DSLAM_RATE} * (\text{adjustment rate})/100 \text{ — (rate reduction)}$$

Range 1 to 200

Default 100

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-modify

Synopsis Enter the **rate-modify** context

Context **configure** **subscriber-mgmt ancp ancp-policy** *string* **ingress rate-modify**

Tree [rate-modify](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis Scheduler to be applied for rate modification

Context **configure** **subscriber-mgmt ancp ancp-policy** *string* **ingress rate-modify scheduler** *string*

Tree [scheduler](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rate-monitor

| | |
|------------|--|
| Synopsis | Enter the rate-monitor context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-monitor |
| Tree | rate-monitor |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

alarm *boolean*

| | |
|-------------|--|
| Synopsis | Generate SNMP notification when monitor event is raised |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-monitor alarm <i>boolean</i> |
| Tree | alarm |
| Description | When configured to true , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate.

When configured to false , no alarm is generated. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate *number*

| | |
|------------|---|
| Synopsis | Rate below which the system generates an event |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-monitor rate <i>number</i> |
| Tree | rate |
| Range | 1 to 4294967295 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate-reduction *number*

| | |
|----------|--|
| Synopsis | Constant rate reduction to specified DSLAM rate |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> ingress rate-reduction <i>number</i> |
| Tree | rate-reduction |

| | |
|-------------|--|
| Description | This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as:
$\text{DSLAM_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$ |
| Range | 1 to 4294967295 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

port-down

| | |
|-------------|--|
| Synopsis | Enter the port-down context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down |
| Tree | port-down |
| Description | Commands in this context configure the actions taken on port-down. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suspend-shcv

| | |
|-------------|--|
| Synopsis | Enable the suspend-shcv context |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down suspend-shcv |
| Tree | suspend-shcv |
| Description | Commands in this context specify the configuration to suspend SHCV for the hosts defined with the ANCP policy. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

alarm *boolean*

| | |
|----------|--|
| Synopsis | Send an alarm before suspending SHCV |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down suspend-shcv alarm <i>boolean</i> |
| Tree | alarm |
| Default | false |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|-------------|---|
| Synopsis | Time that SHCV is suspended |
| Context | configure subscriber-mgmt ancp ancp-policy <i>string</i> port-down suspend-shcv hold-time <i>number</i> |
| Tree | hold-time |
| Description | This command configures the time that the node suspends SHCV.
When unconfigured, SHCV is suspended until a port-up message is received. |
| Range | 1 to 7200 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-static-map

| | |
|------------|---|
| Synopsis | Enter the ancp-static-map context |
| Context | configure subscriber-mgmt ancp ancp-static-map |
| Tree | ancp-static-map |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multi-service-site-entry [[ancp-string](#)] *string* [customer-name](#) *reference* [customer-site-name](#) *reference*

| | |
|-------------|---|
| Synopsis | Enter the multi-service-site-entry list instance |
| Context | configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i> |
| Tree | multi-service-site-entry |
| Description | Commands in this context configure the ANCP key mapping (usually the circuit ID of the DSLAM port) to a customer, site, and scheduler name when Multi-Service site (MSS) is used. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ancp-string] *string*

| | |
|---------------|--|
| Synopsis | ANCP string |
| Context | configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i>
customer-name <i>reference</i> customer-site-name <i>reference</i> |
| Tree | multi-service-site-entry |
| String Length | 1 to 63 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

customer-name *reference*

| | |
|------------|--|
| Synopsis | Customer ID |
| Context | configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i>
customer-name <i>reference</i> customer-site-name <i>reference</i> |
| Tree | multi-service-site-entry |
| Reference | configure service customer <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

customer-site-name *reference*

| | |
|------------|--|
| Synopsis | Service customer multi-service site name |
| Context | configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i>
customer-name <i>reference</i> customer-site-name <i>reference</i> |
| Tree | multi-service-site-entry |
| Reference | configure service customer <i>string</i> multi-service-site <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-policy *reference*

| | |
|------------|--|
| Synopsis | ANCP policy name |
| Context | configure subscriber-mgmt ancp ancp-static-map multi-service-site-entry <i>string</i> customer-name <i>reference</i> customer-site-name <i>reference</i> ancp-policy <i>reference</i> |
| Tree | ancp-policy |
| Reference | configure subscriber-mgmt ancp ancp-policy <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-entry [[ancp-string](#)] *string* [sap-id](#) *string*

| | |
|------------|--|
| Synopsis | Enter the sap-entry list instance |
| Context | configure subscriber-mgmt ancp ancp-static-map sap-entry <i>string</i> sap-id <i>string</i> |
| Tree | sap-entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[ancp-string] *string*

| | |
|---------------|--|
| Synopsis | ANCP key name |
| Context | configure subscriber-mgmt ancp ancp-static-map sap-entry <i>string</i> sap-id <i>string</i> |
| Tree | sap-entry |
| String Length | 1 to 63 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *string*

| | |
|---------------|--|
| Synopsis | SAP ID |
| Context | configure subscriber-mgmt ancp ancp-static-map sap-entry <i>string</i> sap-id <i>string</i> |
| Tree | sap-entry |
| String Length | 1 to 45 |
| Notes | This element is part of a list key. |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-policy *reference*

Synopsis ANCP policy name
Context **configure** [subscriber-mgmt ancp ancp-static-map sap-entry string sap-id string ancp-policy reference](#)
Tree [ancp-policy](#)
Reference **configure** [subscriber-mgmt ancp ancp-policy string](#)
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

authentication-origin

Synopsis Enter the **authentication-origin** context
Context **configure** [subscriber-mgmt authentication-origin](#)
Tree [authentication-origin](#)
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure** [subscriber-mgmt authentication-origin overrides](#)
Tree [overrides](#)
Introduced 21.2.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

priority [*id*] *number*

Synopsis Enter the **priority** list instance
Context **configure** [subscriber-mgmt authentication-origin overrides priority number](#)
Tree [priority](#)

| | |
|-------------|---|
| Description | Commands in this context arrange the relative order of authentication priorities. |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] number

| | |
|-------------|---|
| Synopsis | Authentication origin priority override |
| Context | configure subscriber-mgmt authentication-origin overrides priority <i>number</i> |
| Tree | priority |
| Description | This command configures the insert position of the authentication origin priority override. |
| Range | 1 to 4294967295 |
| Notes | This element is part of a list key. |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source keyword

| | |
|-------------|---|
| Synopsis | Source of authentication priority |
| Context | configure subscriber-mgmt authentication-origin overrides priority <i>number</i> source <i>keyword</i> |
| Tree | source |
| Description | This command specifies the prioritization of authentication sources. |
| Options | python, diameter-gx, ludb, radius, diameter-nasreq, gtp, dhcp, local-address-assignment, pfc, config |
| Notes | This element is mandatory. |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-sub-id

| | |
|------------|--|
| Synopsis | Enter the auto-sub-id context |
| Context | configure subscriber-mgmt auto-sub-id |
| Tree | auto-sub-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

implicit-generation *boolean*

| | |
|------------|---|
| Synopsis | Generate implicitly the subscriber identifier if none is provided |
| Context | configure subscriber-mgmt auto-sub-id implicit-generation <i>boolean</i> |
| Tree | implicit-generation |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe-key *keyword*

| | |
|----------------|--|
| Synopsis | Auto-generated subscriber identifier key1 for IPoE hosts |
| Context | configure subscriber-mgmt auto-sub-id ipoe-key <i>keyword</i> |
| Tree | ipoe-key |
| Options | mac, sap-id, circuit-id, remote-id, dual-stack-remote-id, service-name |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-key *keyword*

| | |
|----------------|---|
| Synopsis | Auto-generated subscriber identifier key1 for PPP hosts |
| Context | configure subscriber-mgmt auto-sub-id ppp-key <i>keyword</i> |
| Tree | ppp-key |
| Options | mac, sap-id, circuit-id, remote-id, session-id |
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bgp-peering-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the bgp-peering-policy list instance |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> |
| Tree | bgp-peering-policy |
| Max. Instances | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | BGP peer policy name |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> |
| Tree | bgp-peering-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

advertise-inactive *boolean*

| | |
|------------|---|
| Synopsis | Advertise inactive BGP routes to other BGP peers |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> advertise-inactive <i>boolean</i> |
| Tree | advertise-inactive |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

aggregator-id-zero *boolean*

| | |
|------------|---|
| Synopsis | Set router ID in aggregator path attribute to zero when BGP aggregates routes |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> aggregator-id-zero <i>boolean</i> |
| Tree | aggregator-id-zero |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

as-override *boolean*

| | |
|------------|---|
| Synopsis | Replace the peer ASN with the local ASN in AS Path |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> as-override <i>boolean</i> |
| Tree | as-override |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

asn-4-byte *boolean*

| | |
|------------|--|
| Synopsis | Enable the use of 4-byte ASNs |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> asn-4-byte <i>boolean</i> |
| Tree | asn-4-byte |
| Introduced | 16.0.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | BGP authentication key for all peers |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 370 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication-keychain *reference*

| | |
|------------|---|
| Synopsis | Keychain name used for the TCP session |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> authentication-keychain <i>reference</i> |
| Tree | authentication-keychain |
| Reference | configure system security keychains keychain <i>string</i> |
| Introduced | 16.0.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bfd-liveness *boolean*

| | |
|-------------|---|
| Synopsis | Enable BFD |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> bfd-liveness <i>boolean</i> |
| Tree | bfd-liveness |
| Description | <p>When configured to true, this command enables the use of Bi-directional Forwarding Detection (BFD) to control the state of an ESM dynamic BGP peer that is set up with the BGP peering policy. The parameters used for the BFD session are configured in the BFD context of the group interface or retail subscriber interface.</p> <p>When configured to false, this command disables the use of BFD for new ESM dynamic BGP peers that are set up with the BGP peering policy.</p> |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-reflect *boolean*

| | |
|------------|---|
| Synopsis | Enable client reflection of routes to all client peers |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> client-reflect <i>boolean</i> |
| Tree | client-reflect |
| Introduced | 16.0.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cluster *string*

| | |
|------------|---|
| Synopsis | Cluster ID for route reflector server |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> cluster <i>string</i> |
| Tree | cluster |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

connect-retry *number*

| | |
|----------|---|
| Synopsis | BGP connect retry timer value |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> connect-retry <i>number</i> |
| Tree | connect-retry |
| Range | 1 to 65535 |

| | |
|------------|---|
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

damping *boolean*

| | |
|------------|---|
| Synopsis | Use BGP route damping for learned routes defined within the route policy |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> damping <i>boolean</i> |
| Tree | damping |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

export *reference*

| | |
|----------------|--|
| Synopsis | Export route policies used to control routes advertised to BGP neighbors |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> export <i>reference</i> |
| Tree | export |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 15 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

fast-external-failover *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable BGP fast external failover. |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> fast-external-failover <i>boolean</i> |
| Tree | fast-external-failover |
| Introduced | 16.0.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|------------|---|
| Synopsis | BGP hold time before closing connection |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> hold-time <i>number</i> |
| Tree | hold-time |
| Range | 0 3 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import *reference*

| | |
|----------------|---|
| Synopsis | Import route policies used to control routes advertised to BGP neighbors |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> import <i>reference</i> |
| Tree | import |
| Reference | configure policy-options policy-statement <i>string</i> |
| Max. Instances | 15 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

keepalive *number*

| | |
|----------|---|
| Synopsis | BGP keepalive timer |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> keepalive <i>number</i> |
| Tree | keepalive |
| Range | 0 to 21845 |

| | |
|------------|---|
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Local IP address used by group or neighbor when communicating with BGP peers |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local-as

| | |
|------------|--|
| Synopsis | Enter the local-as context |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> local-as |
| Tree | local-as |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

as-number *number*

| | |
|------------|--|
| Synopsis | AS number to be advertised to peer |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> local-as as-number <i>number</i> |
| Tree | as-number |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

private *boolean*

| | |
|----------|---|
| Synopsis | Hide local AS number in paths learned from peering |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> local-as private <i>boolean</i> |
| Tree | private |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

local-preference *number*

Synopsis Local preference attribute for incoming routes if not specified
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [local-preference](#) *number*
Tree [local-preference](#)
Range 0 to 4294967295
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

loop-detect *keyword*

Synopsis Strategy for loop detection in the AS path
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [loop-detect](#) *keyword*
Tree [loop-detect](#)
Options drop-peer, ignore-loop, off, discard-route
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

med-out (*number* | *keyword*)

Synopsis Multi-Exit Discriminator (MED) advertising
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [med-out](#) (*number* | *keyword*)
Tree [med-out](#)
Max. Range 0 to 4294967295
Options igp-cost
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min-route-advertisement *number*

Synopsis Minimum interval between successive updates of prefix toward peer
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [min-route-advertisement](#) *number*

| | |
|------------|---|
| Tree | min-route-advertisement |
| Range | 1 to 255 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multihop *number*

| | |
|------------|---|
| Synopsis | TTL value entered in IP header of packets sent to peer |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> multihop <i>number</i> |
| Tree | multihop |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-hop-self *boolean*

| | |
|------------|---|
| Synopsis | Advertise routes to peer using next hop path attribute set to itself |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> next-hop-self <i>boolean</i> |
| Tree | next-hop-self |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

passive *boolean*

| | |
|------------|---|
| Synopsis | Wait passively for BGP peer to connect |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> passive <i>boolean</i> |
| Tree | passive |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

peer-as *number*

| | |
|----------|--|
| Synopsis | AS number for remote peer |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> peer-as <i>number</i> |

| | |
|------------|---|
| Tree | peer-as |
| Range | 1 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|------------|--|
| Synopsis | Route preference for routes learned from all configured peers |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> preference <i>number</i> |
| Tree | preference |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remove-private

| | |
|------------|--|
| Synopsis | Enable the remove-private context |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> remove-private |
| Tree | remove-private |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

limited *boolean*

| | |
|------------|---|
| Synopsis | Remove private AS numbers up to first public ASN encountered |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> remove-private limited <i>boolean</i> |
| Tree | limited |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

send-communities

| | |
|----------|--|
| Synopsis | Enter the send-communities context |
| Context | configure subscriber-mgmt bgp-peering-policy <i>string</i> send-communities |

Tree [send-communities](#)
Introduced 16.0.R3
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

extended *boolean*

Synopsis Send the community attribute to the peer for external communities
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [send-communities](#) [extended](#) *boolean*
Tree [extended](#)
Introduced 16.0.R3
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

standard *boolean*

Synopsis Send the community attribute to the peer for non-external communities
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [send-communities](#) [standard](#) *boolean*
Tree [standard](#)
Introduced 16.0.R3
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ttl-security *number*

Synopsis Minimum TTL value for incoming BGP packet
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [ttl-security](#) *number*
Tree [ttl-security](#)
Range 1 to 255
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Peer type
Context **configure** [subscriber-mgmt](#) [bgp-peering-policy](#) *string* [type](#) *keyword*
Tree [type](#)

| | |
|------------|---|
| Options | no-type, internal, external |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

category-map [[category-map-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the category-map list instance |
| Context | configure subscriber-mgmt category-map <i>string</i> |
| Tree | category-map |
| Max. Instances | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[category-map-name] *string*

| | |
|---------------|---|
| Synopsis | Category map name |
| Context | configure subscriber-mgmt category-map <i>string</i> |
| Tree | category-map |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

activity-threshold *number*

| | |
|------------|--|
| Synopsis | Threshold that is applied to determine whether an activity is ongoing |
| Context | configure subscriber-mgmt category-map <i>string</i> activity-threshold <i>number</i> |
| Tree | activity-threshold |
| Range | 1 to 100000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

category [*category-name*] *string*

| | |
|----------------|--|
| Synopsis | Enter the category list instance |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> |
| Tree | category |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[category-name] *string*

| | |
|---------------|--|
| Synopsis | Category name |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> |
| Tree | category |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

credit-type-override *keyword*

| | |
|------------|---|
| Synopsis | Credit type override in category map |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> credit-type-override <i>keyword</i> |
| Tree | credit-type-override |
| Options | volume, time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-credit

| | |
|------------|--|
| Synopsis | Enter the default-credit context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> default-credit |
| Tree | default-credit |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

time *number*

Synopsis Default time credit

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [default-credit time number](#)

Tree [time](#)

Range 1 to 4294967295

Units seconds

Notes The following elements are part of a choice: **time** or **volume**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

volume

Synopsis Enable the **volume** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [default-credit volume](#)

Tree [volume](#)

Notes The following elements are part of a choice: **time** or **volume**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

unit *keyword*

Synopsis Unit for the default volume credit

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [default-credit volume unit keyword](#)

Tree [unit](#)

Default bytes

Options bytes, kilobytes, megabytes, gigabytes

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

value number

| | |
|------------|--|
| Synopsis | Value for the default volume credit |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> default-credit volume <i>value number</i> |
| Tree | value |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|---|
| Synopsis | Enter the egress context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policer number

| | |
|----------------|---|
| Synopsis | Egress policers for this category |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> egress policer <i>number</i> |
| Tree | policer |
| Range | 1 to 63 |
| Max. Instances | 63 |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue *number*

Synopsis Egress queues for this category
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [egress](#) [queue](#) *number*
Tree [queue](#)
Range 1 to 8
Max. 8
Instances
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

exhausted-credit-service-level

Synopsis Enter the **exhausted-credit-service-level** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#)
Tree [exhausted-credit-service-level](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#)
Tree [egress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-filter

Synopsis Enter the **ip-filter** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#)

| | |
|------------|---|
| Tree | ip-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [*id*] *number*

| | |
|----------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> |
| Tree | entry |
| Max. Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] *number*

| | |
|------------|--|
| Synopsis | IP filter entry ID |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> |
| Tree | entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|--|
| Synopsis | Enter the action context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop

| | |
|------------|--|
| Synopsis | Packets matching the filter entry are dropped |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action drop |
| Tree | drop |
| Notes | The following elements are part of a choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|------------|---|
| Synopsis | Packets matching the filter entry are forwarded |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action forward |
| Tree | forward |
| Notes | The following elements are part of a choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

http-redirect

| | |
|------------|---|
| Synopsis | Enable the http-redirect context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action http-redirect |
| Tree | http-redirect |
| Notes | The following elements are part of a choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-override *boolean*

| | |
|----------|---|
| Synopsis | Allow URL to be overridden by RADIUS/Diameter |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> action http-redirect allow-override <i>boolean</i> |
| Tree | allow-override |
| Default | false |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

url string

Synopsis URL that is used to redirect the packets
 Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [action](#) [http-redirect](#) [url](#) *string*
 Tree [url](#)
 String Length 1 to 255
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description string

Synopsis Text description
 Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

match

Synopsis Enter the **match** context
 Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#)
 Tree [match](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dscp keyword

Synopsis DSCP to match

| | |
|------------|---|
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match dscp keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-port

| | |
|------------|---|
| Synopsis | Enter the dst-port context |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match dst-port</i> |
| Tree | dst-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eq number

| | |
|------------|---|
| Synopsis | Port equal |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match dst-port eq number</i> |
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gt number

| | |
|----------|---|
| Synopsis | Port greater than |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match dst-port gt number</i> |
| Tree | gt |

| | |
|------------|--|
| Range | 0 to 65534 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lt number

| | |
|------------|---|
| Synopsis | Port less than |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port lt <i>number</i> |
| Tree | lt |
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match dst-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the port range to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [dst-port](#) [range](#) [start](#) *number*

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fragment keyword

Synopsis Fragmentation to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [fragment](#) *keyword*

Tree [fragment](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis Enter the **icmp** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [icmp](#)

Tree [icmp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code number

Synopsis ICMP code to match

| | |
|------------|---|
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match icmp code number</i> |
| Tree | code |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type number

| | |
|------------|---|
| Synopsis | ICMP type to match |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match icmp type number</i> |
| Tree | type |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-option

| | |
|------------|--|
| Synopsis | Enter the ip-option context |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match ip-option</i> |
| Tree | ip-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mask number

| | |
|------------|--|
| Synopsis | Mask with which the first IP option of IP header is ANDed before comparing |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ip-filter entry number match ip-option mask number</i> |
| Tree | mask |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *number*

| | |
|------------|--|
| Synopsis | First IP option value for the IP header |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match ip-option <i>type</i> <i>number</i> |
| Tree | type |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multiple-option *boolean*

| | |
|------------|---|
| Synopsis | Match the multiple option |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match multiple-option <i>boolean</i> |
| Tree | multiple-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-present *boolean*

| | |
|------------|--|
| Synopsis | Match the present option |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match option-present <i>boolean</i> |
| Tree | option-present |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

protocol (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | IPv4 protocol to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ip-filter entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>) |
| Tree | protocol |
| Range | 0 to 255 |

| | |
|------------|---|
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-ip string

| | |
|------------|---|
| Synopsis | Source IP address and mask to match |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-ip string |
| Tree | src-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-port

| | |
|------------|--|
| Synopsis | Enter the src-port context |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port |
| Tree | src-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eq number

| | |
|------------|--|
| Synopsis | Port equal |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port eq number |
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gt number

| | |
|------------|--|
| Synopsis | Port greater than |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port gt number |
| Tree | gt |
| Range | 0 to 65534 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lt number

| | |
|------------|--|
| Synopsis | Port less than |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port lt number |
| Tree | lt |
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|----------|---|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port range end number |

| | |
|------------|---|
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

| | |
|------------|---|
| Synopsis | Lower bound of the port range to match |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match src-port range start number |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tcp-flags

| | |
|------------|---|
| Synopsis | Enter the tcp-flags context |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match tcp-flags |
| Tree | tcp-flags |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ack boolean

| | |
|------------|---|
| Synopsis | Check for ACK bit |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match tcp-flags ack boolean |
| Tree | ack |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

syn boolean

| | |
|------------|---|
| Synopsis | Check for SYN bit |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ip-filter entry number match tcp-flags syn boolean |
| Tree | syn |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-filter

| | |
|------------|--|
| Synopsis | Enter the ipv6-filter context |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter |
| Tree | ipv6-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [id] number

| | |
|----------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number |
| Tree | entry |
| Max. Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] number

| | |
|----------|---|
| Synopsis | IP filter entry ID |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number |
| Tree | entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|--|
| Synopsis | Enter the action context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop

| | |
|------------|--|
| Synopsis | Packets matching the filter entry are dropped |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> action drop |
| Tree | drop |
| Notes | The following elements are part of a choice: drop or forward . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|------------|---|
| Synopsis | Packets matching the filter entry are forwarded |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> action forward |
| Tree | forward |
| Notes | The following elements are part of a choice: drop or forward . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|---|
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ipv6-filter entry number description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match</i> |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dscp keyword

| | |
|------------|---|
| Synopsis | DSCP to match |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match dscp keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-port

| | |
|------------|---|
| Synopsis | Enter the dst-port context |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match dst-port</i> |
| Tree | dst-port |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq number

Synopsis Port equal

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match dst-port eq number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt number

Synopsis Port greater than

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match dst-port gt number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt number

Synopsis Port less than

Context **configure** [subscriber-mgmt category-map](#) *string category string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number match dst-port lt number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match dst-port range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match dst-port range <i>end number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match dst-port range <i>start number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

icmp

| | |
|----------|---|
| Synopsis | Enter the icmp context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match icmp |

| | |
|------------|---|
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

code number

| | |
|------------|--|
| Synopsis | ICMP code to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match icmp code <i>number</i> |
| Tree | code |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type number

| | |
|------------|--|
| Synopsis | ICMP type to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match icmp type <i>number</i> |
| Tree | type |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-header (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | IP protocol to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>) |
| Tree | next-header |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-ip string

| | |
|------------|---|
| Synopsis | Source IP address and mask as the match condition |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match src-ip string |
| Tree | src-ip |
| Default | 0::0 0::0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-port

| | |
|------------|--|
| Synopsis | Enter the src-port context |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match src-port |
| Tree | src-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eq number

| | |
|------------|--|
| Synopsis | Port equal |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match src-port eq number |
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gt number

| | |
|----------|--|
| Synopsis | Port greater than |
| Context | configure subscriber-mgmt category-map string category string exhausted-credit-service-level egress ipv6-filter entry number match src-port gt number |
| Tree | gt |

| | |
|------------|--|
| Range | 0 to 65534 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lt *number*

| | |
|------------|---|
| Synopsis | Port less than |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port lt <i>number</i> |
| Tree | lt |
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end *number*

| | |
|------------|---|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level egress ipv6-filter entry <i>number</i> match src-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [src-port](#) [range](#) [start](#) *number*

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis Enter the **tcp-flags** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#)

Tree [tcp-flags](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack boolean

Synopsis Check for ACK bit

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) [ack](#) *boolean*

Tree [ack](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

syn boolean

Synopsis Check for SYN bit

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) [syn](#) *boolean*

| | |
|------------|---|
| Tree | syn |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-filter

| | |
|------------|---|
| Synopsis | Enter the ip-filter context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter |
| Tree | ip-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [*id*] *number*

| | |
|----------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> |
| Tree | entry |
| Max. Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[*id*] *number*

| | |
|----------|--------------------|
| Synopsis | IP filter entry ID |
|----------|--------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> |
| Tree | entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|---|
| Synopsis | Enter the action context |
| Context | configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop

| | |
|------------|--|
| Synopsis | Packets matching the filter entry are dropped |
| Context | configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> action drop |
| Tree | drop |
| Notes | The following elements are part of a choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|------------|---|
| Synopsis | Packets matching the filter entry are forwarded |
| Context | configure subscriber-mgmt category-map <i>string category string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> action forward |
| Tree | forward |
| Notes | The following elements are part of a choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

http-redirect

| | |
|------------|--|
| Synopsis | Enable the http-redirect context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> action http-redirect |
| Tree | http-redirect |
| Notes | The following elements are part of a choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-override *boolean*

| | |
|------------|--|
| Synopsis | Allow URL to be overridden by RADIUS/Diameter |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> action http-redirect allow-override <i>boolean</i> |
| Tree | allow-override |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

url *string*

| | |
|---------------|--|
| Synopsis | URL that is used to redirect the packets |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> action http-redirect url <i>string</i> |
| Tree | url |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> description <i>string</i> |

| | |
|---------------|---|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dscp keyword

| | |
|------------|---|
| Synopsis | DSCP to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dscp <i>keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-ip string

| | |
|------------|--|
| Synopsis | Destination IP address and mask to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-ip <i>string</i> |
| Tree | dst-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-port

| | |
|------------|--|
| Synopsis | Enter the dst-port context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port |
| Tree | dst-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eq number

| | |
|------------|---|
| Synopsis | Port equal |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port eq <i>number</i> |
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gt number

| | |
|------------|---|
| Synopsis | Port greater than |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port gt <i>number</i> |
| Tree | gt |
| Range | 0 to 65534 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lt number

| | |
|----------|---|
| Synopsis | Port less than |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port lt <i>number</i> |
| Tree | lt |

| | |
|------------|--|
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|------------|---|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

| | |
|------------|---|
| Synopsis | Lower bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match dst-port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fragment *keyword*

Synopsis Fragmentation to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) **fragment** *keyword*

Tree [fragment](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

icmp

Synopsis Enter the **icmp** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) **icmp**

Tree [icmp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

code *number*

Synopsis ICMP code to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) **icmp** [code](#) *number*

Tree [code](#)

Range 0 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis ICMP type to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [match](#) **icmp** [type](#) *number*

Tree [type](#)

| | |
|------------|---|
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-option

| | |
|------------|--|
| Synopsis | Enter the ip-option context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match ip-option |
| Tree | ip-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mask number

| | |
|------------|---|
| Synopsis | Mask with which the first IP option of IP header is ANDed before comparing |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match ip-option mask <i>number</i> |
| Tree | mask |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type number

| | |
|------------|---|
| Synopsis | First IP option value for the IP header |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match ip-option type <i>number</i> |
| Tree | type |
| Range | 0 to 255 |
| Default | 0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multiple-option *boolean*

| | |
|------------|--|
| Synopsis | Match the multiple option |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match multiple-option <i>boolean</i> |
| Tree | multiple-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-present *boolean*

| | |
|------------|---|
| Synopsis | Match the present option |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match option-present <i>boolean</i> |
| Tree | option-present |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

protocol (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | IPv4 protocol to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>) |
| Tree | protocol |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-port

| | |
|------------|--|
| Synopsis | Enter the src-port context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port |
| Tree | src-port |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

eq *number*

Synopsis Port equal

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [match src-port](#) **eq** *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gt *number*

Synopsis Port greater than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [match src-port](#) **gt** *number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lt *number*

Synopsis Port less than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ip-filter entry](#) *number* [match src-port](#) **lt** *number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match src-port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tcp-flags

| | |
|----------|---|
| Synopsis | Enter the tcp-flags context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match tcp-flags |

| | |
|------------|---|
| Tree | tcp-flags |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ack boolean

| | |
|------------|--|
| Synopsis | Check for ACK bit |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match tcp-flags ack <i>boolean</i> |
| Tree | ack |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

syn boolean

| | |
|------------|--|
| Synopsis | Check for SYN bit |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ip-filter entry <i>number</i> match tcp-flags syn <i>boolean</i> |
| Tree | syn |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-filter

| | |
|------------|---|
| Synopsis | Enter the ipv6-filter context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter |
| Tree | ipv6-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [id] number

| | |
|----------|---|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> |
| Tree | entry |

| | |
|----------------|---|
| Max. Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] *number*

| | |
|------------|--|
| Synopsis | IP filter entry ID |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> |
| Tree | entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|--|
| Synopsis | Enter the action context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop

| | |
|------------|---|
| Synopsis | Packets matching the filter entry are dropped |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> action drop |
| Tree | drop |
| Notes | The following elements are part of a choice: drop or forward . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|------------|---|
| Synopsis | Packets matching the filter entry are forwarded |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> action forward |
| Tree | forward |
| Notes | The following elements are part of a choice: drop or forward . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|---|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dscp *keyword*

| | |
|----------|---|
| Synopsis | DSCP to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dscp <i>keyword</i> |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, |

| | |
|------------|--|
| | cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-ip *string*

| | |
|------------|---|
| Synopsis | Destination IP address and mask to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-ip <i>string</i> |
| Tree | dst-ip |
| Default | 0::0 0::0 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-port

| | |
|------------|---|
| Synopsis | Enter the dst-port context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-port |
| Tree | dst-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eq *number*

| | |
|------------|---|
| Synopsis | Port equal |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-port eq <i>number</i> |
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gt number

| | |
|------------|--|
| Synopsis | Port greater than |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match dst-port</i> gt <i>number</i> |
| Tree | gt |
| Range | 0 to 65534 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lt number

| | |
|------------|--|
| Synopsis | Port less than |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match dst-port</i> lt <i>number</i> |
| Tree | lt |
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

range

| | |
|------------|---|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match dst-port</i> range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

| | |
|----------|--|
| Synopsis | Upper bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number match dst-port range end</i> <i>number</i> |

| | |
|------------|---|
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the port range to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match dst-port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

icmp

| | |
|------------|--|
| Synopsis | Enter the icmp context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

code number

| | |
|------------|---|
| Synopsis | ICMP code to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match icmp code <i>number</i> |
| Tree | code |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *number*

| | |
|------------|--|
| Synopsis | ICMP type to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match icmp <i>type</i> <i>number</i> |
| Tree | type |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-header (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | IP protocol to match |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>) |
| Tree | next-header |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

src-port

| | |
|------------|--|
| Synopsis | Enter the src-port context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port |
| Tree | src-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

eq *number*

| | |
|----------|---|
| Synopsis | Port equal |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match src-port eq <i>number</i> |

| | |
|------------|--|
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gt number

| | |
|------------|--|
| Synopsis | Port greater than |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port gt number</i> |
| Tree | gt |
| Range | 0 to 65534 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lt number

| | |
|------------|--|
| Synopsis | Port less than |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port lt number</i> |
| Tree | lt |
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

range

| | |
|----------|--|
| Synopsis | Enable the range context |
| Context | configure subscriber-mgmt category-map <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range</i> |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number

Synopsis Upper bound of the port range to match
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [src-port](#) [range](#) [end](#) *number*
Tree [end](#)
Range 0 to 65535
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number

Synopsis Lower bound of the port range to match
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [src-port](#) [range](#) [start](#) *number*
Tree [start](#)
Range 0 to 65535
Notes This element is mandatory.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tcp-flags

Synopsis Enter the **tcp-flags** context
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ipv6-filter](#) [entry](#) *number* [match](#) [tcp-flags](#)
Tree [tcp-flags](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ack boolean

| | |
|------------|--|
| Synopsis | Check for ACK bit |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match tcp-flags ack <i>boolean</i> |
| Tree | ack |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

syn boolean

| | |
|------------|--|
| Synopsis | Check for SYN bit |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level ingress ipv6-filter entry <i>number</i> match tcp-flags syn <i>boolean</i> |
| Tree | syn |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> exhausted-credit-service-level pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 100000000 |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|--|
| Synopsis | Enter the ingress context |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policer *number*

| | |
|----------------|--|
| Synopsis | Ingress policers used in this category |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> ingress policer <i>number</i> |
| Tree | policer |
| Range | 1 to 63 |
| Max. Instances | 63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue *number*

| | |
|----------------|--|
| Synopsis | Ingress queues used in this category |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> ingress queue <i>number</i> |
| Tree | queue |
| Range | 1 to 32 |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-of-credit-action-override *keyword*

| | |
|------------|---|
| Synopsis | Out of credit action that is overridden in category map |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> out-of-credit-action-override <i>keyword</i> |
| Tree | out-of-credit-action-override |
| Options | continue, disconnect-host, block-category, change-service-level |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rating-group *number*

| | |
|----------|---|
| Synopsis | Rating group for this category |
| Context | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> rating-group <i>number</i> |

| | |
|------------|---|
| Tree | rating-group |
| Range | 0 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

credit-exhaust-threshold *number*

| | |
|------------|---|
| Synopsis | Percentage for credit exhaust threshold |
| Context | configure subscriber-mgmt category-map <i>string</i> credit-exhaust-threshold <i>number</i> |
| Tree | credit-exhaust-threshold |
| Range | 50 to 100 |
| Default | 100 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

credit-type *keyword*

| | |
|------------|---|
| Synopsis | Credit type |
| Context | configure subscriber-mgmt category-map <i>string</i> credit-type <i>keyword</i> |
| Tree | credit-type |
| Default | volume |
| Options | volume, time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt category-map <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gx-session-level-usage *boolean*

| | |
|------------|---|
| Synopsis | Allow Gx session level Usage Monitoring |
| Context | configure subscriber-mgmt category-map <i>string</i> gx-session-level-usage <i>boolean</i> |
| Tree | gx-session-level-usage |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

credit-control-policy [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the credit-control-policy list instance |
| Context | configure subscriber-mgmt credit-control-policy <i>string</i> |
| Tree | credit-control-policy |
| Max. Instances | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | Credit control policy name |
| Context | configure subscriber-mgmt credit-control-policy <i>string</i> |
| Tree | credit-control-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-category-map *reference*

| | |
|-----------|--|
| Synopsis | Default category map for this policy |
| Context | configure subscriber-mgmt credit-control-policy <i>string</i> default-category-map <i>reference</i> |
| Tree | default-category-map |
| Reference | configure subscriber-mgmt category-map <i>string</i> |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [subscriber-mgmt](#) [credit-control-policy](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

error-handling-action *keyword*

Synopsis Action when an error occurs in the determination of Credit Control
 Context **configure** [subscriber-mgmt](#) [credit-control-policy](#) *string* [error-handling-action](#) *keyword*
 Tree [error-handling-action](#)
 Default continue
 Options continue, block
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-of-credit-action *keyword*

Synopsis Action when out of credit is reached
 Context **configure** [subscriber-mgmt](#) [credit-control-policy](#) *string* [out-of-credit-action](#) *keyword*
 Tree [out-of-credit-action](#)
 Default continue
 Options continue, disconnect-host, block-category, change-service-level
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server

Synopsis Enter the **server** context

| | |
|------------|--|
| Context | configure subscriber-mgmt credit-control-policy <i>string</i> server |
| Tree | server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

diameter *reference*

| | |
|------------|---|
| Synopsis | Diameter policy name that defines the Diameter peers to be used |
| Context | configure subscriber-mgmt credit-control-policy <i>string</i> server diameter <i>reference</i> |
| Tree | diameter |
| Reference | configure subscriber-mgmt diameter-gy-policy <i>string</i> |
| Notes | The following elements are part of a choice: diameter or radius . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius

| | |
|------------|--|
| Synopsis | Use RADIUS authentication servers defined in the RADIUS authentication policy in group interface |
| Context | configure subscriber-mgmt credit-control-policy <i>string</i> server radius |
| Tree | radius |
| Notes | The following elements are part of a choice: diameter or radius . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

diameter-gx-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the diameter-gx-policy list instance |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> |
| Tree | diameter-gx-policy |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | Diameter application policy name |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> |
| Tree | diameter-gx-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gx

| | |
|------------|---|
| Synopsis | Enter the gx context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx |
| Tree | gx |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

avp-subscription-id

| | |
|------------|---|
| Synopsis | Enter the avp-subscription-id context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx avp-subscription-id |
| Tree | avp-subscription-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

origin keyword

| | |
|------------|--|
| Synopsis | Format of the Subscription-Id-Data AVP |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx avp-subscription-id origin <i>keyword</i> |
| Tree | origin |
| Default | subscriber-id |
| Options | subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|--|
| Synopsis | Format of the Subscription-Id-Type AVP |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx avp-subscription-id type <i>keyword</i> |
| Tree | type |
| Default | private |
| Options | e164, imsi, nai, private |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ccrt-replay

| | |
|------------|--|
| Synopsis | Enable the ccrt-replay context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx ccrt-replay |
| Tree | ccrt-replay |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval number

| | |
|----------|---|
| Synopsis | Minimum interval between two consecutive CCR-t replay attempts in a session |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx ccrt-replay interval <i>number</i> |
| Tree | interval |
| Range | 60 to 86400 |

| | |
|------------|---|
| Default | 3600 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-lifetime *number*

| | |
|-------------|---|
| Synopsis | Maximum time that CCR-t messages are replayed |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx ccrt-replay max-lifetime <i>number</i> |
| Tree | max-lifetime |
| Description | This command specifies the maximum time that CCR-t messages for Diameter Gx sessions that belong to the Diameter application policy are replayed. |
| Range | 1 to 24 |
| Default | 24 |
| Units | hours |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

credit-mcs-interval *number*

| | |
|-------------|--|
| Synopsis | Volume syncing interval for usage monitoring |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx credit-mcs-interval <i>number</i> |
| Tree | credit-mcs-interval |
| Description | This command configures the MCS interval at which the accounting data of subscriber hosts is updated. |
| Range | 5 to 60 |
| Default | 10 |
| Units | minutes |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-realm-learning *boolean*

| | |
|----------|--|
| Synopsis | Learn the destination realm from the incoming messages |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx destination-realm-learning <i>boolean</i> |
| Tree | destination-realm-learning |

| | |
|-------------|---|
| Description | <p>When configured to true, destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gx session can use the destination realm learned from the replies.</p> <p>When configured to false, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.</p> |
| Default | true |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

features

| | |
|------------|---|
| Synopsis | Enter the features context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx features |
| Tree | features |
| Introduced | 20.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

extended-bandwidth *boolean*

| | |
|-------------|---|
| Synopsis | Negotiate support for extended bandwidth AVPs |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx features extended-bandwidth <i>boolean</i> |
| Tree | extended-bandwidth |
| Description | <p>When configured to true, negotiation occurs for the support of extended AVPs that are capable of supporting bandwidth values greater than $(2^{32} - 1)$ b/s. The extended AVPs allow bitrates in kb/s and are as follows:</p> <ul style="list-style-type: none"> Extended-GBR-DL (AVP code 2850) Extended-GBR-UL (AVP code 2851) Extended-Max-Requested-BW-DL (AVP code 554) Extended-Max-Requested-BW-UL (AVP code 555) Extended-APN-AMBR-DL (AVP code 2848) Extended-APN-AMBR-UL (AVP code 2849) <p>When configured to false, the extended AVPs are not supported.</p> |
| Default | false |
| Introduced | 20.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-avp

Synopsis Enter the **include-avp** context

Context **configure subscriber-mgmt diameter-gx-policy** *string gx include-avp*

Tree [include-avp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

an-gw-address *boolean*

Synopsis Include the IP address of this gateway

Context **configure subscriber-mgmt diameter-gx-policy** *string gx include-avp an-gw-address boolean*

Tree [an-gw-address](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

apn-ambr *boolean*

Synopsis Include the APN aggregate maximum bitrate

Context **configure subscriber-mgmt diameter-gx-policy** *string gx include-avp apn-ambr boolean*

Tree [apn-ambr](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

called-station-id *boolean*

Synopsis Include the called station ID

Context **configure subscriber-mgmt diameter-gx-policy** *string gx include-avp called-station-id boolean*

Tree [called-station-id](#)

Default false

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

calling-station-id

Synopsis Enable the **calling-station-id** context
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp calling-station-id](#)
Tree [calling-station-id](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Format of the Calling-Station-ID AVP
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp calling-station-id](#) [type](#) *keyword*
Tree [type](#)
Default sap-string
Options sap-string, mac, sap-id, remote-id, llid
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-can-type *boolean*

Synopsis Include the IP CAN type
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp ip-can-type](#) *boolean*
Tree [ip-can-type](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

logical-access-id *boolean*

Synopsis Include the logical access id

| | |
|------------|---|
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp logical-access-id <i>boolean</i> |
| Tree | logical-access-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port

| | |
|------------|---|
| Synopsis | Enable the nas-port context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port |
| Tree | nas-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bit-spec *string*

| | |
|---------------|--|
| Synopsis | NAS-Port AVP format |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port bit-spec <i>string</i> |
| Tree | bit-spec |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port-id

| | |
|------------|--|
| Synopsis | Enable the nas-port-id context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id |
| Tree | nas-port-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-string *string*

| | |
|---------------|--|
| Synopsis | Prefix string for NAS-Port-Id AVP |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id prefix-string <i>string</i> |
| Tree | prefix-string |
| String Length | 1 to 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suffix

| | |
|------------|---|
| Synopsis | Enter the suffix context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix |
| Tree | suffix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id

| | |
|------------|--|
| Synopsis | Add Circuit ID as suffix |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix circuit-id |
| Tree | circuit-id |
| Notes | The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

not-included

| | |
|----------|--|
| Synopsis | Do not add a suffix |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-id suffix not-included |
| Tree | not-included |
| Notes | The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string . |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis Add Remote ID as suffix
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp nas-port-id suffix remote-id](#)
Tree [remote-id](#)
Notes The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-string *string*

Synopsis Add a user configurable string as suffix
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp nas-port-id suffix user-string](#) *string*
Tree [user-string](#)
String Length 1 to 64
Notes The following elements are part of a choice: **circuit-id**, **not-included**, **remote-id**, or **user-string**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-type

Synopsis Enable the **nas-port-type** context
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx include-avp nas-port-type](#)
Tree [nas-port-type](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type number

| | |
|------------|--|
| Synopsis | NAS-Port-Type AVP value |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp nas-port-type type number |
| Tree | type |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pdn-connection-id boolean

| | |
|------------|--|
| Synopsis | Include the PDN connection id |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp pdn-connection-id boolean |
| Tree | pdn-connection-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

physical-access-id boolean

| | |
|------------|---|
| Synopsis | Include the physical access ID |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp physical-access-id boolean |
| Tree | physical-access-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rai boolean

| | |
|------------|--|
| Synopsis | Include the routing area identity |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp rai boolean |
| Tree | rai |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis Include the RAT type

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string gx include-avp rat-type boolean*

Tree [rat-type](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sgsn-mcc-mnc *boolean*

Synopsis Include the 3GPP-SGSN-MCC-MNC AVP

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string gx include-avp sgsn-mcc-mnc boolean*

Tree [sgsn-mcc-mnc](#)

Description When configured to **true**, this command enables the inclusion of the 3GPP-SGSN-MCC-MNC AVP, which contains the MCC and MNC as configured under **configure subscriber-mgmt gtp serving-network**.

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

supported-features *boolean*

Synopsis Include the supported features

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string gx include-avp supported-features boolean*

Tree [supported-features](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-equipment-info

| | |
|------------|--|
| Synopsis | Enable the user-equipment-info context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp user-equipment-info |
| Tree | user-equipment-info |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|------------|---|
| Synopsis | Information to include in User-Equipment-Info attribute in CCR messages |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp user-equipment-info type <i>keyword</i> |
| Tree | type |
| Default | mac |
| Options | imeisv, mac, eui64, modified-eui64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-location-info *boolean*

| | |
|-------------|--|
| Synopsis | Include the 3GPP-User-Location-Information AVP |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx include-avp user-location-info <i>boolean</i> |
| Tree | user-location-info |
| Description | When configured to true , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|----------|---|
| Synopsis | MAC address format |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx mac-format <i>string</i> |
| Tree | mac-format |

| | |
|---------------|---|
| String Length | 2 to 7 |
| Default | aa: |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

report-ip-address-event *boolean*

| | |
|------------|---|
| Synopsis | Enable CCR-u upon IP address allocation events for dual stack subscribers |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx report-ip-address-event <i>boolean</i> |
| Tree | report-ip-address-event |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-qos-mapping

| | |
|------------|--|
| Synopsis | Enter the three-gpp-qos-mapping context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping |
| Tree | three-gpp-qos-mapping |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

apn-ambr-dl

| | |
|------------|--|
| Synopsis | Enter the apn-ambr-dl context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl |
| Tree | apn-ambr-dl |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aggregate-rate

| | |
|----------|--------------------------|
| Synopsis | Map to an aggregate rate |
|----------|--------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt diameter-gx-policy string gx three-gpp-qos-mapping apn-ambr-dl aggregate-rate |
| Tree | aggregate-rate |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arbiter string

| | |
|---------------|---|
| Synopsis | Arbiter name to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy string gx three-gpp-qos-mapping apn-ambr-dl arbiter string |
| Tree | arbiter |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hs-sla-agg-rate

| | |
|------------|---|
| Synopsis | Map to an HS SLA aggregate rate |
| Context | configure subscriber-mgmt diameter-gx-policy string gx three-gpp-qos-mapping apn-ambr-dl hs-sla-agg-rate |
| Tree | hs-sla-agg-rate |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ignore-override

| | |
|----------|---|
| Synopsis | no override on apn-ambr-dl |
| Context | configure subscriber-mgmt diameter-gx-policy string gx three-gpp-qos-mapping apn-ambr-dl ignore-override |
| Tree | ignore-override |

| | |
|------------|---|
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer *number*

| | |
|------------|---|
| Synopsis | Policer ID to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl policer <i>number</i> |
| Tree | policer |
| Range | 1 to 63 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue *number*

| | |
|------------|---|
| Synopsis | Queue ID to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl queue <i>number</i> |
| Tree | queue |
| Range | 1 to 8 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|--|
| Synopsis | Name of the scheduler to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-dl scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |

| | |
|------------|---|
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , hs-sla-agg-rate , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

apn-ambr-ul

| | |
|------------|--|
| Synopsis | Enter the apn-ambr-ul context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul |
| Tree | apn-ambr-ul |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arbiter *string*

| | |
|---------------|---|
| Synopsis | Arbiter name to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul arbiter <i>string</i> |
| Tree | arbiter |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ignore-override

| | |
|------------|---|
| Synopsis | no override on apn-ambr-ul |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul ignore-override |
| Tree | ignore-override |
| Notes | The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer *number*

| | |
|------------|---|
| Synopsis | Policer ID to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul policer <i>number</i> |
| Tree | policer |
| Range | 1 to 63 |
| Notes | The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue *number*

| | |
|------------|---|
| Synopsis | Queue ID to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul queue <i>number</i> |
| Tree | queue |
| Range | 1 to 32 |
| Notes | The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|---|
| Synopsis | Name of the scheduler to be overridden |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> gx three-gpp-qos-mapping apn-ambr-ul scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: arbiter , ignore-override , policer , queue , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

node

| | |
|------------|---|
| Synopsis | Enter the node context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> node |
| Tree | node |
| Notes | The following elements are part of a choice: node or peer-policy . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-realm *string*

| | |
|---------------|---|
| Synopsis | Destination-Realm AVP used by the Diameter peer policy |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> node destination-realm <i>string</i> |
| Tree | destination-realm |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

origin-host *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Origin-host that identifies the diameter-node that is to be used for transmission |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> node origin-host <i>reference</i> |
| Tree | origin-host |
| Reference | configure aaa diameter node <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-failure

| | |
|----------|---|
| Synopsis | Enter the on-failure context |
| Context | configure subscriber-mgmt diameter-gx-policy <i>string</i> on-failure |
| Tree | on-failure |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

failover *boolean*

Synopsis Session peer failover
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [on-failure](#) [failover](#) *boolean*
Tree [failover](#)
Default true
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

handling *keyword*

Synopsis Session peer failure handling
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [on-failure](#) [handling](#) *keyword*
Tree [handling](#)
Default terminate
Options terminate, continue, retry-and-terminate
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis Maximum wait time for a pending session request
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [tx-timer](#) *number*
Tree [tx-timer](#)
Range 10 to 1000
Default 10
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-gy-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the diameter-gy-policy list instance |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> |
| Tree | diameter-gy-policy |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | Diameter application policy name |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> |
| Tree | diameter-gy-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gy

| | |
|------------|--|
| Synopsis | Enter the gy context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy |
| Tree | gy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

avp-subscription-id

| | |
|------------|--|
| Synopsis | Enter the avp-subscription-id context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy avp-subscription-id |
| Tree | avp-subscription-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

origin keyword

| | |
|------------|---|
| Synopsis | Origin for the Subscription-Id-Data AVP |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy avp-subscription-id <i>origin</i> <i>keyword</i> |
| Tree | origin |
| Default | subscriber-id |
| Options | subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|---|
| Synopsis | Origin for the Subscription-Id-Type AVP |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy avp-subscription-id <i>type</i> <i>keyword</i> |
| Tree | type |
| Default | private |
| Options | e164, imsi, nai, private |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ccrt-replay

| | |
|----------|--|
| Synopsis | Enable the ccrt-replay context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy ccrt-replay |
| Tree | ccrt-replay |

| | |
|------------|---|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|-------------|--|
| Synopsis | Interval at which CCR-t messages are replayed |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy ccrt-replay <i>interval</i> <i>number</i> |
| Tree | interval |
| Description | This command specifies the interval at which CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed, until a valid CCA-t response is received or until the configured maximum lifetime period expires.

When unconfigured, this command is configured to the default value. |
| Range | 60 to 86400 |
| Default | 3600 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-lifetime *number*

| | |
|-------------|--|
| Synopsis | Maximum time that CCR-t messages are replayed |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy ccrt-replay <i>max-lifetime</i> <i>number</i> |
| Tree | max-lifetime |
| Description | This command specifies the maximum period of time that CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed. |
| Range | 1 to 24 |
| Default | 24 |
| Units | hours |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-realm-learning *boolean*

| | |
|----------|--|
| Synopsis | Learn the destination realm from the incoming messages |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy destination-realm-learning <i>boolean</i> |
| Tree | destination-realm-learning |

| | |
|-------------|---|
| Description | <p>When configured to true, destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gy session can use the destination realm learned from the replies.</p> <p>When configured to false, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.</p> |
| Default | true |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

extended-failure-handling

| | |
|------------|--|
| Synopsis | Enter the extended-failure-handling context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling |
| Tree | extended-failure-handling |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of Extended Failure Handling |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interim-credit

| | |
|------------|---|
| Synopsis | Enter the interim-credit context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit |
| Tree | interim-credit |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max-attempts (*number* | *keyword*)

Synopsis Attempts to retry setting up a session to the OCS

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [extended-failure-handling](#) [interim-credit](#) **max-attempts** (*number* | *keyword*)

Tree [max-attempts](#)

Range 1 to 4294967295

Default 10

Options infinite

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

reporting *boolean*

Synopsis Report interim Credit

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [extended-failure-handling](#) [interim-credit](#) **reporting** *boolean*

Tree [reporting](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

validity-time (*number* | *keyword*)

Synopsis Validity time for interim credit

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [extended-failure-handling](#) [interim-credit](#) **validity-time** (*number* | *keyword*)

Tree [validity-time](#)

Range 1 to 4294967295

Default 1800

Units seconds

Options none

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

volume

| | |
|------------|---|
| Synopsis | Enter the volume context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit volume |
| Tree | volume |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

credits *number*

| | |
|------------|--|
| Synopsis | Default volume credit value |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit volume credits <i>number</i> |
| Tree | credits |
| Range | 1 to 4294967295 |
| Default | 500 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

units *keyword*

| | |
|------------|---|
| Synopsis | Default volume credit units |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling interim-credit volume units <i>keyword</i> |
| Tree | units |
| Default | megabytes |
| Options | bytes, kilobytes, megabytes, gigabytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

new-session-id *boolean*

| | |
|----------|---|
| Synopsis | Enable use of a new session ID for CCR-i messages |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy extended-failure-handling new-session-id <i>boolean</i> |

| | |
|------------|---|
| Tree | new-session-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-avp

| | |
|------------|---|
| Synopsis | Enter the include-avp context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp |
| Tree | include-avp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

aaa-user-name *boolean*

| | |
|------------|---|
| Synopsis | Include RADIUS user name AVP in Diameter Gy messages |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp aaa-user-name <i>boolean</i> |
| Tree | aaa-user-name |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address-avp *boolean*

| | |
|------------|---|
| Synopsis | DCCA AVPs that contain the host address or prefix |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp address-avp <i>boolean</i> |
| Tree | address-avp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

called-station-id

| | |
|----------|---|
| Synopsis | Enable the called-station-id context |
|----------|---|

| | |
|------------|--|
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp called-station-id |
| Tree | called-station-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

id string

| | |
|---------------|---|
| Synopsis | Called station ID |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp called-station-id id <i>string</i> |
| Tree | id |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

charging-rule-base-name

| | |
|------------|--|
| Synopsis | Enter the charging-rule-base-name context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp charging-rule-base-name |
| Tree | charging-rule-base-name |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

category-map

| | |
|------------|---|
| Synopsis | Use the category map name in use for this session |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp charging-rule-base-name category-map |
| Tree | category-map |
| Notes | The following elements are part of a choice: category-map , not-included , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

not-included

| | |
|------------|---|
| Synopsis | Do not include Charging-Rule-Base-Name AVP in Diameter DCCA CCR messages |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp charging-rule-base-name not-included |
| Tree | not-included |
| Notes | The following elements are part of a choice: category-map , not-included , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-string *string*

| | |
|---------------|--|
| Synopsis | String for charging rule base name |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp charging-rule-base-name user-string <i>string</i> |
| Tree | user-string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: category-map , not-included , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ggsn-address

| | |
|------------|---|
| Synopsis | Enable the ggsn-address context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp ggsn-address |
| Tree | ggsn-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|----------|--|
| Synopsis | Address type of GGSN address AVP |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp ggsn-address <i>type</i> <i>keyword</i> |

| | |
|------------|---|
| Tree | type |
| Options | ipv4, ipv6 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pdp-context-type *boolean*

| | |
|------------|--|
| Synopsis | Include the DCCA PDP-Context-Type AVP Parameter |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp pdp-context-type <i>boolean</i> |
| Tree | pdp-context-type |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ps-information *boolean*

| | |
|------------|--|
| Synopsis | Enable reporting of AVPs in grouped PS-Information AVP |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp ps-information <i>boolean</i> |
| Tree | ps-information |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-context-id

| | |
|------------|---|
| Synopsis | Enable the service-context-id context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp service-context-id |
| Tree | service-context-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

id string

| | |
|---------------|--|
| Synopsis | Name for the service context ID AVP |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp service-context-id id <i>string</i> |
| Tree | id |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-charging-characteristics boolean

| | |
|------------|--|
| Synopsis | DCCA 3GPP charging characteristics AVP parameter |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-charging-characteristics <i>boolean</i> |
| Tree | three-gpp-charging-characteristics |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-charging-id keyword

| | |
|------------|---|
| Synopsis | DCCA 3GPP charging ID AVP parameter |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-charging-id <i>keyword</i> |
| Tree | three-gpp-charging-id |
| Default | auto |
| Options | false, auto, esm-info, id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-ggsn-ipv4-address boolean

| | |
|----------|---|
| Synopsis | Include the 3GPP-GGSN Address in Diameter Gy messages |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-ggsn-ipv4-address <i>boolean</i> |

| | |
|-------------|--|
| Tree | three-gpp-ggsn-ipv4-address |
| Description | When configured to true , this command includes the 3GPP GGSN Address AVP in the Diameter Gy messages. The value is set to the source IPv4 address that is used for outgoing diameter messages. |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-ggsn-ipv6-address *boolean*

| | |
|------------|---|
| Synopsis | Include the 3GPP-GGSN-Ipv6 address |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-ggsn-ipv6-address <i>boolean</i> |
| Tree | three-gpp-ggsn-ipv6-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-gprs-negotiated-qos-profile *boolean*

| | |
|------------|---|
| Synopsis | Include the DCCA 3GPP GPRS-negotiated QoS profile AVP parameter |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-gprs-negotiated-qos-profile <i>boolean</i> |
| Tree | three-gpp-gprs-negotiated-qos-profile |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-imsi *keyword*

| | |
|----------|--|
| Synopsis | Origin of the information to send in the IMSI AVP |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-imsi <i>keyword</i> |
| Tree | three-gpp-imsi |
| Default | subscriber-id |
| Options | false, subscriber-id, circuit-id, imsi |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-nsapi *boolean*

Synopsis Include the 3GPP-NSAPI
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-nsapi](#) *boolean*
 Tree [three-gpp-nsapi](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-rat-type

Synopsis Enable the **three-gpp-rat-type** context
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-rat-type](#)
 Tree [three-gpp-rat-type](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *number*

Synopsis Value for 3GPP-RAT-Type AVP
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-rat-type](#) *type* *number*
 Tree [type](#)
 Range 1 to 255
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

three-gpp-selection-mode *boolean*

Synopsis DCCA 3GPP selection mode AVP parameter

| | |
|------------|--|
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-selection-mode <i>boolean</i> |
| Tree | three-gpp-selection-mode |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-session-stop-indicator *boolean*

| | |
|------------|--|
| Synopsis | DCCA 3GPP session stop indicator AVP parameter |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-session-stop-indicator <i>boolean</i> |
| Tree | three-gpp-session-stop-indicator |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

three-gpp-user-location-info *boolean*

| | |
|------------|--|
| Synopsis | DCCA 3GPP session stop indicator AVP parameter |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp three-gpp-user-location-info <i>boolean</i> |
| Tree | three-gpp-user-location-info |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-equipment-info-type

| | |
|------------|---|
| Synopsis | Enable the user-equipment-info-type context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp user-equipment-info-type |
| Tree | user-equipment-info-type |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|------------|--|
| Synopsis | Information to include in User-Equipment-Info attribute in CCR messages |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy include-avp user-equipment-info-type <i>type</i> <i>keyword</i> |
| Tree | type |
| Options | imeisv |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|---------------|---|
| Synopsis | MAC address format |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy mac-format <i>string</i> |
| Tree | mac-format |
| String Length | 2 to 7 |
| Default | aa: |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-of-credit-reporting *keyword*

| | |
|------------|---|
| Synopsis | Reporting reason when the final granted units are consumed |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy out-of-credit-reporting <i>keyword</i> |
| Tree | out-of-credit-reporting |
| Default | final |
| Options | final, quota-exhausted |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor-support *keyword*

| | |
|----------|--|
| Synopsis | Vendor support type announced in capability exchange |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> gy vendor-support <i>keyword</i> |
| Tree | vendor-support |

| | |
|------------|---|
| Default | three-gpp |
| Options | vodafone, three-gpp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

node

| | |
|------------|---|
| Synopsis | Enter the node context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> node |
| Tree | node |
| Notes | The following elements are part of a choice: node or peer-policy . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-realm *string*

| | |
|---------------|---|
| Synopsis | Destination-Realm AVP used by the Diameter peer policy |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> node destination-realm <i>string</i> |
| Tree | destination-realm |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

origin-host *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Origin-host that identifies the diameter-node that is to be used for transmission |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> node origin-host <i>reference</i> |
| Tree | origin-host |
| Reference | configure aaa diameter node <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-failure

| | |
|------------|---|
| Synopsis | Enter the on-failure context |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> on-failure |
| Tree | on-failure |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover *boolean*

| | |
|------------|--|
| Synopsis | Session peer failover |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> on-failure failover <i>boolean</i> |
| Tree | failover |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

handling *keyword*

| | |
|------------|--|
| Synopsis | Session peer failure handling |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> on-failure handling <i>keyword</i> |
| Tree | handling |
| Default | terminate |
| Options | terminate, continue, retry-and-terminate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tx-timer *number*

| | |
|----------|---|
| Synopsis | Maximum wait time for a pending session request |
| Context | configure subscriber-mgmt diameter-gy-policy <i>string</i> tx-timer <i>number</i> |
| Tree | tx-timer |
| Range | 10 to 1000 |
| Default | 10 |
| Units | seconds |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

diameter-nasreq-policy [*name*] *string*

Synopsis Enter the **diameter-nasreq-policy** list instance
Context **configure subscriber-mgmt diameter-nasreq-policy** *string*
Tree [diameter-nasreq-policy](#)
Max. Instances 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Diameter application policy name
Context **configure subscriber-mgmt diameter-nasreq-policy** *string*
Tree [diameter-nasreq-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure subscriber-mgmt diameter-nasreq-policy** *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nasreq

Synopsis Enter the **nasreq** context

| | |
|------------|--|
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq |
| Tree | nasreq |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-avp

| | |
|------------|---|
| Synopsis | Enter the include-avp context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp |
| Tree | include-avp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

called-station-id *boolean*

| | |
|------------|---|
| Synopsis | Include the called station ID AVP |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp called-station-id <i>boolean</i> |
| Tree | called-station-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

calling-station-id

| | |
|------------|---|
| Synopsis | Enable the calling-station-id context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp calling-station-id |
| Tree | calling-station-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|----------|--------------------------------------|
| Synopsis | Format of the Calling-Station-ID AVP |
|----------|--------------------------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp calling-station-id <i>type</i> <i>keyword</i> |
| Tree | type |
| Default | sap-string |
| Options | sap-string, mac, sap-id, remote-id, llid |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id *boolean*

| | |
|------------|--|
| Synopsis | Include the Agent-Circuit-ID AVP |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp circuit-id <i>boolean</i> |
| Tree | circuit-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

imei *boolean*

| | |
|------------|--|
| Synopsis | Include the IMEI |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp imei <i>boolean</i> |
| Tree | imei |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nas-port

| | |
|------------|---|
| Synopsis | Enable the nas-port context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port |
| Tree | nas-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bit-spec *string*

| | |
|---------------|--|
| Synopsis | NAS-Port AVP format |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-bit-spec <i>string</i> |
| Tree | bit-spec |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port-id

| | |
|------------|--|
| Synopsis | Enable the nas-port-id context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id |
| Tree | nas-port-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-string *string*

| | |
|---------------|--|
| Synopsis | Prefix string for NAS-Port-Id AVP |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id prefix-string <i>string</i> |
| Tree | prefix-string |
| String Length | 1 to 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suffix

| | |
|----------|---|
| Synopsis | Enter the suffix context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix |
| Tree | suffix |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id

| | |
|------------|---|
| Synopsis | Add Circuit ID as suffix |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix circuit-id |
| Tree | circuit-id |
| Notes | The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

not-included

| | |
|------------|---|
| Synopsis | Do not add a suffix |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix not-included |
| Tree | not-included |
| Notes | The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id

| | |
|------------|--|
| Synopsis | Add Remote ID as suffix |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix remote-id |
| Tree | remote-id |
| Notes | The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-string *string*

| | |
|---------------|--|
| Synopsis | Add a user configurable string as suffix |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-id suffix user-string <i>string</i> |
| Tree | user-string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: circuit-id , not-included , remote-id , or user-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port-type

| | |
|------------|---|
| Synopsis | Enable the nas-port-type context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-type |
| Tree | nas-port-type |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type (*keyword* | *number*)

| | |
|------------|--|
| Synopsis | NAS-Port-Type AVP value |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp nas-port-type type (<i>keyword</i> <i>number</i>) |
| Tree | type |
| Range | 0 to 255 |
| Default | rfc-aligned |
| Options | rfc-aligned |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rat-type *boolean*

| | |
|----------|--|
| Synopsis | Include the Radio Access Technology (RAT) type AVP |
|----------|--|

| | |
|------------|--|
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp rat-type <i>boolean</i> |
| Tree | rat-type |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-id *boolean*

| | |
|------------|---|
| Synopsis | Include the agent remote ID AVP |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp remote-id <i>boolean</i> |
| Tree | remote-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

user-location-info *boolean*

| | |
|-------------|--|
| Synopsis | Include the 3GPP-User-Location-Information AVP |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq include-avp user-location-info <i>boolean</i> |
| Tree | user-location-info |
| Description | When configured to true , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|---------------|---|
| Synopsis | MAC address format |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq mac-format <i>string</i> |
| Tree | mac-format |
| String Length | 2 to 7 |
| Default | aa: |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis AA-request password
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [password](#) *string*
 Tree [password](#)
 String Length 1 to 115
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis Enter the **user-name** context
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#)
 Tree [user-name](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name *string*

Synopsis Domain name
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) [domain-name](#) *string*
 Tree [domain-name](#)
 String Length 1 to 128
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*

Synopsis Format type for username
 Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) [format](#) *keyword*
 Tree [format](#)

| | |
|------------|---|
| Default | mac |
| Options | mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, nas-port-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

operation *keyword*

| | |
|------------|---|
| Synopsis | Operation to perform |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> nasreq user-name operation <i>keyword</i> |
| Tree | operation |
| Options | append, strip, replace, default |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

node

| | |
|------------|--|
| Synopsis | Enter the node context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> node |
| Tree | node |
| Notes | The following elements are part of a choice: node or peer-policy . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

destination-realm *string*

| | |
|---------------|--|
| Synopsis | Destination-Realm AVP used by the Diameter peer policy |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> node destination-realm <i>string</i> |
| Tree | destination-realm |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

origin-host *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Origin-host that identifies the diameter-node that is to be used for transmission |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> node origin-host <i>reference</i> |
| Tree | origin-host |
| Reference | configure aaa diameter node <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-failure

| | |
|------------|--|
| Synopsis | Enter the on-failure context |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> on-failure |
| Tree | on-failure |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

failover *boolean*

| | |
|------------|--|
| Synopsis | Session peer failover |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> on-failure failover <i>boolean</i> |
| Tree | failover |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

handling *keyword*

| | |
|----------|--|
| Synopsis | Session peer failure handling |
| Context | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> on-failure handling <i>keyword</i> |
| Tree | handling |
| Default | terminate |
| Options | terminate, continue, retry-and-terminate |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

tx-timer *number*

Synopsis Maximum wait time for a pending session request
Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string tx-timer number*
Tree [tx-timer](#)
Range 10 to 1000
Default 10
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

explicit-subscriber-map

Synopsis Enter the **explicit-subscriber-map** context
Context **configure** [subscriber-mgmt](#) [explicit-subscriber-map](#)
Tree [explicit-subscriber-map](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [[subscriber-id](#)] *string*

Synopsis Enter the **entry** list instance
Context **configure** [subscriber-mgmt](#) [explicit-subscriber-map](#) [entry](#) *string*
Tree [entry](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[subscriber-id] *string*

Synopsis Subscriber Identification string
Context **configure** [subscriber-mgmt](#) [explicit-subscriber-map](#) [entry](#) *string*
Tree [entry](#)

| | |
|---------------|---|
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

alias string

| | |
|---------------|--|
| Synopsis | Alias for subscriber identification string |
| Context | configure subscriber-mgmt explicit-subscriber-map entry string alias string |
| Tree | alias |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile reference

| | |
|------------|--|
| Synopsis | Application profile name |
| Context | configure subscriber-mgmt explicit-subscriber-map entry string app-profile reference |
| Tree | app-profile |
| Reference | configure application-assurance group number partition number policy app-profile string |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile reference

| | |
|------------|---|
| Synopsis | SLA profile name |
| Context | configure subscriber-mgmt explicit-subscriber-map entry string sla-profile reference |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile string |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile reference

| | |
|----------|-------------------------|
| Synopsis | Subscriber profile name |
|----------|-------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt explicit-subscriber-map entry <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-interface-statistics

| | |
|------------|---|
| Synopsis | Enter the group-interface-statistics context |
| Context | configure subscriber-mgmt group-interface-statistics |
| Tree | group-interface-statistics |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state for statistics collection |
| Context | configure subscriber-mgmt group-interface-statistics admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-interface-template [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the group-interface-template list instance |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> |
| Tree | group-interface-template |
| Description | Commands in this context configure a template for automatically-generated group interfaces that is used when creating CUPS sessions. A template with the name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned. |
| Max. Instances | 256 |
| Introduced | 20.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Identifies this group interface template template
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string*
Tree [group-interface-template](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-mtu *number*

Synopsis IP MTU applied to outgoing packets
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ip-mtu](#) *number*
Tree [ip-mtu](#)
Range 512 to 9786
Units bytes
Introduced 20.5.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context
Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#)

| | |
|------------|---|
| Tree | ipv4 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

icmp

| | |
|------------|---|
| Synopsis | Enter the icmp context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp |
| Tree | icmp |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mask-reply *boolean*

| | |
|------------|---|
| Synopsis | Allow responses to ICMP mask requests on the interface |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp mask-reply <i>boolean</i> |
| Tree | mask-reply |
| Default | true |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

param-problem

| | |
|-------------|---|
| Synopsis | Enter the param-problem context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp param-problem |
| Tree | param-problem |
| Description | Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of sent Parameter Problem messages |
|----------|---|

| | |
|------------|--|
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp param-problem admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of Parameter Problem messages to send |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp param-problem number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Time used to limit number of Parameter Problem messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp param-problem seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redirects

| | |
|----------|---|
| Synopsis | Enter the redirects context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects |
| Tree | redirects |

| | |
|-------------|--|
| Description | Commands in this context configure the settings for ICMP redirect messages generated by the interface.

The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending ICMP redirect messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of ICMP redirect messages to send |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects number <i>number</i> |
| Tree | number |
| Range | 10 to 1000 |
| Default | 100 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|----------|---|
| Synopsis | Time used to limit the number of ICMP redirect messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp redirects seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |

| | |
|------------|---|
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ttl-expired

| | |
|-------------|---|
| Synopsis | Enter the ttl-expired context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired |
| Tree | ttl-expired |
| Description | Commands in this context configure the settings for ICMP TTL expired messages generated by the interface. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending TTL expired messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|------------|--|
| Synopsis | Maximum number of TTL expired messages to send |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired number <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|--|
| Synopsis | Time used to limit the number of TTL expired messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp ttl-expired seconds <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unreachables

| | |
|-------------|---|
| Synopsis | Enter the unreachables context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables |
| Tree | unreachables |
| Description | Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of sending unreachable messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number *number*

| | |
|----------|--|
| Synopsis | Maximum number of unreachable messages to send |
|----------|--|

| | |
|------------|--|
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables <i>number</i> <i>number</i> |
| Tree | number |
| Range | 10 to 2000 |
| Default | 100 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

seconds *number*

| | |
|------------|---|
| Synopsis | Time to limit the number of ICMP unreachable messages |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 icmp unreachables <i>seconds</i> <i>number</i> |
| Tree | seconds |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

neighbor-discovery

| | |
|------------|---|
| Synopsis | Enter the neighbor-discovery context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 neighbor-discovery |
| Tree | neighbor-discovery |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-arp-policy *reference*

| | |
|-----------|---|
| Synopsis | Proxy ARP policy name |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 neighbor-discovery proxy-arp-policy <i>reference</i> |
| Tree | proxy-arp-policy |
| Reference | configure policy-options policy-statement <i>string</i> |

| | |
|----------------|---|
| Max. Instances | 5 |
| Notes | This element is ordered by the user. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-proxy-arp *boolean*

| | |
|------------|---|
| Synopsis | Enable remote proxy ARP on the interface |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 neighbor-discovery remote-proxy-arp <i>boolean</i> |
| Tree | remote-proxy-arp |
| Default | false |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 urpf-check |
| Tree | urpf-check |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mode *keyword*

| | |
|------------|---|
| Synopsis | Unicast RPF check mode |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv4 urpf-check mode <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

urpf-check

| | |
|------------|---|
| Synopsis | Enable the urpf-check context |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv6 urpf-check |
| Tree | urpf-check |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mode *keyword*

| | |
|------------|--|
| Synopsis | Unicast RPF check mode |
| Context | configure subscriber-mgmt group-interface-template <i>string</i> ipv6 urpf-check <i>mode</i> <i>keyword</i> |
| Tree | mode |
| Default | strict |
| Options | strict, loose, strict-no-ecmp |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gtp

| | |
|-------------|---|
| Synopsis | Enter the gtp context |
| Context | configure subscriber-mgmt gtp |
| Tree | gtp |
| Description | This command enables the context to configure box-wide GTP parameters and profiles. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

apn-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the apn-policy list instance |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> |
| Tree | apn-policy |
| Max. Instances | 128 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | APN policy name for a new incoming GTP connection |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> |
| Tree | apn-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

apn [*apn-name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the apn list instance |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> |
| Tree | apn |
| Max. Instances | 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[apn-name] *string*

| | |
|---------------|---|
| Synopsis | GTP APN name |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> |
| Tree | apn |
| String Length | 1 to 80 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ambr-qos-mapping

| | |
|------------|--|
| Synopsis | Enter the ambr-qos-mapping context |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping |
| Tree | ambr-qos-mapping |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

downlink

| | |
|------------|---|
| Synopsis | Enable the downlink context |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink |
| Tree | downlink |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aggregate-rate

| | |
|------------|---|
| Synopsis | Map the downlink APN-AMBR rate to an Aggregate Rate override |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink aggregate-rate |
| Tree | aggregate-rate |
| Notes | The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arbiter string

| | |
|----------|--|
| Synopsis | Map the downlink APN-AMBR rate to an override for the specified arbiter |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink arbiter string |

| | |
|---------------|---|
| Tree | arbiter |
| String Length | 1 to 32 |
| Notes | The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer number

| | |
|------------|---|
| Synopsis | Map the downlink APN-AMBR rate to a policer PIR override |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping downlink policer <i>number</i> |
| Tree | policer |
| Range | 1 to 63 |
| Notes | The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue number

| | |
|------------|---|
| Synopsis | Map the downlink APN-AMBR rate to a queue PIR override |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping downlink queue <i>number</i> |
| Tree | queue |
| Range | 1 to 8 |
| Notes | The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler string

| | |
|----------|---|
| Synopsis | Map the downlink APN-AMBR rate to a scheduler rate override |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> ambr-qos-mapping downlink scheduler <i>string</i> |
| Tree | scheduler |

| | |
|---------------|---|
| String Length | 1 to 32 |
| Notes | The following elements are part of a mandatory choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

uplink

| | |
|------------|---|
| Synopsis | Enable the uplink context |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink |
| Tree | uplink |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arbiter string

| | |
|---------------|---|
| Synopsis | Map the uplink APN-AMBR rate to an override for the specified arbiter |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink arbiter string |
| Tree | arbiter |
| String Length | 1 to 32 |
| Notes | The following elements are part of a mandatory choice: arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer number

| | |
|------------|---|
| Synopsis | Map the uplink APN-AMBR rate to a policer PIR override |
| Context | configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink policer number |
| Tree | policer |
| Range | 1 to 63 |
| Notes | The following elements are part of a mandatory choice: arbiter , policer , queue , or scheduler . |
| Introduced | 16.0.R7 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue number

Synopsis Map the uplink APN-AMBR rate to a queue PIR override

Context **configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink queue number**

Tree **queue**

Range 1 to 32

Notes The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler string

Synopsis Map the uplink APN-AMBR rate to a scheduler rate override

Context **configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink scheduler string**

Tree **scheduler**

String Length 1 to 32

Notes The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

defaults

Synopsis Enter the **defaults** context

Context **configure subscriber-mgmt gtp apn-policy string apn string defaults**

Tree **defaults**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

group-interface

| | |
|------------|--|
| Synopsis | Enable the group-interface context |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults group-interface |
| Tree | group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|---|
| Synopsis | Group interface name |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults group-interface name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

svc-name *string*

| | |
|---------------|---|
| Synopsis | Service name where the group interface resides |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> defaults group-interface svc-name <i>string</i> |
| Tree | svc-name |
| String Length | 1 to 64 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

diameter-nasreq-policy *reference*

| | |
|----------|--|
| Synopsis | NASREQ authentication policy name |
| Context | configure subscriber-mgmt gtp apn-policy <i>string</i> apn <i>string</i> diameter-nasreq-policy reference |
| Tree | diameter-nasreq-policy |

| | |
|------------|--|
| Reference | configure subscriber-mgmt diameter-nasreq-policy <i>string</i> |
| Notes | The following elements are part of a choice: diameter-nasreq-policy , radius-auth-policy , or user-db . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

radius-auth-policy *reference*

| | |
|------------|--|
| Synopsis | RADIUS authentication policy name |
| Context | configure subscriber-mgmt gtp apn-policy <i>string apn string radius-auth-policy reference</i> |
| Tree | radius-auth-policy |
| Reference | configure subscriber-mgmt radius-authentication-policy <i>string</i> |
| Notes | The following elements are part of a choice: diameter-nasreq-policy , radius-auth-policy , or user-db . |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

skip-gtp-ipv4-allocation *boolean*

| | |
|------------|---|
| Synopsis | defer IPv4 address allocation to DHCP |
| Context | configure subscriber-mgmt gtp apn-policy <i>string apn string skip-gtp-ipv4-allocation boolean</i> |
| Tree | skip-gtp-ipv4-allocation |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

user-db *reference*

| | |
|------------|--|
| Synopsis | Local user database name |
| Context | configure subscriber-mgmt gtp apn-policy <i>string apn string user-db reference</i> |
| Tree | user-db |
| Reference | configure subscriber-mgmt local-user-db <i>string</i> |
| Notes | The following elements are part of a choice: diameter-nasreq-policy , radius-auth-policy , or user-db . |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-held-uplink-sessions *number*

Synopsis Maximum GTP sessions to be held while there is no corresponding ESM state

Context **configure** [subscriber-mgmt gtp max-held-uplink-sessions](#) *number*

Tree [max-held-uplink-sessions](#)

Range 0 to 500000

Default 2000

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

peer-profile [[name](#)] *string*

Synopsis Enter the **peer-profile** list instance

Context **configure** [subscriber-mgmt gtp peer-profile](#) *string*

Tree [peer-profile](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Peer profile name

Context **configure** [subscriber-mgmt gtp peer-profile](#) *string*

Tree [peer-profile](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [subscriber-mgmt gtp peer-profile](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

interface-type *keyword*

Synopsis 3GPP interface type for connections toward this peer
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **interface-type** *keyword*
Tree [interface-type](#)
Options gn, s2a, s2b, s11
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ip-ttl *number*

Synopsis IP header TTL value for GTP control messages
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **ip-ttl** *number*
Tree [ip-ttl](#)
Range 1 to 255
Default 255
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

keep-alive

Synopsis Enter the **keep-alive** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **keep-alive**
Tree [keep-alive](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of GTP-C echo request messages
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **keep-alive** **admin-state** *keyword*

| | |
|------------|------------------------------------|
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | Frequency for sending keepalives |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive interval <i>number</i> |
| Tree | interval |
| Range | 60 to 180 |
| Default | 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

retry-count *number*

| | |
|------------|--|
| Synopsis | Maximum number of unanswered echo retries after which keepalive failure is detected |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive retry-count <i>number</i> |
| Tree | retry-count |
| Range | 1 to 15 |
| Default | 4 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|----------|--|
| Synopsis | Timeout after which an echo request is considered unanswered |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> keep-alive timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 20 |
| Default | 5 |
| Units | seconds |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

message-retransmit

Synopsis Enter the **message-retransmit** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **message-retransmit**
Tree [message-retransmit](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Maximum number of unanswered retries after which the message is considered failed
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **message-retransmit** **retry-count** *number*
Tree [retry-count](#)
Range 1 to 8
Default 3
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis Timeout after which a message is considered unanswered
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* **message-retransmit** **timeout** *number*
Tree [timeout](#)
Range 1 to 30
Default 5
Units seconds
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

python-policy *reference*

Synopsis Python policy for MGW profile packets sent or received

| | |
|------------|--|
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

s11

| | |
|------------|---|
| Synopsis | Enter the s11 context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> s11 |
| Tree | s11 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

change-reporting-action (*number* | *keyword*)

| | |
|-------------|--|
| Synopsis | Value of change reporting action IE sends to the peer |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> s11 change-reporting-action (<i>number</i> <i>keyword</i>) |
| Tree | change-reporting-action |
| Description | <p>This command specifies the value of the change reporting action IE sends to the peer in applicable messages. The peer needs to indicate support first using the appropriate flag in the indication IE.</p> <p>This can be overridden by AAA, if AAA explicitly request notification changes for either ECGI, TAI or both. If AAA does not request any notification changes or only the generic location changes, the configured value is used.</p> <p>When unconfigured, this command indicates that the IE is not sent, unless specified by AAA.</p> |
| Range | 0 to 255 |
| Options | cgi-sai, rai, tai, ecgi, cgi-sai-rai, tai-ecgi |
| Introduced | 16.0.R5 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

end-marker-count *number*

| | |
|----------|--|
| Synopsis | Number of GTP-U end marker packets that are sent |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> s11 end-marker-count <i>number</i> |

| | |
|-------------|--|
| Tree | end-marker-count |
| Description | This command specifies the number of end marker packets that are sent when it is certain no more packets will be sent over the corresponding GTP-U tunnel, such as after a completed mobility event. |
| Range | 0 to 5 |
| Default | 1 |
| Introduced | 16.0.R5 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv4-mtu *number*

| | |
|------------|--|
| Synopsis | IPv4 MTU signaled in the Protocol Configuration Options (PCO) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11</i> ipv4-mtu <i>number</i> |
| Tree | ipv4-mtu |
| Range | 512 to 9000 |
| Default | 1400 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11</i> qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ambr

| | |
|------------|--|
| Synopsis | Enter the ambr context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11</i> qos ambr |
| Tree | ambr |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

down-link number

| | |
|------------|---|
| Synopsis | Downlink Aggregated Maximum Bit Rate (AMBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos ambr down-link number</i> |
| Tree | down-link |
| Range | 0 to 10000000 |
| Default | 20000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-link number

| | |
|------------|---|
| Synopsis | Uplink Aggregated Maximum Bit Rate (AMBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos ambr up-link number</i> |
| Tree | up-link |
| Range | 0 to 10000000 |
| Default | 10000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arp number

| | |
|------------|--|
| Synopsis | Allocation or retention priority |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos arp number</i> |
| Tree | arp |
| Range | 1 to 15 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

down-link

| | |
|----------|---|
| Synopsis | Enter the down-link context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos down-link</i> |

| | |
|------------|------------------------------------|
| Tree | down-link |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gbr number

| | |
|------------|---|
| Synopsis | Guaranteed Bit Rate (GBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> s11 qos down-link gbr <i>number</i> |
| Tree | gbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbr number

| | |
|------------|---|
| Synopsis | Maximum Bit Rate (MBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> s11 qos down-link mbr <i>number</i> |
| Tree | mbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qci number

| | |
|------------|---|
| Synopsis | QoS Class Identifier (QCI) value that is used in GTP messages |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> s11 qos qci <i>number</i> |
| Tree | qci |
| Range | 1 to 9 |
| Default | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-link

| | |
|------------|---|
| Synopsis | Enter the up-link context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos up-link</i> |
| Tree | up-link |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gbr number

| | |
|------------|--|
| Synopsis | Guaranteed Bit Rate (GBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos up-link gbr number</i> |
| Tree | gbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbr number

| | |
|------------|--|
| Synopsis | Maximum Bit Rate (MBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string s11 qos up-link mbr number</i> |
| Tree | mbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

uplink

| | |
|----------|--|
| Synopsis | Enter the uplink context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink</i> |
| Tree | uplink |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

charging-characteristics

Synopsis Enter the **charging-characteristics** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#)
Tree [charging-characteristics](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

home

Synopsis Enter the **home** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
Tree [home](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit0 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#) [bit0](#) *boolean*
Tree [bit0](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit1 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#) [bit1](#) *boolean*
Tree [bit1](#)
Default false

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit10 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
[bit10](#) *boolean*
Tree [bit10](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit11 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
[bit11](#) *boolean*
Tree [bit11](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit12 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)
[bit12](#) *boolean*
Tree [bit12](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit13 *boolean*

Synopsis Set bit in charging characteristics information element

| | |
|------------|--|
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink charging-characteristics home bit13 boolean</i> |
| Tree | bit13 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit14 boolean

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink charging-characteristics home bit14 boolean</i> |
| Tree | bit14 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit15 boolean

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink charging-characteristics home bit15 boolean</i> |
| Tree | bit15 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit2 boolean

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink charging-characteristics home bit2 boolean</i> |
| Tree | bit2 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit3 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home
bit3 <i>boolean</i> |
| Tree | bit3 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit4 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home
bit4 <i>boolean</i> |
| Tree | bit4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit5 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home
bit5 <i>boolean</i> |
| Tree | bit5 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit6 *boolean*

| | |
|----------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home
bit6 <i>boolean</i> |
| Tree | bit6 |

| | |
|------------|------------------------------------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit7 boolean

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit7 <i>boolean</i> |
| Tree | bit7 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit8 boolean

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit8 <i>boolean</i> |
| Tree | bit8 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit9 boolean

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics home bit9 <i>boolean</i> |
| Tree | bit9 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

roaming

| | |
|------------|---|
| Synopsis | Enter the roaming context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming |
| Tree | roaming |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit0 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit0 <i>boolean</i> |
| Tree | bit0 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit1 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit1 <i>boolean</i> |
| Tree | bit1 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit10 *boolean*

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit10 <i>boolean</i> |
| Tree | bit10 |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit11 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure** **subscriber-mgmt** **gtp** **peer-profile** *string* **uplink** **charging-characteristics** **roaming** **bit11** *boolean*

Tree [bit11](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit12 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure** **subscriber-mgmt** **gtp** **peer-profile** *string* **uplink** **charging-characteristics** **roaming** **bit12** *boolean*

Tree [bit12](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit13 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure** **subscriber-mgmt** **gtp** **peer-profile** *string* **uplink** **charging-characteristics** **roaming** **bit13** *boolean*

Tree [bit13](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit14 *boolean*

Synopsis Set bit in charging characteristics information element

Context **configure** **subscriber-mgmt** **gtp** **peer-profile** *string* **uplink** **charging-characteristics** **roaming** **bit14** *boolean*

| | |
|------------|------------------------------------|
| Tree | bit14 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit15 *boolean*

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit15 <i>boolean</i> |
| Tree | bit15 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit2 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit2 <i>boolean</i> |
| Tree | bit2 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit3 *boolean*

| | |
|------------|---|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit3 <i>boolean</i> |
| Tree | bit3 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit4 *boolean*

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit4 <i>boolean</i> |
| Tree | bit4 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit5 *boolean*

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit5 <i>boolean</i> |
| Tree | bit5 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit6 *boolean*

| | |
|------------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit6 <i>boolean</i> |
| Tree | bit6 |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bit7 *boolean*

| | |
|----------|--|
| Synopsis | Set bit in charging characteristics information element |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink charging-characteristics roaming bit7 <i>boolean</i> |
| Tree | bit7 |
| Default | false |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit8 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit8** *boolean*
Tree [bit8](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bit9 *boolean*

Synopsis Set bit in charging characteristics information element
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit9** *boolean*
Tree [bit9](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ggsn

Synopsis Enter the **ggsn** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [ggsn](#)
Tree [ggsn](#)
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [ggsn](#) [qos](#)
Tree [qos](#)

| | |
|------------|------------------------------------|
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ambr

| | |
|------------|--|
| Synopsis | Enable the ambr context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink ggsn qos ambr</i> |
| Tree | ambr |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

down-link *number*

| | |
|------------|---|
| Synopsis | Downlink Aggregated Maximum Bit Rate (AMBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink ggsn qos ambr down-link number</i> |
| Tree | down-link |
| Range | 0 to 10000000 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-link *number*

| | |
|------------|---|
| Synopsis | Uplink Aggregated Maximum Bit Rate (AMBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink ggsn qos ambr up-link number</i> |
| Tree | up-link |
| Range | 0 to 10000000 |
| Units | kilobps |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arp number

| | |
|------------|---|
| Synopsis | Allocation or retention priority |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos arp <i>number</i> |
| Tree | arp |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

down-link

| | |
|------------|---|
| Synopsis | Enter the down-link context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos down-link |
| Tree | down-link |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gbr number

| | |
|------------|---|
| Synopsis | Guaranteed Bit Rate (GBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos down-link gbr <i>number</i> |
| Tree | gbr |
| Range | 0 to 100000 |
| Default | 2000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbr number

| | |
|----------|---|
| Synopsis | Maximum Bit Rate (MBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos down-link mbr <i>number</i> |
| Tree | mbr |
| Range | 0 to 100000 |

| | |
|------------|------------------------------------|
| Default | 2000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-link

| | |
|------------|---|
| Synopsis | Enter the up-link context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos up-link |
| Tree | up-link |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gbr number

| | |
|------------|---|
| Synopsis | Guaranteed Bit Rate (GBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos up-link gbr <i>number</i> |
| Tree | gbr |
| Range | 0 to 100000 |
| Default | 5000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbr number

| | |
|------------|---|
| Synopsis | Maximum Bit Rate (MBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink ggsn qos up-link mbr <i>number</i> |
| Tree | mbr |
| Range | 0 to 100000 |
| Default | 5000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pgw

| | |
|------------|--|
| Synopsis | Enter the pgw context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw |
| Tree | pgw |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ambr

| | |
|------------|---|
| Synopsis | Enter the ambr context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos ambr |
| Tree | ambr |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

down-link *number*

| | |
|------------|---|
| Synopsis | Downlink Aggregated Maximum Bit Rate (AMBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos ambr down-link <i>number</i> |
| Tree | down-link |
| Range | 0 to 10000000 |
| Default | 20000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-link number

| | |
|------------|--|
| Synopsis | Uplink Aggregated Maximum Bit Rate (AMBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos ambr up-link number</i> |
| Tree | up-link |
| Range | 0 to 10000000 |
| Default | 10000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arp number

| | |
|------------|---|
| Synopsis | Allocation or retention priority |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos arp number</i> |
| Tree | arp |
| Range | 1 to 15 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

down-link

| | |
|------------|--|
| Synopsis | Enter the down-link context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos down-link</i> |
| Tree | down-link |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gbr number

| | |
|----------|---|
| Synopsis | Guaranteed Bit Rate (GBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos down-link gbr number</i> |
| Tree | gbr |
| Range | 0 to 100000 |

| | |
|------------|------------------------------------|
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbr number

| | |
|------------|---|
| Synopsis | Maximum Bit Rate (MBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos down-link mbr number</i> |
| Tree | mbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

qci number

| | |
|------------|---|
| Synopsis | QoS Class Identifier (QCI) value that is used in GTP messages |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos qci number</i> |
| Tree | qci |
| Range | 1 to 9 |
| Default | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

up-link

| | |
|------------|--|
| Synopsis | Enter the up-link context |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink pgw qos up-link</i> |
| Tree | up-link |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gbr number

| | |
|------------|--|
| Synopsis | Guaranteed Bit Rate (GBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos up-link gbr <i>number</i> |
| Tree | gbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbr number

| | |
|------------|--|
| Synopsis | Maximum Bit Rate (MBR) |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink pgw qos up-link mbr <i>number</i> |
| Tree | mbr |
| Range | 0 to 100000 |
| Default | 0 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

protocol-configuration-options keyword

| | |
|------------|--|
| Synopsis | Information element to use for the protocol configuration options |
| Context | configure subscriber-mgmt gtp peer-profile <i>string</i> uplink protocol-configuration-options <i>keyword</i> |
| Tree | protocol-configuration-options |
| Default | pco |
| Options | pco, apco |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rat-type (number | keyword)

| | |
|----------|---|
| Synopsis | Default Radio Access Type (RAT) signaled in GTP setup |
|----------|---|

| | |
|-------------|---|
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink rat-type (number keyword)</i> |
| Tree | rat-type |
| Description | This command configures the default Radio Access Technology (RAT) type signaled during GTP setup. RAT identifies the underlying physical connection method for a radio-based communication network. This can be overridden by RADIUS. |
| Range | 0 to 255 |
| Default | wlan |
| Options | utran, geran, wlan, gan, hspa, eutran, virtual |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

report-wlan-location *boolean*

| | |
|-------------|---|
| Synopsis | Report WLAN or cellular location of UE during setup |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink report-wlan-location boolean</i> |
| Tree | report-wlan-location |
| Description | When configured to true , this command enables reporting of the WLAN location or cellular location of the UE in the signaling interface (S2a or Gn) between the WLAN GW and the mobile gateway (PGW or GGSN).

When configured to false , this command disables location reporting. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

session-hold-time (*number | keyword*)

| | |
|------------|---|
| Synopsis | Time to hold a GTP session after its UE is disconnected |
| Context | configure subscriber-mgmt gtp peer-profile <i>string uplink session-hold-time (number keyword)</i> |
| Tree | session-hold-time |
| Range | 0 to 3600 |
| Default | 30 |
| Units | seconds |
| Options | remaining-lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

serving-network

| | |
|-------------|---|
| Synopsis | Enable the serving-network context |
| Context | configure subscriber-mgmt gtp serving-network |
| Tree | serving-network |
| Description | Commands in this context configure the 3GPP serving network that the node is part of. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mcc string

| | |
|---------------|---|
| Synopsis | Mobile Country Code (MCC) portion of serving network |
| Context | configure subscriber-mgmt gtp serving-network mcc string |
| Tree | mcc |
| String Length | 3 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mnc string

| | |
|---------------|---|
| Synopsis | Mobile Network Code (MNC) portion of serving network |
| Context | configure subscriber-mgmt gtp serving-network mnc string |
| Tree | mnc |
| String Length | 2 to 3 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

host-lockout-policy [\[name\]](#) string

| | |
|----------|---|
| Synopsis | Enter the host-lockout-policy list instance |
| Context | configure subscriber-mgmt host-lockout-policy string |
| Tree | host-lockout-policy |

| | |
|----------------|---|
| Max. Instances | 128 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | Host lockout policy name to associate with the SAP |
| Context | configure subscriber-mgmt host-lockout-policy <i>string</i> |
| Tree | host-lockout-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt host-lockout-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-key *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Parameters used in host identification for lockout on specified SAP or capture SAP |
| Context | configure subscriber-mgmt host-lockout-policy <i>string</i> host-key <i>keyword</i> |
| Tree | host-key |
| Default | all |
| Options | all, mac |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lockout-reset-time *number*

Synopsis Lockout reset time settings

Context **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string* **lockout-reset-time** *number*

Tree [lockout-reset-time](#)

Range 1 to 86400

Default 60

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lockout-time

Synopsis Enter the **lockout-time** context

Context **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string* **lockout-time**

Tree [lockout-time](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis Maximum lockout time

Context **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string* **lockout-time** **max** *number*

Tree [max](#)

Range 1 to 86400

Default 3600

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

min *number*

Synopsis Minimum lockout time

| | |
|------------|--|
| Context | configure subscriber-mgmt host-lockout-policy <i>string</i> lockout-time <i>min</i> <i>number</i> |
| Tree | min |
| Range | 1 to 86400 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-lockout-hosts *number*

| | |
|------------|--|
| Synopsis | Max lockout hosts |
| Context | configure subscriber-mgmt host-lockout-policy <i>string</i> max-lockout-hosts <i>number</i> |
| Tree | max-lockout-hosts |
| Range | 1 to 32000 |
| Default | 100 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-tracking-policy [[name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the host-tracking-policy list instance |
| Context | configure subscriber-mgmt host-tracking-policy <i>string</i> |
| Tree | host-tracking-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[name](#)] *string*

| | |
|---------------|---|
| Synopsis | Host tracking policy name |
| Context | configure subscriber-mgmt host-tracking-policy <i>string</i> |
| Tree | host-tracking-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt host-tracking-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress-rate-modify

| | |
|------------|--|
| Synopsis | Enter the egress-rate-modify context |
| Context | configure subscriber-mgmt host-tracking-policy <i>string</i> egress-rate-modify |
| Tree | egress-rate-modify |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|-------------|---|
| Synopsis | Maximum total rate for all subscriber egress queues |
| Context | configure subscriber-mgmt host-tracking-policy <i>string</i> egress-rate-modify agg-rate |
| Tree | agg-rate |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy. |
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|--|
| Synopsis | Scheduler to be applied for rate modification |
| Context | configure subscriber-mgmt host-tracking-policy <i>string</i> egress-rate-modify scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |

| | |
|------------|--|
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

http-redirect-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the http-redirect-policy list instance |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> |
| Tree | http-redirect-policy |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | HTTP redirect policy name |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> |
| Tree | http-redirect-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aa-url-parameter *string*

| | |
|---------------|---|
| Synopsis | AA URL parameter included for HTTP portal redirect |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> aa-url-parameter <i>string</i> |
| Tree | aa-url-parameter |
| String Length | 1 to 247 |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

application-assurance *reference*

| | |
|------------|--|
| Synopsis | AA application profile used for portal authentication |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> application-assurance <i>reference</i> |
| Tree | application-assurance |
| Reference | configure application-assurance <i>group</i> <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dst-port *number*

| | |
|------------|--|
| Synopsis | Destination port number of the HTTP request to match |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> dst-port <i>number</i> |
| Tree | dst-port |
| Range | 1 to 65535 |
| Default | 80 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

forward-entry [dst-ip](#) (*ipv4-prefix* | *ipv6-prefix*) [protocol](#) *keyword* [dst-port](#) *number*

| | |
|------------|---|
| Synopsis | Add a list entry for forward-entry |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> forward-entry dst-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) protocol <i>keyword</i> dst-port <i>number</i> |
| Tree | forward-entry |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dst-ip (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Destination address |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> forward-entry dst-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) protocol <i>keyword</i> dst-port <i>number</i> |
| Tree | forward-entry |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

protocol *keyword*

| | |
|------------|---|
| Synopsis | Destination protocol |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> forward-entry dst-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) protocol <i>keyword</i> dst-port <i>number</i> |
| Tree | forward-entry |
| Options | tcp, udp |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dst-port *number*

| | |
|------------|---|
| Synopsis | Destination port |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> forward-entry dst-ip (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) protocol <i>keyword</i> dst-port <i>number</i> |
| Tree | forward-entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ignore-app-profile *boolean*

| | |
|----------|--|
| Synopsis | Ignore application profile attribute in the RADIUS Access-Accept message |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> ignore-app-profile <i>boolean</i> |

| | |
|------------|------------------------------------|
| Tree | ignore-app-profile |
| Default | false |
| Introduced | 19.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

portal-hold-time *number*

| | |
|------------|--|
| Synopsis | Time to hold redirect forwarding resources |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> portal-hold-time <i>number</i> |
| Tree | portal-hold-time |
| Range | 1 to 60 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

url *string*

| | |
|---------------|---|
| Synopsis | HTTP URL to which the matching traffic is redirected |
| Context | configure subscriber-mgmt http-redirect-policy <i>string</i> url <i>string</i> |
| Tree | url |
| Description | This command configures the HTTP redirect URL to which the matching traffic is redirected. Use the following variables to insert subscriber session data in the URL: <ul style="list-style-type: none"> • \$URL (Request-URI in the HTTP GET Request received) • \$MAC (a string that represents the MAC address of the subscriber host) • \$IP (a string that represents the IP address of the subscriber host) • \$NASIP (a string that represents the RADIUS IP address of the ISA/ESA-VM) |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

igmp-policy [[name](#)] *string*

| | |
|----------|--|
| Synopsis | Enter the igmp-policy list instance |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> |
| Tree | igmp-policy |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Policy name
 Context **configure** [subscriber-mgmt igmp-policy](#) *string*
 Tree [igmp-policy](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress-rate-modify

Synopsis Enter the **egress-rate-modify** context
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [egress-rate-modify](#)
 Tree [egress-rate-modify](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

agg-rate

Synopsis Maximum total rate for all subscriber egress queues
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [egress-rate-modify](#) [agg-rate](#)
 Tree [agg-rate](#)

| | |
|-------------|--|
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy. |
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|---|
| Synopsis | Scheduler to be applied for rate modification |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> egress-rate-modify scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

fast-leave *boolean*

| | |
|------------|--|
| Synopsis | Enable fast leave |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> fast-leave <i>boolean</i> |
| Tree | fast-leave |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|---|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|-------------|--|
| Synopsis | Maximum number of group sources for this interface |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|--|
| Synopsis | Maximum number of groups for this interface |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|---|
| Synopsis | Maximum number of sources that are allowed per group |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

multicast-reporter

| | |
|----------|---|
| Synopsis | Enter the multicast-reporter context |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter |
| Tree | multicast-reporter |

Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the multicast reporter
Context **configure** [subscriber-mgmt](#) [igmp-policy](#) *string* [multicast-reporter](#) [admin-state](#) *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

destination *reference*

Synopsis Multicast reporter destination
Context **configure** [subscriber-mgmt](#) [igmp-policy](#) *string* [multicast-reporter](#) [destination](#) *reference*
Tree [destination](#)
Reference **configure** [multicast-management](#) [multicast-reporting-destination](#) *string*
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

optional-fields

Synopsis Enter the **optional-fields** context
Context **configure** [subscriber-mgmt](#) [igmp-policy](#) *string* [multicast-reporter](#) [optional-fields](#)
Tree [optional-fields](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-mac *boolean*

Synopsis Include host mac address
Context **configure** [subscriber-mgmt](#) [igmp-policy](#) *string* [multicast-reporter](#) [optional-fields](#) [host-mac](#) *boolean*

| | |
|------------|---|
| Tree | host-mac |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-session-id *boolean*

| | |
|------------|---|
| Synopsis | Include the PPPoE session ID in multicast reporting messages |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields pppoe-session-id <i>boolean</i> |
| Tree | pppoe-session-id |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *boolean*

| | |
|------------|---|
| Synopsis | Include sap ID |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

svc-id *boolean*

| | |
|------------|---|
| Synopsis | Include service ID |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> multicast-reporter optional-fields svc-id <i>boolean</i> |
| Tree | svc-id |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-interval *number*

| | |
|------------|---|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-last-member-interval *number*

| | |
|------------|---|
| Synopsis | Time between group-specific query messages |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-response-interval *number*

| | |
|------------|--|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redirection-policy *reference*

| | |
|------------|--|
| Synopsis | Multicast redirection action applied to the subscriber |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> redirection-policy <i>reference</i> |
| Tree | redirection-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

replication *keyword*

| | |
|------------|--|
| Synopsis | Multicast replication mode for subscriber multicast |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> replication <i>keyword</i> |
| Tree | replication |
| Default | per-sap |
| Options | per-sap, per-host, per-spi |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|---|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

static

| | |
|------------|--|
| Synopsis | Enter the static context |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group [[group-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[group-address] *string*

| | |
|-------------|---|
| Synopsis | Group address of static IGMP multicast channel |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> |
| Tree | group |
| Description | This command configures an address that receives data on an interface. The IP address must be unique for each static group. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source [[source-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for source |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address of multicast channel sending data |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

starg

| | |
|----------|---|
| Synopsis | any source address (*,G) |
| Context | configure subscriber-mgmt igmp-policy <i>string</i> static group <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |

Introduced 16.0.R2
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-multicast-destination-mac *boolean*

Synopsis Use multicast destination mac address for outgoing traffic.
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* **use-multicast-destination-mac** *boolean*
 Tree [use-multicast-destination-mac](#)
 Default false
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

version *keyword*

Synopsis IGMP protocol version
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* **version** *keyword*
 Tree [version](#)
 Default 3
 Options 1, 2, 3
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipoe-session-policy [[name](#)] *string*

Synopsis Enter the **ipoe-session-policy** list instance
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string*
 Tree [ipoe-session-policy](#)
 Max. Instances 256
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis IPoE session policy name
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string*

| | |
|---------------|---|
| Tree | ipoe-session-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id-from-auth *boolean*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Use the Circuit ID from the authentication server to identify a session |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> circuit-id-from-auth <i>boolean</i> |
| Tree | circuit-id-from-auth |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-key

| | |
|------------|--|
| Synopsis | Enter the session-key context |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key |
| Tree | session-key |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cid *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use the Circuit ID as part of the index |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key cid <i>boolean</i> |
| Tree | cid |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac *boolean*

| | |
|------------|---|
| Synopsis | Use the MAC address as part of the index |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key mac <i>boolean</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rid *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use the remote ID as part of the index |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key rid <i>boolean</i> |
| Tree | rid |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap *boolean*

| | |
|----------|---|
| Synopsis | Use the SAP ID as part of the index |
| Context | configure subscriber-mgmt ipoe-session-policy <i>string</i> session-key sap <i>boolean</i> |
| Tree | sap |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

session-timeout (*number* | *keyword*)

Synopsis Timeout for IPoE sessions
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string session-timeout* (*number* | *keyword*)
 Tree [session-timeout](#)
 Range 1 to 31104000
 Default unlimited
 Options unlimited
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-filter [[name](#)] *string*

Synopsis Enter the **isa-filter** list instance
 Context **configure** [subscriber-mgmt isa-filter](#) *string*
 Tree [isa-filter](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis ISA filter name
 Context **configure** [subscriber-mgmt isa-filter](#) *string*
 Tree [isa-filter](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-filter <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-action *keyword*

| | |
|------------|--|
| Synopsis | Action for non-matching entry |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv4 default-action <i>keyword</i> |
| Tree | default-action |
| Default | drop |
| Options | drop, forward |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [*id*] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv4 entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] number

| | |
|------------|--|
| Synopsis | ISA filter entry ID |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number |
| Tree | entry |
| Range | 1 to 1024 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|---|
| Synopsis | Enable the action context |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop

| | |
|------------|---|
| Synopsis | A packet matching the entry will be dropped |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number action drop |
| Tree | drop |
| Notes | The following elements are part of a mandatory choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R5 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|------------|---|
| Synopsis | A packet matching the entry will be forwarded |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number action forward |
| Tree | forward |
| Notes | The following elements are part of a mandatory choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R5 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

http-redirect

| | |
|------------|---|
| Synopsis | Enable the http-redirect context |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number action http-redirect |
| Tree | http-redirect |
| Notes | The following elements are part of a mandatory choice: drop , forward , or http-redirect . |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

url string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | HTTP URL to which the matching traffic is redirected |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number action http-redirect url string |
| Tree | url |
| Description | This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA.

Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified. |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number match |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-ip string

| | |
|------------|--|
| Synopsis | Destination IPv4 prefix |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number match dst-ip string |
| Tree | dst-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-port

| | |
|------------|---|
| Synopsis | Enter the dst-port context |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number match dst-port |
| Tree | dst-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

equals number

| | |
|------------|---|
| Synopsis | Exact port number |
| Context | configure subscriber-mgmt isa-filter string ipv4 entry number match dst-port equals number |
| Tree | equals |
| Range | 0 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

protocol *keyword*

| | |
|------------|--|
| Synopsis | Protocol |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv4 entry <i>number</i> match protocol <i>keyword</i> |
| Tree | protocol |
| Options | icmp, tcp, udp, gre |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-action *keyword*

| | |
|------------|--|
| Synopsis | Action for non-matching entry |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv6 default-action <i>keyword</i> |
| Tree | default-action |
| Default | drop |
| Options | drop, forward |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [*id*] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt isa-filter <i>string</i> ipv6 entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] number

| | |
|------------|--|
| Synopsis | ISA filter entry ID |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number |
| Tree | entry |
| Range | 1 to 1024 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action

| | |
|------------|---|
| Synopsis | Enable the action context |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

drop

| | |
|------------|---|
| Synopsis | A packet matching the entry will be dropped |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number action drop |
| Tree | drop |
| Notes | The following elements are part of a mandatory choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R5 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|------------|---|
| Synopsis | A packet matching the entry will be forwarded |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number action forward |
| Tree | forward |
| Notes | The following elements are part of a mandatory choice: drop , forward , or http-redirect . |
| Introduced | 16.0.R5 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

http-redirect

| | |
|------------|---|
| Synopsis | Enable the http-redirect context |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number action http-redirect |
| Tree | http-redirect |
| Notes | The following elements are part of a mandatory choice: drop , forward , or http-redirect . |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

url string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | HTTP URL to which the matching traffic is redirected |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number action http-redirect url string |
| Tree | url |
| Description | This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA.

Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified. |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number match |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-ip string

| | |
|------------|--|
| Synopsis | Destination IPv6 prefix |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number match dst-ip string |
| Tree | dst-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dst-port

| | |
|------------|---|
| Synopsis | Enter the dst-port context |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number match dst-port |
| Tree | dst-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

equals number

| | |
|------------|---|
| Synopsis | Exact port number |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number match dst-port equals number |
| Tree | equals |
| Range | 0 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

protocol *keyword*

| | |
|------------|---|
| Synopsis | Protocol |
| Context | configure subscriber-mgmt isa-filter string ipv6 entry number match protocol keyword |
| Tree | protocol |
| Options | icmp, tcp, udp, gre |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Limit what the ISA filter can be used for |
| Context | configure subscriber-mgmt isa-filter string type keyword |
| Tree | type |
| Default | dsm |
| Options | dsm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

isa-policer [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the isa-policer list instance |
| Context | configure subscriber-mgmt isa-policer string |
| Tree | isa-policer |
| Max. Instances | 128 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|----------|---|
| Synopsis | ISA policer name |
| Context | configure subscriber-mgmt isa-policer string |

| | |
|---------------|---|
| Tree | isa-policer |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action *keyword*

| | |
|------------|---|
| Synopsis | Action to be taken for packets that are in-profile and out-of-profile |
| Context | configure subscriber-mgmt isa-policer <i>string</i> action <i>keyword</i> |
| Tree | action |
| Default | permit-deny |
| Options | permit-deny, priority-mark |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

adaptation-rule

| | |
|------------|---|
| Synopsis | Enter the adaptation-rule context |
| Context | configure subscriber-mgmt isa-policer <i>string</i> adaptation-rule |
| Tree | adaptation-rule |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir *keyword*

| | |
|------------|--|
| Synopsis | Committed information rate |
| Context | configure subscriber-mgmt isa-policer <i>string</i> adaptation-rule cir <i>keyword</i> |
| Tree | cir |
| Default | closest |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir *keyword*

| | |
|------------|---|
| Synopsis | Peak Information Rate |
| Context | configure subscriber-mgmt isa-policer <i>string</i> adaptation-rule pir <i>keyword</i> |
| Tree | pir |
| Default | closest |
| Options | max, min, closest |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cbs *number*

| | |
|------------|--|
| Synopsis | Committed burst size |
| Context | configure subscriber-mgmt isa-policer <i>string</i> cbs <i>number</i> |
| Tree | cbs |
| Range | 0 to 131071 |
| Default | 0 |
| Units | kilobytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-policer <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mbs *number*

| | |
|----------|--|
| Synopsis | Maximum Burst Size |
| Context | configure subscriber-mgmt isa-policer <i>string</i> mbs <i>number</i> |
| Tree | mbs |
| Range | 0 to 131071 |

| | |
|------------|---|
| Default | 0 |
| Units | kilobytes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt isa-policer string rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Committed information rate |
| Context | configure subscriber-mgmt isa-policer string rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 100000000 |
| Default | 0 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Peak Information Rate |
| Context | configure subscriber-mgmt isa-policer string rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 100000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policing technique
 Context **configure** [subscriber-mgmt isa-policer](#) *string type keyword*
 Tree [type](#)
 Default single-bucket-bandwidth
 Options single-bucket-bandwidth, dual-bucket-bandwidth
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

isa-service-chaining

Synopsis Enter the **isa-service-chaining** context
 Context **configure** [subscriber-mgmt isa-service-chaining](#)
 Tree [isa-service-chaining](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

evpn [*id*] *string*

Synopsis Enter the **evpn** list instance
 Context **configure** [subscriber-mgmt isa-service-chaining evpn](#) *string*
 Tree [evpn](#)
 Max. Instances 1024
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[id] *string*

| | |
|---------------|--|
| Synopsis | EVPN service ID |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> |
| Tree | evpn |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of EVPN |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bgp

| | |
|------------|---|
| Synopsis | Enter the bgp context |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp |
| Tree | bgp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

route-distinguisher

| | |
|------------|---|
| Synopsis | Enter the route-distinguisher context |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-distinguisher |
| Tree | route-distinguisher |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rd (*keyword* | *vpn-route-distinguisher*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-distinguisher rd (<i>keyword</i> <i>vpn-route-distinguisher</i>) |
| Tree | rd |
| Options | auto-rd |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

route-target

| | |
|------------|---|
| Synopsis | Enable the route-target context |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-target |
| Tree | route-target |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

export *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Extended community name for default export policy for BGP in EVPN service |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-target export <i>string</i> |
| Tree | export |
| String Length | 10 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

import *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Extended community name for default import policy for BGP in EVPN service |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> bgp route-target import <i>string</i> |
| Tree | import |
| String Length | 10 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

export

| | |
|------------|---|
| Synopsis | Enter the export context |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export |
| Tree | export |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

advertise-pools

| | |
|----------|---|
| Synopsis | Enter the advertise-pools context |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools |

| | |
|------------|--|
| Tree | advertise-pools |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of NAT pool route advertisement |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pool [router-instance](#) *string* [name](#) *string*

| | |
|------------|---|
| Synopsis | Add a list entry for pool |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools pool router-instance <i>string</i> name <i>string</i> |
| Tree | pool |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router-instance of the NAT pool |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools pool router-instance <i>string</i> name <i>string</i> |
| Tree | pool |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|---|
| Synopsis | NAT pool name |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export advertise-pools pool router-instance <i>string</i> name <i>string</i> |
| Tree | pool |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gateway-address-range

| | |
|------------|---|
| Synopsis | Enable the gateway-address-range context |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export gateway-address-range |
| Tree | gateway-address-range |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

end *string*

| | |
|------------|--|
| Synopsis | Upper bound of the gateway address range |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export gateway-address-range <i>end</i> <i>string</i> |
| Tree | end |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

start *string*

| | |
|----------|--|
| Synopsis | Lower bound of the gateway address range |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> export gateway-address-range <i>start</i> <i>string</i> |
| Tree | start |
| Notes | This element is mandatory. |

| | |
|------------|--|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vxlan

| | |
|------------|--|
| Synopsis | Enter the vxlan context |
| Context | configure subscriber-mgmt isa-service-chaining evpn string export vxlan |
| Tree | vxlan |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vni number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | VNI of the VXLAN created by the EVPN service |
| Context | configure subscriber-mgmt isa-service-chaining evpn string export vxlan vni number |
| Tree | vni |
| Range | 1 to 16777215 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

import-mode keyword



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Import mode for the EVPN |
| Context | configure subscriber-mgmt isa-service-chaining evpn string import-mode keyword |
| Tree | import-mode |
| Default | none |
| Options | none, bridged, routed |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix-route-resolution *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | How prefix routes should be resolved |
| Context | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> prefix-route-resolution <i>keyword</i> |
| Tree | prefix-route-resolution |
| Default | recursive |
| Options | recursive, non-recursive |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-prefix *string*

| | |
|---------------|--|
| Synopsis | MAC prefix for all NAT groups for Service Chaining |
| Context | configure subscriber-mgmt isa-service-chaining mac-prefix <i>string</i> |
| Tree | mac-prefix |
| String Length | 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vas-filter [[name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the vas-filter list instance |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> |
| Tree | vas-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|----------|--|
| Synopsis | VAS filter name |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> |

| | |
|---------------|--|
| Tree | vas-filter |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

entry [*id*] *number*

| | |
|----------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> |
| Tree | entry |
| Max. Instances | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[id] *number*

| | |
|------------|--|
| Synopsis | VAS filter entry ID |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> |
| Tree | entry |
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

action [*direction*] *keyword*

| | |
|------------|---|
| Synopsis | Enter the action list instance |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> action <i>keyword</i> |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[direction] *keyword*

| | |
|------------|---|
| Synopsis | Direction for the action in a VAS filter entry |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> action <i>keyword</i> |
| Tree | action |
| Options | upstream, downstream |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

fail-action *keyword*

| | |
|------------|--|
| Synopsis | Fail action when sf-ip is not resolved or no forward action specified |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> action <i>keyword</i> fail-action <i>keyword</i> |
| Tree | fail-action |
| Default | accept |
| Options | drop, accept |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

forward

| | |
|----------|---|
| Synopsis | Enable the forward context |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> action <i>keyword</i> forward |

| | |
|------------|--|
| Tree | forward |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

esi string

| | |
|------------|---|
| Synopsis | ESI (Ethernet Segment Identifier) for the action in a VAS filter |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action
<i>keyword</i> forward esi <i>string</i> |
| Tree | esi |
| Default | 00:00:00:00:00:00:00:00:00 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sf-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Forwarding SF (Service Forward) IP address for the action in VAS filter entry |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action
<i>keyword</i> forward sf-ip (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | sf-ip |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

svc reference

| | |
|------------|--|
| Synopsis | EVPN service used for forwarding packets |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> action
<i>keyword</i> forward svc <i>reference</i> |
| Tree | svc |
| Reference | configure subscriber-mgmt isa-service-chaining evpn <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

insert-nsh

| | |
|------------|--|
| Synopsis | Enter the insert-nsh context |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i>
<i>keyword</i> insert-nsh |
| Tree | insert-nsh |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

meta-data

| | |
|------------|--|
| Synopsis | Enter the meta-data context |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i>
<i>keyword</i> insert-nsh meta-data |
| Tree | meta-data |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

insert-subscriber-id

| | |
|------------|---|
| Synopsis | Insert the subscriber-id in the NSH |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i>
<i>keyword</i> insert-nsh meta-data insert-subscriber-id |
| Tree | insert-subscriber-id |
| Notes | The following elements are part of a choice: insert-subscriber-id or opaque-data . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

opaque-data *string*

| | |
|---------------|--|
| Synopsis | Opaque meta-data for the NSH |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> <i>entry</i> <i>number</i> <i>action</i>
<i>keyword</i> insert-nsh meta-data opaque-data <i>string</i> |
| Tree | opaque-data |
| String Length | 10 18 26 34 |
| Notes | The following elements are part of a choice: insert-subscriber-id or opaque-data . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-path

Synopsis Enable the **svc-path** context

Context **configure** **subscriber-mgmt** **isa-service-chaining** **vas-filter** *string* **entry** *number* **action**
keyword **insert-nsh** **svc-path**

Tree [svc-path](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

path-id *number*

Synopsis Path ID used to construct a NSH for the action in a VAS filter entry

Context **configure** **subscriber-mgmt** **isa-service-chaining** **vas-filter** *string* **entry** *number* **action**
keyword **insert-nsh** **svc-path** **path-id** *number*

Tree [path-id](#)

Range 1 to 16777215

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

svc-index *number*

Synopsis Service index used to construct a NSH for the action in a VAS filter entry

Context **configure** **subscriber-mgmt** **isa-service-chaining** **vas-filter** *string* **entry** *number* **action**
keyword **insert-nsh** **svc-path** **svc-index** *number*

Tree [svc-index](#)

Range 1 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of the VAS filter

| | |
|------------|---|
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

match



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

foreign-ip (*ipv4-unicast-prefix* | *ipv4-unicast-address*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Foreign IP address or prefix to match in this VAS filter entry |
|----------|--|

| | |
|------------|--|
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match foreign-ip (<i>ipv4-unicast-prefix</i> <i>ipv4-unicast-address</i>) |
| Tree | foreign-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

foreign-port *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Foreign TCP or UDP port to match in this VAS filter entry |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match foreign-port <i>number</i> |
| Tree | foreign-port |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

protocol *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | IP protocol to match the VAS filter |
| Context | configure subscriber-mgmt isa-service-chaining vas-filter <i>string</i> entry <i>number</i> match protocol <i>keyword</i> |
| Tree | protocol |
| Default | none |
| Options | tcp-udp, none, icmp, tcp, udp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-user-db [[name](#)] *string*

| | |
|----------|--|
| Synopsis | Enter the local-user-db list instance |
|----------|--|

| | |
|----------------|---|
| Context | configure subscriber-mgmt local-user-db string |
| Tree | local-user-db |
| Max. Instances | 127 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] string

| | |
|---------------|---|
| Synopsis | Local user database name |
| Context | configure subscriber-mgmt local-user-db string |
| Tree | local-user-db |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state keyword

| | |
|------------|---|
| Synopsis | Administrative state of the local user database |
| Context | configure subscriber-mgmt local-user-db string admin-state keyword |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt local-user-db string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe

| | |
|------------|--|
| Synopsis | Enter the ipoe context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe |
| Tree | ipoe |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host [[host-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the host list instance |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> |
| Tree | host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[host-name] *string*

| | |
|---------------|--|
| Synopsis | Host name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> |
| Tree | host |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication

| | |
|------------|---|
| Synopsis | Enter the authentication context |
| Context | configure subscriber-mgmt local-user-db string ipoe host string authentication |
| Tree | authentication |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auth-domain-name *string*

| | |
|---------------|---|
| Synopsis | Domain name appended to the username for the host |
| Context | configure subscriber-mgmt local-user-db string ipoe host string authentication auth-domain-name string |
| Tree | auth-domain-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gx-policy *string*

| | |
|---------------|--|
| Synopsis | Diameter application policy |
| Context | configure subscriber-mgmt local-user-db string ipoe host string authentication gx-policy string |
| Tree | gx-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nasreq-auth-policy *string*

| | |
|---------------|---|
| Synopsis | Diameter NASREQ application policy to use for authentication |
| Context | configure subscriber-mgmt local-user-db string ipoe host string authentication nasreq-auth-policy string |
| Tree | nasreq-auth-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *string*

Synopsis Host authentication policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [radius-auth-policy](#) *string*

Tree [radius-auth-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

gtp-interface

Synopsis Enable the **gtp-interface** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#)

Tree [gtp-interface](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis IP interface name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#) [name](#) *string*

Tree [name](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis Service ID

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [gtp-interface](#) [service-id](#) *number*

| | |
|------------|---|
| Tree | service-id |
| Range | 1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-identification

| | |
|------------|---|
| Synopsis | Enter the host-identification context |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string host-identification</i> |
| Tree | host-identification |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id

| | |
|------------|--|
| Synopsis | Enter the circuit-id context |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string host-identification circuit-id</i> |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Circuit ID as ASCII string |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string host-identification circuit-id ascii-string string</i> |
| Tree | ascii-string |
| String Length | 1 to 127 |

| | |
|------------|---|
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Circuit ID as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification circuit-id hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

derived-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Derived ID string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification derived-id <i>string</i> |
| Tree | derived-id |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

encap-tag-range

| | |
|----------|---|
| Synopsis | Enable the encap-tag-range context |
|----------|---|

| | |
|------------|--|
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-range |
| Tree | encap-tag-range |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

from *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Start tag |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-range from <i>string</i> |
| Tree | from |
| String Length | 1 to 11 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

to *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | End tag |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-range to <i>string</i> |
| Tree | to |
| String Length | 1 to 11 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

encap-tag-separate-range

| | |
|------------|---|
| Synopsis | Enter the encap-tag-separate-range context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-separate-range |
| Tree | encap-tag-separate-range |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inner

| | |
|------------|---|
| Synopsis | Enter the inner context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-separate-range inner |
| Tree | inner |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Upper bound of the inner encapsulation tag range |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification encap-tag-separate-range inner end <i>number</i> |
| Tree | end |
| Description | This command configures an inner end tag for the range of encapsulation tags used for host identification. |
| Range | 0 to 4094 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Lower bound of the inner encapsulation tag range |
| Context | configure subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range inner start <i>number</i> |
| Tree | start |
| Description | This command configures an inner start tag for the range of encapsulation tags used for host identification. |
| Range | 0 to 4094 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

outer

| | |
|------------|--|
| Synopsis | Enter the outer context |
| Context | configure subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range outer |
| Tree | outer |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Upper bound of the outer encapsulation tag range |
| Context | configure subscriber-mgmt local-user-db string ipoe host string host-identification encap-tag-separate-range outer end <i>number</i> |
| Tree | end |
| Description | This command configures an outer end tag for the range of encapsulation tags used for host identification. |
| Range | 0 to 4094 |
| Introduced | 20.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [host-identification](#) [encap-tag-separate-range](#) [outer](#) **start** *number*

Tree [start](#)

Description This command configures an outer start tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ip-prefix (*ipv4-prefix-with-host-bits* | *ipv6-prefix-with-host-bits*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IP interface name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [host-identification](#) **ip-prefix** (*ipv4-prefix-with-host-bits* | *ipv6-prefix-with-host-bits*)

Tree [ip-prefix](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis MAC address

| | |
|------------|--|
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string host-identification mac string</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option60

| | |
|------------|--|
| Synopsis | Enter the option60 context |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string host-identification option60</i> |
| Tree | option60 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Option 60 as ASCII string |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string host-identification option60 ascii-string string</i> |
| Tree | ascii-string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--------------------------------|
| Synopsis | Option as a hexadecimal string |
|----------|--------------------------------|

| | |
|---------------|---|
| Context | configure subscriber-mgmt local-user-db string ipoe host string host-identification option60 hex-string string |
| Tree | hex-string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id

| | |
|------------|--|
| Synopsis | Enter the remote-id context |
| Context | configure subscriber-mgmt local-user-db string ipoe host string host-identification remote-id |
| Tree | remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Remote ID as ASCII string |
| Context | configure subscriber-mgmt local-user-db string ipoe host string host-identification remote-id ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Remote ID as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification remote-id hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 512 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | SAP ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification sap-id <i>string</i> |
| Tree | sap-id |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-id *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Service ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification service-id <i>number</i> |
| Tree | service-id |

| | |
|------------|---|
| Range | 1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | VSO string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification <i>string</i> <i>string</i> |
| Tree | string |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

system-id *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | System ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> host-identification system-id <i>string</i> |
| Tree | system-id |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

identification

| | |
|----------|--|
| Synopsis | Enable the identification context |
|----------|--|

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#)
 Tree [identification](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ancp-string *string*

Synopsis ANCP string
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [ancp-string](#) *string*
 Tree [ancp-string](#)
 String Length 1 to 63
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

app-profile-string *string*

Synopsis Application profile string
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [app-profile-string](#) *string*
 Tree [app-profile-string](#)
 String Length 1 to 16
 Introduced 21.10.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

category-map-name *string*

Synopsis Category map name
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [category-map-name](#) *string*
 Tree [category-map-name](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

int-dest-id *string*

| | |
|---------------|---|
| Synopsis | Intermediate destination ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification int-dest-id <i>string</i> |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-number *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Identification strings for the subscriber |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification option-number <i>number</i> |
| Tree | option-number |
| Range | 1 to 254 |
| Default | 254 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile-string *string*

| | |
|---------------|--|
| Synopsis | SLA profile string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification sla-profile-string <i>string</i> |
| Tree | sla-profile-string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

spi-sharing-group-id *number*

| | |
|----------|----------------------|
| Synopsis | SPI sharing group ID |
|----------|----------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification spi-sharing-group-id <i>number</i> |
| Tree | spi-sharing-group-id |
| Range | 0 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile-string *string*

| | |
|---------------|--|
| Synopsis | Sub profile string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification sub-profile-string <i>string</i> |
| Tree | sub-profile-string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id *string*

| | |
|---------------|---|
| Synopsis | Subscriber ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> identification subscriber-id <i>string</i> |
| Tree | subscriber-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address

| | |
|------------|---|
| Synopsis | Enter the address context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address *keyword*

| | |
|------------|---|
| Synopsis | Use gi-address to select a pool with the given scope |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address gi-address <i>keyword</i> |
| Tree | gi-address |
| Options | subnet-scope, pool-scope |
| Notes | The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-address *string*

| | |
|------------|--|
| Synopsis | Fixed IPv4 address of the host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address ip-address <i>string</i> |
| Tree | ip-address |
| Notes | The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pool

| | |
|----------|--|
| Synopsis | Enable the pool context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv4 address pool |
| Tree | pool |

| | |
|------------|---|
| Notes | The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delimiter string

| | |
|---------------|---|
| Synopsis | Delimiter character to combine primary and secondary pool names |
| Context | configure subscriber-mgmt local-user-db string ipoe host string ipv4 address pool delimiter string |
| Tree | delimiter |
| String Length | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

primary string

| | |
|---------------|---|
| Synopsis | Primary pool name |
| Context | configure subscriber-mgmt local-user-db string ipoe host string ipv4 address pool primary string |
| Tree | primary |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

secondary string

| | |
|---------------|---|
| Synopsis | Secondary pool name |
| Context | configure subscriber-mgmt local-user-db string ipoe host string ipv4 address pool secondary string |
| Tree | secondary |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-pool-from-client

| | |
|------------|---|
| Synopsis | Enable the use-pool-from-client context |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 address use-pool-from-client</i> |
| Tree | use-pool-from-client |
| Notes | The following elements are part of a choice: gi-address , ip-address , pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delimiter *string*

| | |
|---------------|--|
| Synopsis | Delimiter character to combine primary and secondary pool names |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 address use-pool-from-client delimiter string</i> |
| Tree | delimiter |
| String Length | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address *string*

| | |
|------------|--|
| Synopsis | GI addresses based on the host entry in the LUDB |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 gi-address string</i> |
| Tree | gi-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [*number*] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the option list instance |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string ipv4 option (number keyword)</i> |
| Tree | option |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*)

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv4](#) [option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|--|
| Synopsis | Empty DHCP option. |
| Context | configure subscriber-mgmt local-user-db string ipoe host string ipv4 option (number keyword) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db string ipoe host string ipv4 option (number keyword) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option as a list of IPv4 addresses |
| Context | configure subscriber-mgmt local-user-db string ipoe host string ipv4 option (number keyword) ipv4-address <i>string</i> |
| Tree | ipv4-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
This element is ordered by the user. |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis DHCP option as NetBIOS node type
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv4 option (number | keyword) netbios-node-type keyword*
 Tree [netbios-node-type](#)
 Options b-node, p-node, m-node, h-node
 Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

server *string*

Synopsis IPv4 address of the DHCP server
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv4 server string*
 Tree [server](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6

Synopsis Enter the **ipv6** context
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6*
 Tree [ipv6](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis Fixed IPv6 address of the host
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string ipoe host string ipv6 address string*
 Tree [address](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address-pool *string*

Synopsis IPv6 address pool name
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [address-pool](#) *string*
Tree [address-pool](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix *string*

Synopsis IPv6 delegated prefix of this host
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [delegated-prefix](#) *string*
Tree [delegated-prefix](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-length *number*

Synopsis Delegated prefix length
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [delegated-prefix-length](#) *number*
Tree [delegated-prefix-length](#)
Range 48 to 64
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-prefix-pool *string*

Synopsis Delegated prefix pool
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [ipv6](#) [delegated-prefix-pool](#) *string*

| | |
|---------------|---|
| Tree | delegated-prefix-pool |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

link-address *string*

| | |
|------------|--|
| Synopsis | Link address used for prefix selection at DHCP server |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 link-address <i>string</i> |
| Tree | link-address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [[number](#)] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Enter the option list instance |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | The number of the DHCPv6 option. |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 23 |
| Options | dns-server |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: hex-string or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *string*

| | |
|----------------|--|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i> |
| Tree | ipv6-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: hex-string or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-advertisement-policy *string*

| | |
|---------------|---|
| Synopsis | IPv6 router advertisement policy |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 router-advertisement-policy <i>string</i> |
| Tree | router-advertisement-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server *string*

| | |
|----------|---------------------------------|
| Synopsis | IPv6 address of the DHCP server |
|----------|---------------------------------|

Context **configure subscriber-mgmt local-user-db string ipoe host string ipv6 server string**
 Tree **server**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix string

Synopsis IPv6 SLAAC prefix of this host
 Context **configure subscriber-mgmt local-user-db string ipoe host string ipv6 slaac-prefix string**
 Tree **slaac-prefix**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

slaac-prefix-pool string

Synopsis IPv6 SLAAC prefix pool of this host
 Context **configure subscriber-mgmt local-user-db string ipoe host string ipv6 slaac-prefix-pool string**
 Tree **slaac-prefix-pool**
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timers

Synopsis Enter the **timers** context
 Context **configure subscriber-mgmt local-user-db string ipoe host string ipv6 timers**
 Tree **timers**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

preferred-lifetime (number | keyword)

Synopsis Time for a lease to remain preferred
 Context **configure subscriber-mgmt local-user-db string ipoe host string ipv6 timers preferred-lifetime (number | keyword)**

| | |
|------------|---|
| Tree | preferred-lifetime |
| Range | 300 to 315446399 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rebind *number*

| | |
|------------|---|
| Synopsis | Rebind timer (T2) |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers rebind <i>number</i> |
| Tree | rebind |
| Range | 0 to 1209600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew *number*

| | |
|------------|--|
| Synopsis | Renew timer (T1) |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers renew <i>number</i> |
| Tree | renew |
| Range | 0 to 604800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Time for a lease to remain valid |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> ipv6 timers valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 300 to 315446399 |

| | |
|------------|---|
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-radius-proxy-cache

| | |
|------------|--|
| Synopsis | Enter the match-radius-proxy-cache context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache |
| Tree | match-radius-proxy-cache |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

fail-action *keyword*

| | |
|------------|--|
| Synopsis | Action when no match is found |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache fail-action <i>keyword</i> |
| Tree | fail-action |
| Default | drop |
| Options | continue, drop |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|---------------|--|
| Synopsis | MAC address format |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache mac-format <i>string</i> |
| Tree | mac-format |
| String Length | 2 to 7 |
| Default | aa: |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match

| | |
|------------|--|
| Synopsis | Enter the match context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match |
| Tree | match |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id *boolean*

| | |
|------------|--|
| Synopsis | Match circuit ID in DHCP Option 82 |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match circuit-id <i>boolean</i> |
| Tree | circuit-id |
| Notes | The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-option *number*

| | |
|------------|--|
| Synopsis | DHCP option number |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match ipv4-option <i>number</i> |
| Tree | ipv4-option |
| Range | 1 to 254 |
| Notes | The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-option *number*

| | |
|----------|--|
| Synopsis | DHCPv6 option number |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> match-radius-proxy-cache match ipv6-option <i>number</i> |

| | |
|------------|--|
| Tree | ipv6-option |
| Range | 1 to 65535 |
| Notes | The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac *boolean*

| | |
|------------|--|
| Synopsis | Match MAC address of DHCP client |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string match-radius-proxy-cache match mac</i> <i>boolean</i> |
| Tree | mac |
| Default | true |
| Notes | The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id *boolean*

| | |
|------------|---|
| Synopsis | Match remote ID in DHCP Option 82 |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string match-radius-proxy-cache match remote-id</i> <i>boolean</i> |
| Tree | remote-id |
| Notes | The following elements are part of a choice: circuit-id , (ipv4-option and ipv6-option), mac , or remote-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server

| | |
|------------|---|
| Synopsis | Enable the server context |
| Context | configure subscriber-mgmt local-user-db <i>string ipoe host string match-radius-proxy-cache server</i> |
| Tree | server |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*

Synopsis Local user database server name

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **match-radius-proxy-cache** **server** **name** *string*

Tree **name**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis Service ID

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **match-radius-proxy-cache** **server** **service** *number*

Tree **service**

Range 1 to 2147483647

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-import [**policy-name**] *string*

Synopsis Add a list entry for **mld-import**

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **mld-import** *string*

Tree **mld-import**

Max. Instances 14

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[policy-name] *string*

Synopsis MLD import policy used to control the multicast group

| | |
|---------------|---|
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> mld-import <i>string</i> |
| Tree | mld-import |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

msap-defaults

| | |
|------------|--|
| Synopsis | Enter the msap-defaults context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults |
| Tree | msap-defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-interface

| | |
|------------|--|
| Synopsis | Enable the group-interface context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface |
| Tree | group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|---|
| Synopsis | IP interface name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix *keyword*

| | |
|------------|--|
| Synopsis | Prefix to the IP interface name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface prefix <i>keyword</i> |
| Tree | prefix |
| Options | port-id |
| Notes | The following elements are part of a choice: prefix or suffix . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suffix *keyword*

| | |
|------------|--|
| Synopsis | Suffix for the group interface |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults group-interface suffix <i>keyword</i> |
| Tree | suffix |
| Options | port-id |
| Notes | The following elements are part of a choice: prefix or suffix . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *string*

| | |
|---------------|---|
| Synopsis | MSAP policy |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults policy <i>string</i> |
| Tree | policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service *number*

| | |
|----------|--|
| Synopsis | Service ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> msap-defaults service <i>number</i> |

| | |
|------------|---|
| Tree | service |
| Range | 1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-accounting-policy

| | |
|------------|--|
| Synopsis | Enter the radius-accounting-policy context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> radius-accounting-policy |
| Tree | radius-accounting-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duplicate *string*

| | |
|---------------|---|
| Synopsis | RADIUS accounting policy for generating duplicate accounting information |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> radius-accounting-policy duplicate <i>string</i> |
| Tree | duplicate |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | RADIUS accounting policy name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> radius-accounting-policy name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retail-service-id *number*

| | |
|------------|---|
| Synopsis | Configure the retail service-id |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> retail-service-id <i>number</i> |
| Tree | retail-service-id |
| Range | 1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rip-policy *string*

| | |
|---------------|--|
| Synopsis | RIP policy |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> rip-policy <i>string</i> |
| Tree | rip-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

to-client-options

| | |
|------------|---|
| Synopsis | Enter the to-client-options context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options |
| Tree | to-client-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-option [[number](#)] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the ipv4-option list instance |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv4-option (<i>number</i> <i>keyword</i>) |
| Tree | ipv4-option |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*)

Tree [ipv4-option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

duration *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|---|
| Synopsis | Empty DHCP option |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-client-options ipv4-option (number keyword) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-client-options ipv4-option (number keyword) hex-string string |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option as a list of IPv4 addresses |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-client-options ipv4-option (number keyword) ipv4-address string |
| Tree | ipv4-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
This element is ordered by the user. |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

netbios-node-type *keyword*

Synopsis DHCP option as NetBIOS node type
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv4-option](#) (*number* | *keyword*) **netbios-node-type** *keyword*
 Tree [netbios-node-type](#)
 Options b-node, p-node, m-node, h-node
 Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [[number](#)] (*number* | *keyword*)

Synopsis Enter the **ipv6-option** list instance
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)
 Tree [ipv6-option](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send as identification string
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)
 Tree [ipv6-option](#)
 Range 1 to 65535
 Options dns-server, domain-name
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as an ASCII string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as a domain name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) domain-string <i>string</i> |
| Tree | domain-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|---|
| Synopsis | Empty DHCP option |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-client-options ipv6-option (<i>number</i> <i>keyword</i>) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-client-options ipv6-option (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-client-options ipv6-option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i> |
| Tree | ipv6-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

to-server-options

| | |
|------------|--|
| Synopsis | Enter the to-server-options context |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-server-options |
| Tree | to-server-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-option [[number](#)] (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Enter the ipv6-option list instance |
|----------|--|

| | |
|------------|---|
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>) |
| Tree | ipv6-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | DHCP option to send as identification string |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>) |
| Tree | ipv6-option |
| Range | 1 to 65535 |
| Options | dns-server, domain-name |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as an ASCII string |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>) ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-string *string*

| | |
|----------|--|
| Synopsis | DHCP option specified as a domain name |
| Context | configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option (<i>number</i> <i>keyword</i>) domain-string <i>string</i> |
| Tree | domain-string |

| | |
|---------------|---|
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|--|
| Synopsis | Empty DHCP option |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options ipv6-option (<i>number</i> <i>keyword</i>) empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options ipv6-option (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> to-server-options ipv6-option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i> |
| Tree | ipv6-address |
| Max. Instances | 4 |

| | |
|------------|---|
| Notes | The following elements are part of a mandatory choice: ascii-string , domain-string , empty , hex-string , or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wpp

| | |
|------------|--|
| Synopsis | Enter the wpp context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp |
| Tree | wpp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

initial

| | |
|------------|--|
| Synopsis | Enter the initial context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial |
| Tree | initial |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *string*

| | |
|---------------|--|
| Synopsis | Initial application profile name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial app-profile <i>string</i> |
| Tree | app-profile |
| String Length | 1 to 32 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *string*

| | |
|----------|---------------------|
| Synopsis | Initial SLA profile |
|----------|---------------------|

| | |
|---------------|--|
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial sla-profile <i>string</i> |
| Tree | sla-profile |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *string*

| | |
|---------------|--|
| Synopsis | Initial subscriber profile |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp initial sub-profile <i>string</i> |
| Tree | sub-profile |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal

| | |
|------------|---|
| Synopsis | Enter the portal context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal |
| Tree | portal |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | Web portal server name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

portal-group *string*

| | |
|---------------|--|
| Synopsis | WPP portal group for this interface |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal portal-group <i>string</i> |
| Tree | portal-group |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-instance (*keyword* | *number*)

| | |
|------------|--|
| Synopsis | The virtual router instance of the WPP portal for the hosts |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp portal router-instance (<i>keyword</i> <i>number</i>) |
| Tree | router-instance |
| Range | 1 to 2147483647 |
| Default | base |
| Options | base |
| Notes | The following elements are part of a choice: portal-group or (name and router-instance). |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

restore-to-initial-on-disconnect *keyword*

| | |
|------------|--|
| Synopsis | Restore initial profiles after a host has disconnected |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe host <i>string</i> wpp restore-to-initial-on-disconnect <i>keyword</i> |
| Tree | restore-to-initial-on-disconnect |
| Options | restore, no-restore |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mask type keyword

| | |
|------------|--|
| Synopsis | Enter the mask list instance |
| Context | configure subscriber-mgmt local-user-db string ipoe mask type keyword |
| Tree | mask |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|--|
| Synopsis | Matching type to identify a host |
| Context | configure subscriber-mgmt local-user-db string ipoe mask type keyword |
| Tree | mask |
| Options | circuit-id, remote-id, sap-id, string, system-id, option60 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix

| | |
|------------|---|
| Synopsis | Enable the prefix context |
| Context | configure subscriber-mgmt local-user-db string ipoe mask type keyword prefix |
| Tree | prefix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

length number

| | |
|------------|---|
| Synopsis | PPP mask prefix length |
| Context | configure subscriber-mgmt local-user-db string ipoe mask type keyword prefix length number |
| Tree | length |
| Range | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | Prefix string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe mask type <i>keyword</i> prefix string <i>string</i> |
| Tree | string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suffix

| | |
|------------|---|
| Synopsis | Enable the suffix context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe mask type <i>keyword</i> suffix |
| Tree | suffix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

length *number*

| | |
|------------|--|
| Synopsis | PPP mask suffix length |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe mask type <i>keyword</i> suffix length <i>number</i> |
| Tree | length |
| Range | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|----------|--|
| Synopsis | Suffix string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe mask type <i>keyword</i> suffix string <i>string</i> |
| Tree | string |

| | |
|---------------|---|
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-list *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|--|
| Synopsis | IPoE host match type |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ipoe match-list <i>keyword</i> |
| Tree | match-list |
| Options | circuit-id, mac, remote-id, sap-id, service-id, string, system-id, option60, encap-tag-range, dual-stack-remote-id, derived-id, ip, encap-tag-separate-range |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp

| | |
|------------|---|
| Synopsis | Enter the ppp context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp |
| Tree | ppp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host [[host-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the host list instance |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> |
| Tree | host |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[host-name] *string*

Synopsis Host name
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string*
 Tree [host](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

access-loop-encapsulation

Synopsis Enable the **access-loop-encapsulation** context
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#)
 Tree [access-loop-encapsulation](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

encap-offset

Synopsis Enter the **encap-offset** context
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#) [encap-offset](#)
 Tree [encap-offset](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Egress encapsulation type
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [access-loop-encapsulation](#) [encap-offset](#) *type* *keyword*
 Tree [type](#)

| | |
|------------|--|
| Options | pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate-down *number*

| | |
|------------|---|
| Synopsis | Last mile link downstream rate in the access loop |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-encapsulation rate-down <i>number</i> |
| Tree | rate-down |
| Range | 1 to 100000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

access-loop-information

| | |
|------------|---|
| Synopsis | Enter the access-loop-information context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information |
| Tree | access-loop-information |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id

| | |
|------------|--|
| Synopsis | Enable the circuit-id context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information circuit-id |
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|---|
| Synopsis | Circuit ID as an ASCII string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information circuit-id ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 63 |
| Notes | The following elements are part of a mandatory choice: ascii-string , sap-id , or use-sap-id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-sap-id

| | |
|------------|---|
| Synopsis | Use sap-id as circuit-id. |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information circuit-id use-sap-id |
| Tree | use-sap-id |
| Notes | The following elements are part of a mandatory choice: ascii-string , sap-id , or use-sap-id . |
| Introduced | 20.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id

| | |
|------------|---|
| Synopsis | Enable the remote-id context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information remote-id |
| Tree | remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|----------|--|
| Synopsis | String format for the remote ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information remote-id ascii-string <i>string</i> |
| Tree | ascii-string |

| | |
|---------------|---|
| String Length | 1 to 63 |
| Notes | The following elements are part of a mandatory choice: ascii-string , mac , or use-mac-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-mac-address

| | |
|------------|---|
| Synopsis | Use MAC address as remote-id. |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> access-loop-information remote-id use-mac-address |
| Tree | use-mac-address |
| Notes | The following elements are part of a mandatory choice: ascii-string , mac , or use-mac-address . |
| Introduced | 20.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication

| | |
|------------|--|
| Synopsis | Enter the authentication context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication |
| Tree | authentication |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gx-policy *string*

| | |
|---------------|--|
| Synopsis | Diameter application policy |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication gx-policy <i>string</i> |
| Tree | gx-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nasreq-auth-policy *string*

| | |
|---------------|---|
| Synopsis | Diameter NASREQ application policy to use for authentication |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication nasreq-auth-policy <i>string</i> |
| Tree | nasreq-auth-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

padi-auth-policy *string*

| | |
|---------------|---|
| Synopsis | Authentication policy name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication padi-auth-policy <i>string</i> |
| Tree | padi-auth-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pre-auth-policy *string*

| | |
|---------------|--|
| Synopsis | Pre-authentication policy of this host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> authentication pre-auth-policy <i>string</i> |
| Tree | pre-auth-policy |
| String Length | 1 to 32 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

radius-auth-policy *string*

Synopsis Host authentication policy
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [authentication radius-auth-policy](#) *string*
 Tree [radius-auth-policy](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis Local user DB to use for PPP PAP/CHAP authentication
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [authentication user-db](#) *string*
 Tree [user-db](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-identification

Synopsis Enter the **host-identification** context
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#)
 Tree [host-identification](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id

Synopsis Enter the **circuit-id** context
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [circuit-id](#)

| | |
|------------|---|
| Tree | circuit-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Circuit ID as ASCII string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification circuit-id ascii-string <i>string</i> |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Circuit ID as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification circuit-id hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

derived-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Derived ID string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification derived-id <i>string</i> |
| Tree | derived-id |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

encap-tag-range

| | |
|------------|---|
| Synopsis | Enable the encap-tag-range context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-range |
| Tree | encap-tag-range |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

from *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Start tag |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-range from <i>string</i> |
| Tree | from |
| String Length | 1 to 11 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

to string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | End tag |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-range to <i>string</i> |
| Tree | to |
| String Length | 1 to 11 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

encap-tag-separate-range

| | |
|------------|--|
| Synopsis | Enter the encap-tag-separate-range context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range |
| Tree | encap-tag-separate-range |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inner

| | |
|------------|---|
| Synopsis | Enter the inner context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range inner |
| Tree | inner |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Upper bound of the inner encapsulation tag range |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range inner end <i>number</i> |
| Tree | end |
| Description | This command configures an inner end tag for the range of encapsulation tags used for host identification. |
| Range | 0 to 4094 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Lower bound of the inner encapsulation tag range |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range inner start <i>number</i> |
| Tree | start |
| Description | This command configures an inner start tag for the range of encapsulation tags used for host identification. |
| Range | 0 to 4094 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

outer

| | |
|------------|---|
| Synopsis | Enter the outer context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification encap-tag-separate-range outer |
| Tree | outer |
| Introduced | 20.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

end number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [host-identification](#) [encap-tag-separate-range](#) [outer](#) [end](#) *number*

Tree [end](#)

Description This command configures an outer end tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

start number



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the outer encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [host-identification](#) [encap-tag-separate-range](#) [outer](#) [start](#) *number*

Tree [start](#)

Description This command configures an outer start tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | MAC address |
| Context | configure subscriber-mgmt local-user-db string ppp host string host-identification mac string |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remote-id

| | |
|------------|---|
| Synopsis | Enter the remote-id context |
| Context | configure subscriber-mgmt local-user-db string ppp host string host-identification remote-id |
| Tree | remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string string**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Remote ID as ASCII string |
| Context | configure subscriber-mgmt local-user-db string ppp host string host-identification remote-id ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Remote ID as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification remote-id hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 512 |
| Notes | The following elements are part of a choice: ascii-string or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | SAP ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification sap-id <i>string</i> |
| Tree | sap-id |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-name *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Administrative service name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> host-identification service-name <i>string</i> |
| Tree | service-name |

String Length 1 to 255
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis Enable the **user-name** context
 Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [host-identification user-name](#)
 Tree [user-name](#)
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Username format
 Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [host-identification user-name format](#) *keyword*
 Tree [format](#)
 Default full
 Options full, no-domain, domain-only
 Introduced 16.0.R4
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Host username
 Context **configure** [subscriber-mgmt local-user-db string](#) [ppp host string](#) [host-identification user-name name](#) *string*
 Tree [name](#)

| | |
|---------------|---|
| String Length | 1 to 253 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

identification

| | |
|------------|---|
| Synopsis | Enable the identification context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification |
| Tree | identification |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

anccp-string *string*

| | |
|---------------|--|
| Synopsis | ANCP string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification anccp-string <i>string</i> |
| Tree | anccp-string |
| String Length | 1 to 63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile-string *string*

| | |
|---------------|--|
| Synopsis | Application profile string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification app-profile-string <i>string</i> |
| Tree | app-profile-string |
| String Length | 1 to 16 |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

category-map-name *string*

| | |
|----------|-------------------|
| Synopsis | Category map name |
|----------|-------------------|

| | |
|---------------|--|
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification category-map-name <i>string</i> |
| Tree | category-map-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id *string*

| | |
|---------------|--|
| Synopsis | Intermediate destination ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification int-dest-id <i>string</i> |
| Tree | int-dest-id |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option-number *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Identification strings for the subscriber |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification option-number <i>number</i> |
| Tree | option-number |
| Range | 1 to 254 |
| Default | 254 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile-string *string*

| | |
|----------|---|
| Synopsis | SLA profile string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification sla-profile-string <i>string</i> |

| | |
|---------------|---|
| Tree | sla-profile-string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

spi-sharing-group-id *number*

| | |
|------------|---|
| Synopsis | SPI sharing group ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification spi-sharing-group-id <i>number</i> |
| Tree | spi-sharing-group-id |
| Range | 0 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile-string *string*

| | |
|---------------|---|
| Synopsis | Sub profile string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification sub-profile-string <i>string</i> |
| Tree | sub-profile-string |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id *string*

| | |
|---------------|--|
| Synopsis | Subscriber ID |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> identification subscriber-id <i>string</i> |
| Tree | subscriber-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|--|
| Synopsis | Enter the ipv4 context |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address

| | |
|------------|--|
| Synopsis | Enter the address context |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 address |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gi-address *keyword*

| | |
|------------|---|
| Synopsis | Use gi-address to select a pool with the given scope |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 address gi-address keyword |
| Tree | gi-address |
| Options | subnet-scope, pool-scope |
| Notes | The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-address *string*

| | |
|------------|---|
| Synopsis | Fixed IPv4 address of the host |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 address ip-address string |
| Tree | ip-address |
| Notes | The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pool

Synopsis Enable the **pool** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#)

Tree [pool](#)

Notes The following elements are part of a choice: **gi-address**, (**ip-address** and **prefix-length**), **pool**, or **use-pool-from-client**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delimiter *string*

Synopsis Delimiter character to combine primary and secondary pool names

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#) [delimiter](#) *string*

Tree [delimiter](#)

String Length 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

primary *string*

Synopsis Primary pool name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [ipv4](#) [address](#) [pool](#) [primary](#) *string*

Tree [primary](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

secondary *string*

Synopsis Secondary pool name

| | |
|---------------|---|
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address pool secondary <i>string</i> |
| Tree | secondary |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-length *number*

| | |
|------------|--|
| Synopsis | IPv4 host address prefix length |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address prefix-length <i>number</i> |
| Tree | prefix-length |
| Range | 1 to 32 |
| Default | 32 |
| Notes | The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client . |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-pool-from-client

| | |
|------------|---|
| Synopsis | Enable the use-pool-from-client context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address use-pool-from-client |
| Tree | use-pool-from-client |
| Notes | The following elements are part of a choice: gi-address , (ip-address and prefix-length), pool , or use-pool-from-client . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delimiter *string*

| | |
|----------|---|
| Synopsis | Delimiter character to combine primary and secondary pool names |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 address use-pool-from-client delimiter <i>string</i> |
| Tree | delimiter |

| | |
|---------------|---|
| String Length | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore-df-bit *boolean*

| | |
|-------------|--|
| Synopsis | Ignore the DF bit in the IPv4 header when fragmenting |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 ignore-df-bit <i>boolean</i> |
| Tree | ignore-df-bit |
| Description | <p>When configured to true, this command ignores the DF bit in the IPv4 header for frames egressing the subscriber interface. The frames are fragmented according the applicable egress MTU. The DF bit is reset for frames that are fragmented.</p> <p>This command applies to PPPoE PTA and L2TP LNS frames only. It is not applicable for L2TP LAC frames.</p> <p>When configured to false, this command does not ignore the DF bit in the IPv4 header for frames egressing the subscriber interface.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [[number](#)] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the option list instance |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | DHCP option to send identification strings to client |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 1 to 254 |

| | |
|------------|---|
| Options | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as an ASCII string |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 option (number keyword) ascii-string string |
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|------------|---|
| Synopsis | DHCP option as time duration |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 option (number keyword) duration number |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|----------|--|
| Synopsis | Empty DHCP option. |
| Context | configure subscriber-mgmt local-user-db string ppp host string ipv4 option (number keyword) empty |
| Tree | empty |

| | |
|------------|---|
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|--|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option as a list of IPv4 addresses |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i> |
| Tree | ipv4-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

netbios-node-type *keyword*

| | |
|----------|--|
| Synopsis | DHCP option as NetBIOS node type |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv4 option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i> |
| Tree | netbios-node-type |

| | |
|------------|---|
| Options | b-node, p-node, m-node, h-node |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|------------|---|
| Synopsis | Enter the ipv6 context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 |
| Tree | ipv6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address *string*

| | |
|------------|--|
| Synopsis | Fixed IPv6 address of the host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 address <i>string</i> |
| Tree | address |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

address-pool *string*

| | |
|---------------|---|
| Synopsis | IPv6 address pool name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 address-pool <i>string</i> |
| Tree | address-pool |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delegated-prefix *string*

| | |
|----------|---|
| Synopsis | IPv6 delegated prefix of this host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 delegated-prefix <i>string</i> |

| | |
|------------|---|
| Tree | delegated-prefix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delegated-prefix-length *number*

| | |
|------------|--|
| Synopsis | Delegated prefix length |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 delegated-prefix-length <i>number</i> |
| Tree | delegated-prefix-length |
| Range | 48 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delegated-prefix-pool *string*

| | |
|---------------|--|
| Synopsis | Delegated prefix pool |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 delegated-prefix-pool <i>string</i> |
| Tree | delegated-prefix-pool |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-ipv6cp *boolean*

| | |
|------------|--|
| Synopsis | Force IPv6 control protocol |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 force-ipv6cp <i>boolean</i> |
| Tree | force-ipv6cp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [*number*] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Enter the option list instance |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | The number of the DHCPv6 option. |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 23 |
| Options | dns-server |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|---------------|---|
| Synopsis | DHCP option specified as hexadecimal string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: hex-string or ipv6-address . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *string*

| | |
|----------|---|
| Synopsis | DHCP option specified as a list of IPv6 addresses |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 option (<i>number</i> <i>keyword</i>) ipv6-address <i>string</i> |

| | |
|----------------|---|
| Tree | ipv6-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: hex-string or ipv6-address .
This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-advertisement-policy *string*

| | |
|---------------|--|
| Synopsis | IPv6 router advertisement policy |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 router-advertisement-policy <i>string</i> |
| Tree | router-advertisement-policy |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

slaac-prefix *string*

| | |
|------------|---|
| Synopsis | IPv6 SLAAC prefix of this host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 slaac-prefix <i>string</i> |
| Tree | slaac-prefix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

slaac-prefix-pool *string*

| | |
|---------------|--|
| Synopsis | IPv6 SLAAC prefix pool of this host |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 slaac-prefix-pool <i>string</i> |
| Tree | slaac-prefix-pool |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timers

| | |
|------------|---|
| Synopsis | Enter the timers context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers |
| Tree | timers |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a lease to remain preferred |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 300 to 315446399 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rebind *number*

| | |
|------------|--|
| Synopsis | Rebind timer (T2) |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers rebind <i>number</i> |
| Tree | rebind |
| Range | 0 to 1209600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

renew *number*

| | |
|----------|---|
| Synopsis | Renew timer (T1) |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers renew <i>number</i> |

| | |
|------------|---|
| Tree | renew |
| Range | 0 to 604800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a lease to remain valid |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ipv6 timers valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 300 to 315446399 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

l2tp

| | |
|------------|--|
| Synopsis | Enter the l2tp context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> l2tp |
| Tree | l2tp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group

| | |
|------------|--|
| Synopsis | Enable the group context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> l2tp group |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name string

| | |
|---------------|--|
| Synopsis | L2TP tunnel group name |
| Context | configure subscriber-mgmt local-user-db string ppp host string l2tp group name string |
| Tree | name |
| String Length | 1 to 63 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-id number

| | |
|------------|--|
| Synopsis | Service ID for the L2TP tunnel group |
| Context | configure subscriber-mgmt local-user-db string ppp host string l2tp group service-id number |
| Tree | service-id |
| Range | 1 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

Ins-interface

| | |
|------------|---|
| Synopsis | Enable the Ins-interface context |
| Context | configure subscriber-mgmt local-user-db string ppp host string Ins-interface |
| Tree | Ins-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name string

| | |
|---------------|---|
| Synopsis | IP interface name |
| Context | configure subscriber-mgmt local-user-db string ppp host string Ins-interface name string |
| Tree | name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service-id *number*

Synopsis Service ID

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **lns-interface** **service-id** *number*

Tree **service-id**

Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-import [**policy-name**] *string*

Synopsis Add a list entry for **mld-import**

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **mld-import** *string*

Tree **mld-import**

Max. 14

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[policy-name] *string*

Synopsis MLD import policy used to control the multicast group

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ppp** **host** *string* **mld-import** *string*

Tree **mld-import**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msap-defaults

| | |
|------------|--|
| Synopsis | Enter the msap-defaults context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults |
| Tree | msap-defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group-interface

| | |
|------------|--|
| Synopsis | Enable the group-interface context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults group-interface |
| Tree | group-interface |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|---------------|--|
| Synopsis | IP interface name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults group-interface name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix *keyword*

| | |
|------------|---|
| Synopsis | Prefix to the IP interface name |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> msap-defaults group-interface prefix <i>keyword</i> |
| Tree | prefix |
| Options | port-id |
| Notes | The following elements are part of a choice: prefix or suffix . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis Suffix for the group interface

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [group-interface](#) **suffix** *keyword*

Tree [suffix](#)

Options port-id

Notes The following elements are part of a choice: **prefix** or **suffix**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *string*

Synopsis MSAP policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) **policy** *string*

Tree [policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

service *number*

Synopsis Service ID

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) **service** *number*

Tree [service](#)

Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-delay *number*

| | |
|------------|---|
| Synopsis | Delay timeout before sending a PADO |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> pado-delay <i>number</i> |
| Tree | pado-delay |
| Range | 1 to 30 |
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

password

| | |
|------------|---|
| Synopsis | Enter the password context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> password |
| Tree | password |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

chap *string*

| | |
|---------------|--|
| Synopsis | CHAP protocol |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> password chap <i>string</i> |
| Tree | chap |
| String Length | 1 to 115 |
| Notes | The following elements are part of a choice: chap , ignore , or pap . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ignore

| | |
|------------|--|
| Synopsis | Ignore the PAP and CHAP passwords |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> password ignore |
| Tree | ignore |
| Notes | The following elements are part of a choice: chap , ignore , or pap . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pap string

Synopsis PAP for the password

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [password](#) [pap](#) [string](#)

Tree [pap](#)

String Length 1 to 115

Notes The following elements are part of a choice: **chap**, **ignore**, or **pap**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-policy-parameters

Synopsis Enter the **ppp-policy-parameters** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [ppp-policy-parameters](#)

Tree [ppp-policy-parameters](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis Enable the **keepalive** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [ppp-policy-parameters](#) [keepalive](#)

Tree [keepalive](#)

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hold-up-multiplier number

Synopsis PPP LCP keepalive hold up multiplier override

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ppp](#) [host](#) [string](#) [ppp-policy-parameters](#) [keepalive](#) [hold-up-multiplier](#) [number](#)

Tree [hold-up-multiplier](#)

| | |
|-------------|--|
| Description | This command configures the number of LCP echo replies that can be missed before the PPP session is brought down and overrides the value configured in the configure subscriber-mgmt ppp-policy context for PPPoE PTA sessions or in the configure l2tp group context for L2TP LNS sessions. |
| Range | 1 to 5 |
| Default | 3 |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|-------------|--|
| Synopsis | PPP LCP keepalive interval override |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ppp-policy-parameters keepalive interval <i>number</i> |
| Tree | interval |
| Description | This command configures the time interval in seconds at which LCP echo requests are transmitted for the PPP session and overrides the value configured in the configure subscriber-mgmt ppp-policy context for PPPoE PTA sessions or the configure l2tp group context for L2TP LNS sessions. |
| Range | 4 to 300 |
| Default | 30 |
| Units | seconds |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-sessions-per-mac *number*

| | |
|-------------|--|
| Synopsis | Maximum number of sessions per MAC address |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp host <i>string</i> ppp-policy-parameters max-sessions-per-mac <i>number</i> |
| Tree | max-sessions-per-mac |
| Description | This command sets the maximum PPP sessions that can be opened for a specified MAC address. |
| Range | 1 to 8191 |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-accounting-policy

| | |
|------------|--|
| Synopsis | Enter the radius-accounting-policy context |
| Context | configure subscriber-mgmt local-user-db string ppp host string radius-accounting-policy |
| Tree | radius-accounting-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duplicate string

| | |
|---------------|---|
| Synopsis | RADIUS accounting policy for generating duplicate accounting information |
| Context | configure subscriber-mgmt local-user-db string ppp host string radius-accounting-policy duplicate string |
| Tree | duplicate |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name string

| | |
|---------------|--|
| Synopsis | RADIUS accounting policy name |
| Context | configure subscriber-mgmt local-user-db string ppp host string radius-accounting-policy name string |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retail-service-id number

| | |
|----------|---|
| Synopsis | Configure the retail service-id |
| Context | configure subscriber-mgmt local-user-db string ppp host string retail-service-id number |
| Tree | retail-service-id |
| Range | 1 to 2147483647 2147483648 2147483649 2147483650 2147483651 to 2147483690 2147483691 to 2148007980 2148007981 to 2148012076 2148012077 to 2148016172 2148016173 to 2148278316 2148278317 2148278318 to 2148278381 2148278382 2148278383 to 2148278386 |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rip-policy *string*

Synopsis RIP policy
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* **rip-policy** *string*
 Tree [rip-policy](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

steering-profile *string*

Synopsis Steering profile
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* **steering-profile** *string*
 Tree [steering-profile](#)
 String Length 1 to 32
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

to-client-options

Synopsis Enter the **to-client-options** context
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* **to-client-options**
 Tree [to-client-options](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-option [[number](#)] (*number* | *keyword*)

Synopsis Enter the **ipv6-option** list instance
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) **ipv6-option** (*number* | *keyword*)
 Tree [ipv6-option](#)
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[number] (*number* | *keyword*)

Synopsis DHCP option to send as identification string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*)

Tree [ipv6-option](#)

Range 1 to 65535

Options dns-server, domain-name

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-string *string*

Synopsis DHCP option specified as a domain name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) [domain-string](#) *string*

Tree [domain-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis Empty DHCP option

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) **empty**

Tree [empty](#)

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

Synopsis DHCP option specified as hexadecimal string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) **hex-string** *string*

Tree [hex-string](#)

String Length 1 to 256

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv6-address *string*

Synopsis DHCP option specified as a list of IPv6 addresses

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) **ipv6-address** *string*

Tree [ipv6-address](#)

Max. Instances 4

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.
This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mask type *keyword*

Synopsis Enter the **mask** list instance

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [mask type](#) *keyword*

Tree [mask](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Matching type to identify a host

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [mask type](#) *keyword*

Tree [mask](#)

Options circuit-id, mac, remote-id, user-name, service-name, sap-id

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix

Synopsis Enable the **prefix** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [mask type](#) *keyword* [prefix](#)

Tree [prefix](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

length *number*

Synopsis PPP mask prefix length

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [mask type](#) *keyword* [prefix](#) [length](#) *number*

Tree [length](#)

Range 1 to 127

| | |
|------------|---|
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Prefix string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i> prefix string <i>string</i> |
| Tree | string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suffix

| | |
|------------|--|
| Synopsis | Enable the suffix context |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i> suffix |
| Tree | suffix |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

length *number*

| | |
|------------|---|
| Synopsis | PPP mask suffix length |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i> suffix length <i>number</i> |
| Tree | length |
| Range | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | Suffix string |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp mask type <i>keyword</i> suffix <i>string</i>
<i>string</i> |
| Tree | string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: length or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

match-list *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------------|--|
| Synopsis | PPP host match type |
| Context | configure subscriber-mgmt local-user-db <i>string</i> ppp match-list <i>keyword</i> |
| Tree | match-list |
| Options | circuit-id, mac, remote-id, user-name, service-name, sap-id, encap-tag-range, derived-id, encap-tag-separate-range |
| Max. Instances | 3 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mld-policy [*name*] *string*

| | |
|------------|---|
| Synopsis | Enter the mld-policy list instance |
| Context | configure subscriber-mgmt mld-policy <i>string</i> |
| Tree | mld-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | Policy name |
| Context | configure subscriber-mgmt mld-policy <i>string</i> |
| Tree | mld-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt mld-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress-rate-modify

| | |
|------------|--|
| Synopsis | Enter the egress-rate-modify context |
| Context | configure subscriber-mgmt mld-policy <i>string</i> egress-rate-modify |
| Tree | egress-rate-modify |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|-------------|---|
| Synopsis | Maximum total rate for all subscriber egress queues |
| Context | configure subscriber-mgmt mld-policy <i>string</i> egress-rate-modify agg-rate |
| Tree | agg-rate |
| Description | This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy. |
| Notes | The following elements are part of a choice: agg-rate or scheduler . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis Scheduler to be applied for rate modification
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [egress-rate-modify](#) [scheduler](#) *string*
 Tree [scheduler](#)
 String Length 1 to 32
 Notes The following elements are part of a choice: **agg-rate** or **scheduler**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

Synopsis Enable fast leave
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [fast-leave](#) *boolean*
 Tree [fast-leave](#)
 Default true
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

import-policy *reference*

Synopsis Import policy to filter MLD packets
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [import-policy](#) *reference*
 Tree [import-policy](#)
 Reference **configure** [policy-options](#) [policy-statement](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

maximum-number-group-sources *number*

Synopsis Maximum number of group sources for this interface
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [maximum-number-group-sources](#) *number*
 Tree [maximum-number-group-sources](#)

| | |
|-------------|--|
| Description | This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed. |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum number of groups for this interface |
| Context | configure subscriber-mgmt mld-policy <i>string</i> maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of sources that are allowed per group |
| Context | configure subscriber-mgmt mld-policy <i>string</i> maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure subscriber-mgmt mld-policy <i>string</i> query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-last-member-interval *number*

| | |
|------------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure subscriber-mgmt mld-policy <i>string</i> query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-response-interval *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure subscriber-mgmt mld-policy <i>string</i> query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redirection-policy *reference*

| | |
|------------|---|
| Synopsis | Multicast redirection action applied to the subscriber |
| Context | configure subscriber-mgmt mld-policy <i>string</i> redirection-policy <i>reference</i> |
| Tree | redirection-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

replication *keyword*

| | |
|------------|--|
| Synopsis | Multicast replication mode for subscriber multicast |
| Context | configure subscriber-mgmt mld-policy <i>string</i> replication <i>keyword</i> |
| Tree | replication |
| Default | per-sap |
| Options | per-sap, per-host, per-spi |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-alert-check *boolean*

| | |
|------------|---|
| Synopsis | Enable router alert checking for IGMP or MLD messages |
| Context | configure subscriber-mgmt mld-policy <i>string</i> router-alert-check <i>boolean</i> |
| Tree | router-alert-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

static

| | |
|------------|--|
| Synopsis | Enter the static context |
| Context | configure subscriber-mgmt mld-policy <i>string</i> static |
| Tree | static |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

group [[group-address](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the group list instance |
| Context | configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> |
| Tree | group |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[group-address] *string*

| | |
|------------|--|
| Synopsis | Group address of multicast channel |
| Context | configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> |
| Tree | group |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source [[source-address](#)] *string*

| | |
|------------|--|
| Synopsis | Add a list entry for source |
| Context | configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[source-address] *string*

| | |
|------------|--|
| Synopsis | Source IP address |
| Context | configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> source <i>string</i> |
| Tree | source |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

starg

| | |
|------------|---|
| Synopsis | any source address (*,G) |
| Context | configure subscriber-mgmt mld-policy <i>string</i> static group <i>string</i> starg |
| Tree | starg |
| Notes | The following elements are part of a mandatory choice: source or starg . |
| Introduced | 16.0.R2 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-multicast-destination-mac *boolean*

| | |
|------------|--|
| Synopsis | Use multicast destination mac address for outgoing traffic. |
| Context | configure subscriber-mgmt mld-policy <i>string</i> use-multicast-destination-mac <i>boolean</i> |
| Tree | use-multicast-destination-mac |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

version *keyword*

| | |
|------------|--|
| Synopsis | MLD protocol version |
| Context | configure subscriber-mgmt mld-policy <i>string</i> version <i>keyword</i> |
| Tree | version |
| Default | 2 |
| Options | 1, 2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

msap-policy [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the msap-policy list instance |
| Context | configure subscriber-mgmt msap-policy <i>string</i> |
| Tree | msap-policy |
| Max. Instances | 256 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | Managed SAP policy name |
| Context | configure subscriber-mgmt msap-policy <i>string</i> |
| Tree | msap-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpu-protection

| | |
|----------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> cpu-protection |
| Tree | cpu-protection |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

ip-src-monitoring

Synopsis Apply the IP source monitoring
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [cpu-protection](#) [ip-src-monitoring](#)
 Tree [ip-src-monitoring](#)
 Notes The following elements are part of a choice: **ip-src-monitoring** or **mac-monitoring**.
 Introduced 16.0.R2
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

mac-monitoring

Synopsis Apply the per-source rate limit
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [cpu-protection](#) [mac-monitoring](#)
 Tree [mac-monitoring](#)
 Notes The following elements are part of a choice: **ip-src-monitoring** or **mac-monitoring**.
 Introduced 16.0.R2
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

policy-id *reference*

Synopsis CPM protection policy
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [cpu-protection](#) [policy-id](#) *reference*
 Tree [policy-id](#)
 Reference **configure** [system](#) [security](#) [cpu-protection](#) [policy](#) *number*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

description *string*

Synopsis Text description
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [description](#) *string*
 Tree [description](#)

String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dist-cpu-protection *string*

Synopsis Distributed CPU protection policy
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [dist-cpu-protection](#) *string*
Tree [dist-cpu-protection](#)
String Length 1 to 32
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ies-vprn-only-sap-parameters

Synopsis Enter the **ies-vprn-only-sap-parameters** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#)
Tree [ies-vprn-only-sap-parameters](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

anti-spoof *keyword*

Synopsis Anti-spoof filtering for the MSAP
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [anti-spoof](#) *keyword*
Tree [anti-spoof](#)
Default source-ip-and-mac-addr
Options source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [egress](#)

Tree [egress](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
 Context **configure** [subscriber-mgmt msap-policy string ies-vprn-only-sap-parameters egress qos](#)
 Tree [qos](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis QoS policy ID or name to associate with the MSAPs
 Context **configure** [subscriber-mgmt msap-policy string ies-vprn-only-sap-parameters egress qos policy-name reference](#)
 Tree [policy-name](#)
 Reference **configure** [qos sap-egress string](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
 Context **configure** [subscriber-mgmt msap-policy string ies-vprn-only-sap-parameters ingress](#)
 Tree [ingress](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
 Context **configure** [subscriber-mgmt msap-policy string ies-vprn-only-sap-parameters ingress qos](#)
 Tree [qos](#)

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis QoS policy ID or name to associate with the MSAPs
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [ingress](#) [qos](#) [policy-name](#) *reference*
 Tree [policy-name](#)
 Reference **configure** [qos](#) [sap-ingress](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis Queuing type
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [ingress](#) [qos](#) [queuing-type](#) *keyword*
 Tree [queuing-type](#)
 Default shared
 Options shared, service
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-host-tracking

Synopsis Enter the **igmp-host-tracking** context
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#)
 Tree [igmp-host-tracking](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

expiry-time *number*

Synopsis Time that the system continues to track inactive hosts
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [igmp-host-tracking](#) *expiry-time* *number*

| | |
|------------|---|
| Tree | expiry-time |
| Range | 1 to 65535 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|--|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-group-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of multicast groups to be tracked per group |
| Context | configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking maximum-number-group-sources <i>number</i> |
| Tree | maximum-number-group-sources |
| Range | 1 to 32000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups *number*

| | |
|------------|---|
| Synopsis | Maximum number of multicast groups to be tracked |
| Context | configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking maximum-number-groups <i>number</i> |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-sources *number*

| | |
|------------|--|
| Synopsis | Maximum number of multicast sources to be tracked |
| Context | configure subscriber-mgmt msap-policy <i>string</i> igmp-host-tracking maximum-number-sources <i>number</i> |
| Tree | maximum-number-sources |
| Range | 1 to 1000 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lag-link-map-profile *number*

| | |
|------------|--|
| Synopsis | Map profile for LAG link |
| Context | configure subscriber-mgmt msap-policy <i>string</i> lag-link-map-profile <i>number</i> |
| Tree | lag-link-map-profile |
| Range | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sticky-msaps *boolean*

| | |
|-------------|---|
| Synopsis | Prevent MSAPs from being deleted |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sticky-msaps <i>boolean</i> |
| Tree | sticky-msaps |
| Description | <p>When configured to true, MSAPs associated with the specified MSAP policy are not removed unless a manual clear command is issued.</p> <p>This feature is useful if historical statistics records on MSAPs need to be retained. It can also reduce host creation time because the MSAP is already created.</p> <p>When configured to false, MSAPs can be automatically removed when a host creation fails or when a subscriber is no longer associated with the MSAP, for example, when a subscriber ends the session.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sticky-msaps-idle-timeout *number*

| | |
|-------------|---|
| Synopsis | Timeout used for sticky MSAPs |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sticky-msaps-idle-timeout <i>number</i> |
| Tree | sticky-msaps-idle-timeout |
| Description | <p>This command configures the timeout interval which determines when idle sticky MSAPs can be removed.</p> <p>By default, MSAPs are deleted shortly after the subscriber session ends. The system is prevented from automatically deleting sticky MSAPs after the session ends, allowing for a faster subsequent subscriber connection without MSAP creation; however, sticky MSAPs require SAP resources. The configuration of this command allows for the removal of sticky MSAPs that are idle for the specified time period.</p> <p>When unconfigured, no timeout interval is applied.</p> |
| Range | 5 to 604800 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-sla-mgmt

| | |
|------------|---|
| Synopsis | Enter the sub-sla-mgmt context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt |
| Tree | sub-sla-mgmt |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

defaults

| | |
|------------|---|
| Synopsis | Enter the defaults context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults |
| Tree | defaults |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|----------|--------------------------|
| Synopsis | Application profile name |
|----------|--------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

int-dest-id

| | |
|------------|--|
| Synopsis | Enter the int-dest-id context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults int-dest-id |
| Tree | int-dest-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|---|
| Synopsis | String to be used as the int-dest-id |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults int-dest-id string <i>string</i> |
| Tree | string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

top-q-tag

| | |
|------------|--|
| Synopsis | Derive string based on top most delineating Dot1Q tag from SAP's encapsulation |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults int-dest-id top-q-tag |
| Tree | top-q-tag |
| Notes | The following elements are part of a choice: string or top-q-tag . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | Default SLA profile |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Subscriber profile |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id

| | |
|------------|--|
| Synopsis | Enter the subscriber-id context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults subscriber-id |
| Tree | subscriber-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-id

| | |
|------------|--|
| Synopsis | Autogenerated sub-id as default sub-id |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt defaults subscriber-id auto-id |
| Tree | auto-id |
| Notes | The following elements are part of a choice: auto-id , sap-id , or string . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-id

Synopsis SAP-id as default sub-id

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [sub-sla-mgmt](#) defaults [subscriber-id](#) [sap-id](#)

Tree [sap-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

string *string*

Synopsis String to be used as default sub-id

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [sub-sla-mgmt](#) defaults [subscriber-id](#) [string](#) *string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

single-sub-parameters

Synopsis Enter the **single-sub-parameters** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#)

Tree [single-sub-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

non-sub-traffic-profiles

Synopsis Enable the **non-sub-traffic-profiles** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [sub-sla-mgmt](#) [single-sub-parameters](#) [non-sub-traffic-profiles](#)

| | |
|------------|---|
| Tree | non-sub-traffic-profiles |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|---|
| Synopsis | Application profile name |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|---|
| Synopsis | SLA profile name |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|------------|---|
| Synopsis | Subscriber profile |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id *string*

| | |
|---------------|--|
| Synopsis | Subscriber identification string |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles subscriber-id <i>string</i> |
| Tree | subscriber-id |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

profiled-traffic-only *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable profiled-traffic-only. |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt single-sub-parameters profiled-traffic-only <i>boolean</i> |
| Tree | profiled-traffic-only |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-ident-policy *reference*

| | |
|------------|---|
| Synopsis | Configure subscriber identification policy |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt sub-ident-policy <i>reference</i> |
| Tree | sub-ident-policy |
| Reference | configure subscriber-mgmt sub-ident-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-limit (*keyword* | *number*)

| | |
|----------|---|
| Synopsis | Maximum subscribers on this SAP |
| Context | configure subscriber-mgmt msap-policy <i>string</i> sub-sla-mgmt subscriber-limit (<i>keyword</i> <i>number</i>) |
| Tree | subscriber-limit |
| Range | 1 to 131071 |

| | |
|------------|---|
| Default | 1 |
| Options | no-limit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vpls-only-sap-parameters

| | |
|------------|---|
| Synopsis | Enter the vpls-only-sap-parameters context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters |
| Tree | vpls-only-sap-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp-host

| | |
|------------|--|
| Synopsis | Enter the arp-host context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters arp-host |
| Tree | arp-host |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-limit *number*

| | |
|------------|---|
| Synopsis | Maximum number of ARP hosts |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters arp-host host-limit <i>number</i> |
| Tree | host-limit |
| Range | 1 to 131071 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-auth-interval *number*

| | |
|----------|---------------------------------|
| Synopsis | Minimum authentication interval |
|----------|---------------------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters arp-host min-auth-interval <i>number</i> |
| Tree | min-auth-interval |
| Range | 1 to 6000 |
| Default | 15 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp-reply-agent *keyword*

| | |
|------------|--|
| Synopsis | Enable arp-reply-agent function |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters arp-reply-agent <i>keyword</i> |
| Tree | arp-reply-agent |
| Options | true, with-subscr-ident |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp

| | |
|------------|--|
| Synopsis | Enter the dhcp context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp |
| Tree | dhcp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-populate *number*

| | |
|------------|---|
| Synopsis | Maximum number of DHCPv4 leases per managed SAP |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp lease-populate <i>number</i> |
| Tree | lease-populate |
| Range | 1 to 131071 |
| Default | 1 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

option-82

Synopsis Enter the **option-82** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [option-82](#)

Tree [option-82](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action *keyword*

Synopsis DHCP relay forwarding policy action

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [option-82](#)
[action](#) *keyword*

Tree [action](#)

Default keep

Options replace, drop, keep

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *keyword*

Synopsis Circuit ID suboption of the IPOE relay

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp](#) [option-82](#)
[circuit-id](#) *keyword*

Tree [circuit-id](#)

Default ascii-tuple

Options none, ascii-tuple, vlan-ascii-tuple

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

remote-id

Synopsis Enter the **remote-id** context

| | |
|------------|--|
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 remote-id |
| Tree | remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac

| | |
|------------|--|
| Synopsis | MAC address of the remote end that is encoded in the suboption |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 remote-id mac |
| Tree | mac |
| Notes | The following elements are part of a choice: mac or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|---------------|--|
| Synopsis | String to encode in the suboption |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 remote-id string string |
| Tree | string |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: mac or string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vendor-specific-option

| | |
|------------|---|
| Synopsis | Enter the vendor-specific-option context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option |
| Tree | vendor-specific-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

client-mac-address *boolean*

| | |
|------------|---|
| Synopsis | Send MAC address in Nokia vendor-specific sub-option |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i> |
| Tree | client-mac-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-id *boolean*

| | |
|------------|---|
| Synopsis | Send SAP ID in the Nokia vendor-specific sub-option |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option sap-id <i>boolean</i> |
| Tree | sap-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service-id *boolean*

| | |
|------------|---|
| Synopsis | Send service ID in the Nokia vendor-specific sub-option |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option service-id <i>boolean</i> |
| Tree | service-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

string *string*

| | |
|----------|--|
| Synopsis | String in the sub-option of the DHCP relay packet |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option string <i>string</i> |
| Tree | string |

| | |
|---------------|---|
| Description | This command specifies the string in the Nokia vendor-specific sub-option of the DHCP relay packet. |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

system-id *boolean*

| | |
|------------|---|
| Synopsis | Send system ID in the Nokia vendor-specific sub-option |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp option-82 vendor-specific-option system-id <i>boolean</i> |
| Tree | system-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

proxy-server

| | |
|------------|---|
| Synopsis | Enter the proxy-server context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server |
| Tree | proxy-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the DHCP proxy server |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

emulated-server *string*

| | |
|------------|---|
| Synopsis | IP address used as DHCP server address in SAP context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server emulated-server <i>string</i> |
| Tree | emulated-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-time

| | |
|------------|--|
| Synopsis | Enter the lease-time context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server lease-time |
| Tree | lease-time |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-override *boolean*

| | |
|------------|---|
| Synopsis | Use lease time information provided by RADIUS server |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server lease-time radius-override <i>boolean</i> |
| Tree | radius-override |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

value *number*

| | |
|------------|--|
| Synopsis | DHCP lease time |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters dhcp proxy-server lease-time value <i>number</i> |
| Tree | value |
| Range | 300 to 315446399 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [egress](#)
Tree [egress](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [egress](#) [qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis QoS policy ID or name to associate with the MSAPs
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [egress](#) [qos](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos](#) [sap-egress](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

igmp-snooping

Synopsis Enter the **igmp-snooping** context
Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
Tree [igmp-snooping](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fast-leave *boolean*

| | |
|------------|--|
| Synopsis | Allow IGMP fast leave processing |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping fast-leave <i>boolean</i> |
| Tree | fast-leave |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

import-policy *reference*

| | |
|------------|---|
| Synopsis | Import policy that filters IGMP packets |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping import-policy <i>reference</i> |
| Tree | import-policy |
| Reference | configure policy-options policy-statement <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

maximum-number-groups (*keyword | number*)

| | |
|------------|--|
| Synopsis | Maximum number of multicast groups |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping maximum-number-groups (<i>keyword number</i>) |
| Tree | maximum-number-groups |
| Range | 1 to 16000 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mcac

| | |
|----------|-------------------------------|
| Synopsis | Enter the mcac context |
|----------|-------------------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac |
| Tree | mcac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bandwidth

| | |
|------------|--|
| Synopsis | Enter the bandwidth context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac bandwidth |
| Tree | bandwidth |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mandatory (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Pre-reserved bandwidth for all mandatory channels |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac bandwidth mandatory (<i>number</i> <i>keyword</i>) |
| Tree | mandatory |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

total (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Maximum allowed bandwidth |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac bandwidth total (<i>number</i> <i>keyword</i>) |
| Tree | total |
| Range | 0 to 2147483647 |
| Default | unlimited |
| Options | unlimited |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

interface-policy *reference*

Synopsis MCAC interface policy name
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
[mcac](#) [interface-policy](#) *reference*
 Tree [interface-policy](#)
 Reference **configure** [mcac](#) [interface-policy](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mc-constraints

Synopsis Enter the **mc-constraints** context
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
[mcac](#) [mc-constraints](#)
 Tree [mc-constraints](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level [[level-id](#)] *number*

Synopsis Enter the **level** list instance
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
[mcac](#) [mc-constraints](#) [level](#) *number*
 Tree [level](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[level-id] *number*

Synopsis Bandwidth level ID for an MCAC constraint
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#)
[mcac](#) [mc-constraints](#) [level](#) *number*

| | |
|------------|---|
| Tree | level |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bandwidth *number*

| | |
|------------|--|
| Synopsis | Bandwidth available for this level |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints level <i>number</i> bandwidth <i>number</i> |
| Tree | bandwidth |
| Max. Range | 0 to 4294967295 |
| Default | 1 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

number-down [[number-lag-port-down](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the number-down list instance |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number-lag-port-down] *number*

| | |
|------------|--|
| Synopsis | Number of lag ports down |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mcac mc-constraints number-down <i>number</i> |
| Tree | number-down |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

level *number*

Synopsis Level to be associated with this number of lag ports that are down

Context **configure** **subscriber-mgmt** **msap-policy** *string* **vpls-only-sap-parameters** **igmp-snooping** **mcac** **mc-constraints** **number-down** *number* **level** *number*

Tree [level](#)

Range 1 to 8

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-lag-port-weight *boolean*

Synopsis Use LAG port weight while calculating Multicast CAC constraints

Context **configure** **subscriber-mgmt** **msap-policy** *string* **vpls-only-sap-parameters** **igmp-snooping** **mcac** **mc-constraints** **use-lag-port-weight** *boolean*

Tree [use-lag-port-weight](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy *reference*

Synopsis Multicast CAC policy name

Context **configure** **subscriber-mgmt** **msap-policy** *string* **vpls-only-sap-parameters** **igmp-snooping** **mcac** **policy** *reference*

Tree [policy](#)

Reference **configure** **mcac** **policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mvr

Synopsis Enter the **mvr** context

| | |
|------------|---|
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mvr |
| Tree | mvr |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

from-vpls *reference*

| | |
|------------|--|
| Synopsis | MVR VPLS from which the multicast channels are taken |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping mvr from-vpls <i>reference</i> |
| Tree | from-vpls |
| Reference | configure service vpls <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-interval *number*

| | |
|------------|--|
| Synopsis | Time between two consecutive host-query messages |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping query-interval <i>number</i> |
| Tree | query-interval |
| Range | 2 to 1024 |
| Default | 125 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-last-member-interval *number*

| | |
|----------|--|
| Synopsis | Time between group-specific query messages |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping query-last-member-interval <i>number</i> |
| Tree | query-last-member-interval |
| Range | 1 to 50 |
| Default | 10 |

| | |
|------------|---|
| Units | deciseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

query-response-interval *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response to the host-query messages |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping query-response-interval <i>number</i> |
| Tree | query-response-interval |
| Range | 1 to 1023 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

robust-count *number*

| | |
|------------|--|
| Synopsis | Number of retries after expected message loss |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping robust-count <i>number</i> |
| Tree | robust-count |
| Range | 2 to 7 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

send-queries *boolean*

| | |
|------------|---|
| Synopsis | Generate IGMP general queries |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping send-queries <i>boolean</i> |
| Tree | send-queries |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

version *keyword*

| | |
|------------|--|
| Synopsis | IGMP version |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters igmp-snooping version <i>keyword</i> |
| Tree | version |
| Default | 3 |
| Options | 1, 2, 3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | QoS policy ID or name to associate with the MSAPs |
| Context | configure subscriber-mgmt msap-policy <i>string</i> vpls-only-sap-parameters ingress qos policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

queuing-type *keyword*

Synopsis Queuing type

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [ingress qos](#) **queuing-type** *keyword*

Tree [queuing-type](#)

Default multipoint-shared

Options multipoint-shared, service

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-da-hashing *boolean*

Synopsis Include hashing on MAC DA ISO subscriber ID

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [mac-da-hashing](#) *boolean*

Tree [mac-da-hashing](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

split-horizon-group *string*

Synopsis Name of the split horizon group for the MSAP

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [split-horizon-group](#) *string*

Tree [split-horizon-group](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pfcp

Synopsis Enter the **pfcp** context

| | |
|------------|---|
| Context | configure subscriber-mgmt pfc |
| Tree | pfc |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

association [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the association list instance |
| Context | configure subscriber-mgmt pfc association <i>string</i> |
| Tree | association |
| Description | Commands in this context configure a PFCP association towards a BNG CUPS CPF. |
| Max. Instances | 1 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | PFCP association name |
| Context | configure subscriber-mgmt pfc association <i>string</i> |
| Tree | association |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the PFCP association |
| Context | configure subscriber-mgmt pfc association <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

association-release-timeout (*keyword* | *number*)

| | |
|-------------|---|
| Synopsis | Time to wait for a response to a release request |
| Context | configure subscriber-mgmt pcfp association <i>string</i> association-release-timeout (<i>keyword</i> <i>number</i>) |
| Tree | association-release-timeout |
| Description | <p>This command configures the time to wait to clean up the PFCP association after it has been disabled. After administratively disabling a PFCP association, the system requests a shutdown to the BNG CPF. If the BNG CPF does not gracefully remove the association before expiry of the timer, the full association and all related sessions are forcefully removed.</p> <p>The PFCP protocol encoding does not allow the full range of configured values. The system automatically rounds up the configured value to the nearest value allowed by the protocol. For more information about the protocol encoding, see 3GPP TS 29.244 8.2.78.1.</p> |
| Range | 30 to 3600 |
| Default | 3600 |
| Units | seconds |
| Options | none |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

association-setup-retry *number*

| | |
|-------------|---|
| Synopsis | Time to wait between successive association attempts |
| Context | configure subscriber-mgmt pcfp association <i>string</i> association-setup-retry <i>number</i> |
| Tree | association-setup-retry |
| Description | This command configures the time to wait before attempting a retry after a PFCP association setup fails. |
| Range | 1 to 36000 |
| Default | 10 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bfd-expedited-path-down *boolean*

| | |
|----------|---|
| Synopsis | Track BFD sessions to expedite PFCP path down detection |
|----------|---|

| | |
|-------------|--|
| Context | configure subscriber-mgmt pfcg association <i>string</i> bfd-expedited-path-down <i>boolean</i> |
| Tree | bfd-expedited-path-down |
| Description | When configured to true , the system tracks BFD sessions to expedite PFCP path down detection on BFD down events. This requires the configuration of path-restoration-time . |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt pfcg association <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

heartbeat

| | |
|-------------|--|
| Synopsis | Enter the heartbeat context |
| Context | configure subscriber-mgmt pfcg association <i>string</i> heartbeat |
| Tree | heartbeat |
| Description | Commands in this context configure the parameters for transmitting PFCP Heartbeat Request messages to a PFCP peer. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|----------|---|
| Synopsis | Time between two successful heartbeat request messages |
| Context | configure subscriber-mgmt pfcg association <i>string</i> heartbeat interval <i>number</i> |
| Tree | interval |
| Range | 5 to 180 |
| Default | 60 |
| Units | seconds |

| | |
|------------|---|
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retries *number*

| | |
|-------------|---|
| Synopsis | Number of retries after the heartbeat timeout expires |
| Context | configure subscriber-mgmt pfcg association <i>string</i> heartbeat retries <i>number</i> |
| Tree | retries |
| Description | This command configures the number of times the same Heartbeat Request is sent before the PFCP path to the peer is considered down. |
| Range | 0 to 30 |
| Default | 4 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|-------------|---|
| Synopsis | Time the system waits for a heartbeat response message |
| Context | configure subscriber-mgmt pfcg association <i>string</i> heartbeat timeout <i>number</i> |
| Tree | timeout |
| Description | This command configures the timeout after which a Heartbeat Request is considered unanswered. |
| Range | 1 to 20 |
| Default | 5 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interface

| | |
|-------------|---|
| Synopsis | Enter the interface context |
| Context | configure subscriber-mgmt pfcg association <i>string</i> interface |
| Tree | interface |
| Description | Commands in this context configure the interface from which PFCP messages will be sent and on which PFCP messages will be received. |
| Introduced | 20.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface to use for the association

Context **configure subscriber-mgmt pfcg association** *string* **interface name** *string*

Tree **name**

String Length 1 to 32

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router context for the PFCP association

Context **configure subscriber-mgmt pfcg association** *string* **interface router-instance** *string*

Tree **router-instance**

Description This command configures the name of the interface, along with its routing instance, used as binding interface for PFCP.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis Enter the **nat** context

Context **configure subscriber-mgmt pfcg association** *string* **nat**

Tree **nat**

Description Commands in this context configure NAT or WLAN-GW groups for BNG CUPS PFCP association.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

nat-group *reference*

Synopsis NAT group used for CUPS NAT functionality

Context **configure** [subscriber-mgmt pfcf association](#) *string* [nat nat-group](#) *reference*

Tree [nat-group](#)

Reference **configure** [isa nat-group](#) *number*

Notes The following elements are part of a choice: **nat-group** or **wlan-gw-group**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wlan-gw-group *reference*

Synopsis WLAN gateway group used for CUPS NAT functionality

Context **configure** [subscriber-mgmt pfcf association](#) *string* [nat wlan-gw-group](#) *reference*

Tree [wlan-gw-group](#)

Reference **configure** [isa wlan-gw-group](#) *number*

Notes The following elements are part of a choice: **nat-group** or **wlan-gw-group**.

Introduced 20.10.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

node-id

Synopsis Enter the **node-id** context

Context **configure** [subscriber-mgmt pfcf association](#) *string* [node-id](#)

Tree [node-id](#)

Description Commands in this context configure the UPF Node Identifier as sent in PFCP. It can either be configured to use the linked interface source IP or a preconfigured FQDN.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fqdn string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | FQDN that identifies the local system for PFCP |
| Context | configure subscriber-mgmt pfcp association string node-id fqdn string |
| Tree | fqdn |
| String Length | 1 to 255 |
| Notes | The following elements are part of a choice: fqdn or use-ip-address . |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-ip-address

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Use the IP address of interface for the association |
| Context | configure subscriber-mgmt pfcp association string node-id use-ip-address |
| Tree | use-ip-address |
| Description | When configured, the binding interface address is used as identification of the local system for PFCP. |
| Notes | The following elements are part of a choice: fqdn or use-ip-address . |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

path-restoration-time number

| | |
|-------------|--|
| Synopsis | Time to wait before declaring the path down |
| Context | configure subscriber-mgmt pfcp association string path-restoration-time number |
| Tree | path-restoration-time |
| Description | This command configures the time for which sessions are kept after a PFCP path failure is detected. If the path recovers without a restart before this time expires, the sessions are kept. Otherwise, they are removed. |
| Range | 5 to 11520 |

| | |
|------------|---|
| Units | minutes |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

peer

| | |
|------------|--|
| Synopsis | Enter the peer context |
| Context | configure subscriber-mgmt pfcg association <i>string</i> peer |
| Tree | peer |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | PFCP peer IP address |
| Context | configure subscriber-mgmt pfcg association <i>string</i> peer ip-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | ip-address |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy *reference*

| | |
|------------|--|
| Synopsis | Python policy to process PFCP messages |
| Context | configure subscriber-mgmt pfcg association <i>string</i> python-policy <i>reference</i> |
| Tree | python-policy |
| Reference | configure python python-policy <i>string</i> |
| Introduced | 22.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tx

| | |
|-------------|--|
| Synopsis | Enter the tx context |
| Context | configure subscriber-mgmt pfcg association string tx |
| Tree | tx |
| Description | Commands in this context configure how PFCP messages are sent. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retries number

| | |
|-------------|--|
| Synopsis | Number of retries |
| Context | configure subscriber-mgmt pfcg association string tx retries number |
| Tree | retries |
| Description | This command configures the number of times a message is retried before it is considered lost, also known as N1. |
| Range | 0 to 7 |
| Default | 3 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout number

| | |
|-------------|--|
| Synopsis | Retransmission timer |
| Context | configure subscriber-mgmt pfcg association string tx timeout number |
| Tree | timeout |
| Description | This command configures the time after which a message is considered unanswered, also known as T1. |
| Range | 1 to 30 |
| Default | 1 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tll number

| | |
|------------|---|
| Synopsis | TTL value in the IP header of egress PFCP packets |
| Context | configure subscriber-mgmt pfcg association <i>string tx tll number</i> |
| Tree | tll |
| Range | 1 to 255 |
| Default | 255 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up-resiliency

| | |
|------------|---|
| Synopsis | Enter the up-resiliency context |
| Context | configure subscriber-mgmt pfcg up-resiliency |
| Tree | up-resiliency |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pim-policy [name] string

| | |
|----------------|---|
| Synopsis | Enter the pim-policy list instance |
| Context | configure subscriber-mgmt pim-policy <i>string</i> |
| Tree | pim-policy |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] string

| | |
|---------------|---|
| Synopsis | Policy name |
| Context | configure subscriber-mgmt pim-policy <i>string</i> |
| Tree | pim-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
Context **configure** [subscriber-mgmt pim-policy](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-policy [[name](#)] *string*

Synopsis Enter the **ppp-policy** list instance
Context **configure** [subscriber-mgmt ppp-policy](#) *string*
Tree [ppp-policy](#)
Max. Instances 256
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis PPP policy name
Context **configure** [subscriber-mgmt ppp-policy](#) *string*
Tree [ppp-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

allow-same-circuit-id-for-dhcp *boolean*

Synopsis Enable support for IPv4 address allocation on a SAP
Context **configure** [subscriber-mgmt ppp-policy](#) *string* [allow-same-circuit-id-for-dhcp](#) *boolean*

| | |
|------------|---|
| Tree | allow-same-circuit-id-for-dhcp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cookies *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable the use of AC-Cookie tags. |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> cookies <i>boolean</i> |
| Tree | cookies |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-pap-password *string*

| | |
|---------------|--|
| Synopsis | Default PAP password to be used when the PPP client does not provide a password |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> default-pap-password <i>string</i> |
| Tree | default-pap-password |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

default-user-name *string*

| | |
|---------------|---|
| Synopsis | Default username used for authentication |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> default-user-name <i>string</i> |
| Tree | default-user-name |
| Description | This command configures the default username for authentication when not provided in PAP/CHAP authentication (no Name field in CHAP Response message or PeerOld-Length=0 in PAP Authenticate-Request).

The PPP session terminates when no username is provided in the PAP/CHAP authentication and no default username is configured. |
| String Length | 1 to 253 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-ppp-mtu-gt-1492 *boolean*

| | |
|-------------|---|
| Synopsis | Enable PPPoE MRU negotiations greater than 1492 bytes |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> force-ppp-mtu-gt-1492 <i>boolean</i> |
| Tree | force-ppp-mtu-gt-1492 |
| Description | <p>When configured to true, this command enables PPPoE MRU negotiations greater than 1492 bytes without the need to receive a “PPP-Max-Payload” tag in PADI/PADR from the client as defined in RFC 4638, <i>Accommodating a Maximum Transit Unit/ Maximum Receive Unit (MTU/MRU) Greater Than 1492 in the Point-to-Point Protocol over Ethernet (PPPoE)</i>.</p> <p>When configured to false, this command disables PPPoE MRU negotiations greater than 1492 bytes.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipcp-subnet-negotiation *boolean*

| | |
|------------|--|
| Synopsis | Allow IPCP subnet negotiation for PPPoE hosts |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ipcp-subnet-negotiation <i>boolean</i> |
| Tree | ipcp-subnet-negotiation |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

keepalive

| | |
|----------|------------------------------------|
| Synopsis | Enter the keepalive context |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt ppp-policy <i>string</i> keepalive |
| Tree | keepalive |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-up-multiplier *number*

| | |
|------------|--|
| Synopsis | PPP keepalive multiplier |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> keepalive hold-up-multiplier <i>number</i> |
| Tree | hold-up-multiplier |
| Range | 1 to 5 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|--|
| Synopsis | PPP keepalive interval |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> keepalive interval <i>number</i> |
| Tree | interval |
| Range | 4 to 300 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lcp-ignore-identifier *boolean*

| | |
|-------------|---|
| Synopsis | Ignore identifier values in the LCP Echo Reply |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> lcp-ignore-identifier <i>boolean</i> |
| Tree | lcp-ignore-identifier |
| Description | When configured to true , BNG ignores the Identifier field of the Echo-Reply message and keeps the PPP session up.
When configured to false , BNG does not ignore the identifier value, discards any incorrect messages, and the PPP session terminates because of the echo timeout. |
| Default | false |

| | |
|------------|---|
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lcp-ignore-magic-numbers *boolean*

| | |
|------------|---|
| Synopsis | Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> lcp-ignore-magic-numbers <i>boolean</i> |
| Tree | lcp-ignore-magic-numbers |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-sessions-per-cid

| | |
|------------|--|
| Synopsis | Enable the max-sessions-per-cid context |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> max-sessions-per-cid |
| Tree | max-sessions-per-cid |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

allow-sessions-without-cid *boolean*

| | |
|-------------|--|
| Synopsis | Allow PPPoE sessions without an Agent Circuit ID |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> max-sessions-per-cid allow-sessions-without-cid <i>boolean</i> |
| Tree | allow-sessions-without-cid |
| Description | <p>When configured to true, PPPoE sessions without an Agent Circuit ID can be established on a SAP. The limit configured for the maximum number of sessions allowed per Agent Circuit ID does not apply to these sessions.</p> <p>When configured to false, PPPoE sessions without an Agent Circuit ID are denied.</p> <p>The command is valid only when a limit is configured for the maximum sessions per Agent Circuit ID on a SAP.</p> |
| Default | false |
| Introduced | 20.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

limit number

| | |
|-------------|--|
| Synopsis | Maximum sessions per Agent Circuit ID and per SAP |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> max-sessions-per-cid limit <i>number</i> |
| Tree | limit |
| Description | <p>This command configures the maximum number of PPPoE sessions that can be active with the same Agent Circuit ID on the same SAP or MSAP. This limit is enforced in the discovery phase, prior to PAP or CHAP authentication, based on the Agent Circuit ID sub-option present in the vendor-specific PPPoE access loop identification tag added in PADI and PADR messages by a PPPoE intermediate agent.</p> <p>PPPoE sessions without an Agent Circuit ID are not subject to the configured limit; however, sessions without an Agent Circuit ID can only be established when the allow-sessions-without-cid command is configured to true.</p> |
| Range | 1 to 8190 |
| Notes | This element is mandatory. |
| Introduced | 20.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-sessions-per-mac number

| | |
|-------------|--|
| Synopsis | Maximum number of sessions per MAC address |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> max-sessions-per-mac <i>number</i> |
| Tree | max-sessions-per-mac |
| Description | <p>This command sets the maximum PPP sessions that can be opened for a specified MAC address.</p> <p>To enable IPv4 address allocation using the internal DHCPv4 client for multiple PPPoE sessions on a single SAP and having the same MAC address and circuit-ID, the optional CLI parameter allow-same-circuit-id-for-dhcp should be added. The SR OS local DHCP server detects the additional vendor-specific options inserted by the internal DHCPv4 client and use an extended unique key for lease allocation.</p> |
| Range | 1 to 8191 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mlppp

| | |
|----------|--------------------------------|
| Synopsis | Enter the mlppp context |
|----------|--------------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt ppp-policy <i>string</i> mlppp |
| Tree | mlppp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

accept-mrru *boolean*

| | |
|------------|---|
| Synopsis | Accept multilink MRRU LCP option |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> mlppp accept-mrru <i>boolean</i> |
| Tree | accept-mrru |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

endpoint

| | |
|------------|---|
| Synopsis | Enter the endpoint context |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> mlppp endpoint |
| Tree | endpoint |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ip (*ipv4-address* | *keyword*)

| | |
|------------|--|
| Synopsis | Endpoint ID as an IP address |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> mlppp endpoint ip (<i>ipv4-address</i> <i>keyword</i>) |
| Tree | ip |
| Options | system |
| Notes | The following elements are part of a choice: ip or mac . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

mac (*mac-address* | *keyword*)

| | |
|------------|--|
| Synopsis | Endpoint ID as a MAC address |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> mlppp endpoint mac (<i>mac-address</i> <i>keyword</i>) |
| Tree | mac |
| Options | system |
| Notes | The following elements are part of a choice: ip or mac . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

short-sequence-numbers *boolean*

| | |
|------------|---|
| Synopsis | Request a peer to send short sequence numbers |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> mlppp short-sequence-numbers <i>boolean</i> |
| Tree | short-sequence-numbers |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

ncp-renegotiation *keyword*

| | |
|------------|--|
| Synopsis | Behavior for subsequent NCP renegotiation messages |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ncp-renegotiation <i>keyword</i> |
| Tree | ncp-renegotiation |
| Default | terminate-session |
| Options | ignore, terminate-session |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pado-ac-name *string*

| | |
|---------------|--|
| Synopsis | Access Concentrator name used in PPPoE PADO message |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> pado-ac-name <i>string</i> |
| Tree | pado-ac-name |
| String Length | 1 to 128 |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pado-delay *number*

Synopsis Delay timeout before sending a PADO
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [pado-delay](#) *number*
Tree [pado-delay](#)
Range 1 to 30
Units deciseconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-authentication *keyword*

Synopsis PPP authentication protocol to negotiate
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-authentication](#) *keyword*
Tree [ppp-authentication](#)
Default pref-chap
Options pap, chap, pref-chap, pref-pap
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ppp-chap-challenge-length

Synopsis Enter the **ppp-chap-challenge-length** context
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-chap-challenge-length](#)
Tree [ppp-chap-challenge-length](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

max *number*

Synopsis Maximum length for the PPP CHAP challenge
Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-chap-challenge-length](#) *max* *number*

| | |
|------------|---|
| Tree | max |
| Range | 8 to 64 |
| Default | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min number

| | |
|------------|---|
| Synopsis | Minimum length for the PPP CHAP challenge |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-chap-challenge-length <i>min number</i> |
| Tree | min |
| Range | 8 to 64 |
| Default | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-initial-delay boolean

| | |
|------------|--|
| Synopsis | Select delay timeout before starting the PPP stack |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-initial-delay <i>boolean</i> |
| Tree | ppp-initial-delay |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-mtu number

| | |
|------------|---|
| Synopsis | Maximum PPP MTU size |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-mtu <i>number</i> |
| Tree | ppp-mtu |
| Range | 512 to 9212 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-options

| | |
|------------|---|
| Synopsis | Enter the ppp-options context |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-options |
| Tree | ppp-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

custom-option [protocol](#) *keyword* [option-number](#) *number*

| | |
|------------|---|
| Synopsis | Enter the custom-option list instance |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i> |
| Tree | custom-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[protocol](#) *keyword*

| | |
|------------|---|
| Synopsis | Protocol for the custom PPP option |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i> |
| Tree | custom-option |
| Options | lcp, ipcp, ipv6cp |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[option-number](#) *number*

| | |
|------------|---|
| Synopsis | PPP option number |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol <i>keyword</i> option-number <i>number</i> |
| Tree | custom-option |
| Range | 0 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

address *string*

Synopsis IP address of the custom PPP option

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-options](#) [custom-option](#) [protocol](#)
keyword [option-number](#) *number* [address](#) *string*

Tree [address](#)

Notes The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ascii-string *string*

Synopsis ASCII string for the customer PPP option

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-options](#) [custom-option](#) [protocol](#)
keyword [option-number](#) *number* [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

empty

Synopsis Configure an empty PPP option.

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ppp-options](#) [custom-option](#) [protocol](#)
keyword [option-number](#) *number* [empty](#)

Tree [empty](#)

Notes The following elements are part of a mandatory choice: **address**, **ascii-string**, **empty**, or **hex-string**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hex-string *string*

| | |
|---------------|---|
| Synopsis | Hexadecimal string for the custom PPP option |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> ppp-options custom-option protocol
<i>keyword</i> option-number <i>number</i> hex-string <i>string</i> |
| Tree | hex-string |
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: address , ascii-string , empty , or hex-string . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

re-establish-session *boolean*

| | |
|------------|---|
| Synopsis | Reconnect and override an existing session |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> re-establish-session <i>boolean</i> |
| Tree | re-establish-session |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reject-unconfigured-ncp *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable reject unconfigured NCP. |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> reject-unconfigured-ncp <i>boolean</i> |
| Tree | reject-unconfigured-ncp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reply-on-padt *boolean*

| | |
|----------|--|
| Synopsis | Enable/disable reply on PADT packets. |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> reply-on-padt <i>boolean</i> |
| Tree | reply-on-padt |
| Default | false |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-timeout *number*

| | |
|------------|---|
| Synopsis | Session timeout interval |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> session-timeout <i>number</i> |
| Tree | session-timeout |
| Range | 1 to 31104000 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sid-allocation *keyword*

| | |
|-------------|---|
| Synopsis | PPPoE session ID allocation method |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> sid-allocation <i>keyword</i> |
| Tree | sid-allocation |
| Description | This command determines the allocation of session IDs for a PPPoE session with a given MAC address that is active on a given SAP. |
| Default | sequential |
| Options | sequential, random |
| Introduced | 20.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unique-sid *keyword*

| | |
|-------------|---|
| Synopsis | Mode in which a unique session ID is allocated |
| Context | configure subscriber-mgmt ppp-policy <i>string</i> unique-sid <i>keyword</i> |
| Tree | unique-sid |
| Description | This command specifies how unique session IDs are assigned to PPPoE sessions that are active on a single SAP.

This command is used with the sid-allocation command to determine the assignment of session IDs to subsequent PPPoE sessions. |
| Default | per-sap-mac |
| Options | per-sap, per-sap-mac, per-msap |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-client-policy [*name*] *string*

Synopsis Enter the **pppoe-client-policy** list instance
 Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string*
 Tree [pppoe-client-policy](#)
 Max. Instances 256
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis PPPoE client policy name
 Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string*
 Tree [pppoe-client-policy](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [subscriber-mgmt](#) [pppoe-client-policy](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

keepalive

Synopsis Enter the **keepalive** context

| | |
|------------|---|
| Context | configure <i>subscriber-mgmt pppoe-client-policy string</i> <i>keepalive</i> |
| Tree | <i>keepalive</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-up-multiplier *number*

| | |
|------------|---|
| Synopsis | PPPoE keepalive multiplier |
| Context | configure <i>subscriber-mgmt pppoe-client-policy string</i> <i>keepalive hold-up-multiplier number</i> |
| Tree | <i>hold-up-multiplier</i> |
| Range | 1 to 5 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|------------|---|
| Synopsis | PPPoE keepalive interval |
| Context | configure <i>subscriber-mgmt pppoe-client-policy string</i> <i>keepalive interval number</i> |
| Tree | <i>interval</i> |
| Range | 10 to 300 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mru *number*

| | |
|------------|--|
| Synopsis | PPPoE MRU |
| Context | configure <i>subscriber-mgmt pppoe-client-policy string</i> <i>mru number</i> |
| Tree | <i>mru</i> |
| Range | 512 to 9154 |
| Default | 1492 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mtu number

Synopsis PPPoE MTU
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [mtu number](#)
Tree [mtu](#)
Range 512 to 9154
Default 1492
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

python-policy reference

Synopsis Python policy to be applied to all messages in the PPPoE client policy
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [python-policy reference](#)
Tree [python-policy](#)
Reference **configure** [python python-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

restart-backoff

Synopsis Enter the **restart-backoff** context
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff](#)
Tree [restart-backoff](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

initial-time number

Synopsis Initial backoff time
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff](#) [initial-time number](#)
Tree [initial-time](#)
Range 10 to 3600

| | |
|------------|---|
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-time *number*

| | |
|------------|--|
| Synopsis | Maximum backoff time |
| Context | configure subscriber-mgmt pppoe-client-policy <i>string</i> restart-backoff max-time <i>number</i> |
| Tree | max-time |
| Range | 10 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stack

| | |
|------------|---|
| Synopsis | Enter the stack context |
| Context | configure subscriber-mgmt pppoe-client-policy <i>string</i> stack |
| Tree | stack |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4 *boolean*

| | |
|------------|---|
| Synopsis | Start IPCP to retrieve an IPv4 address |
| Context | configure subscriber-mgmt pppoe-client-policy <i>string</i> stack ipv4 <i>boolean</i> |
| Tree | ipv4 |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-slaac *boolean*

| | |
|------------|--|
| Synopsis | Start IPv6CP and use SLAAC to retrieve an IPv6 prefix |
| Context | configure subscriber-mgmt pppoe-client-policy <i>string</i> stack ipv6-slaac <i>boolean</i> |
| Tree | ipv6-slaac |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-accounting-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the radius-accounting-policy list instance |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> |
| Tree | radius-accounting-policy |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[*name*] *string*

| | |
|---------------|---|
| Synopsis | RADIUS-based accounting policy name |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> |
| Tree | radius-accounting-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

acct-tunnel-connection-fmt *string*

| | |
|---------------|--|
| Synopsis | String sent in the accounting message |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> acct-tunnel-connection-fmt <i>string</i> |
| Tree | acct-tunnel-connection-fmt |
| String Length | 1 to 253 |

| | |
|------------|---|
| Default | %n |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

custom-record

| | |
|------------|---|
| Synopsis | Enter the custom-record context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record |
| Tree | custom-record |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queue [*id*] *number*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[*id*] *number*

| | |
|------------|---|
| Synopsis | Queue ID for which counters are collected in the record |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> |
| Tree | queue |
| Range | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

e-counters

| | |
|----------|-------------------------------------|
| Synopsis | Enter the e-counters context |
|----------|-------------------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters |
| Tree | e-counters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-octets-discarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the in-profile octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-octets-discarded-count <i>boolean</i> |
| Tree | in-profile-octets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-octets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the in-profile octets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-octets-forwarded-count <i>boolean</i> |
| Tree | in-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-packets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the in-profile packets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-packets-discarded-count <i>boolean</i> |
| Tree | in-profile-packets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-packets-forwarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the in-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters in-profile-packets-forwarded-count <i>boolean</i> |
| Tree | in-profile-packets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-octets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the out-profile octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters out-profile-octets-discarded-count <i>boolean</i> |
| Tree | out-profile-octets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-octets-forwarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the out-of-profile octets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters out-profile-octets-forwarded-count <i>boolean</i> |
| Tree | out-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-packets-discarded-count *boolean*

| | |
|----------|--|
| Synopsis | Include the out-profile packets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number e-counters out-profile-packets-discarded-count <i>boolean</i> |
| Tree | out-profile-packets-discarded-count |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-packets-forwarded-count *boolean*

Synopsis Include the out-of-profile packets forwarded count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [e-counters](#) [out-profile-packets-forwarded-count](#) *boolean*
Tree [out-profile-packets-forwarded-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

i-counters

Synopsis Enter the **i-counters** context
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#)
Tree [i-counters](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-octets-offered-count *boolean*

Synopsis Include the all octets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [all-octets-offered-count](#) *boolean*
Tree [all-octets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-packets-offered-count *boolean*

Synopsis Include all packets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [all-packets-offered-count](#) *boolean*

| | |
|------------|---|
| Tree | all-packets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-octets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the high octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> i-counters high-octets-discarded-count <i>boolean</i> |
| Tree | high-octets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-octets-offered-count *boolean*

| | |
|------------|---|
| Synopsis | Include the high octets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> i-counters high-octets-offered-count <i>boolean</i> |
| Tree | high-octets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-packets-discarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the high packets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue <i>number</i> i-counters high-packets-discarded-count <i>boolean</i> |
| Tree | high-packets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-packets-offered-count *boolean*

| | |
|------------|---|
| Synopsis | Include the high packets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters high-packets-offered-count <i>boolean</i> |
| Tree | high-packets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-octets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the in-profile octets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters in-profile-octets-forwarded-count <i>boolean</i> |
| Tree | in-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-packets-forwarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the in-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters in-profile-packets-forwarded-count <i>boolean</i> |
| Tree | in-profile-packets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

low-octets-discarded-count *boolean*

| | |
|----------|---|
| Synopsis | Include the low octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters low-octets-discarded-count <i>boolean</i> |
| Tree | low-octets-discarded-count |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-octets-offered-count *boolean*

Synopsis Include the low octets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) **low-octets-offered-count** *boolean*
Tree [low-octets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-discarded-count *boolean*

Synopsis Include the low packets discarded count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) **low-packets-discarded-count** *boolean*
Tree [low-packets-discarded-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

low-packets-offered-count *boolean*

Synopsis Include the low packets offered count
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) **low-packets-offered-count** *boolean*
Tree [low-packets-offered-count](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

out-profile-octets-forwarded-count *boolean*

Synopsis Include the out-of-profile octets forwarded count

| | |
|------------|---|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters out-profile-octets-forwarded-count <i>boolean</i> |
| Tree | out-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-packets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the out-of-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters out-profile-packets-forwarded-count <i>boolean</i> |
| Tree | out-profile-packets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

uncoloured-octets-offered-count *boolean*

| | |
|------------|--|
| Synopsis | Include the uncolored octets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters uncoloured-octets-offered-count <i>boolean</i> |
| Tree | uncoloured-octets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

uncoloured-packets-offered-count *boolean*

| | |
|------------|---|
| Synopsis | Include the uncolored packets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record queue number i-counters uncoloured-packets-offered-count <i>boolean</i> |
| Tree | uncoloured-packets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ref-queue

| | |
|------------|---|
| Synopsis | Enter the ref-queue context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue |
| Tree | ref-queue |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

all

| | |
|------------|---|
| Synopsis | Apply significant change to counters for all queues |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue all |
| Tree | all |
| Notes | The following elements are part of a choice: all or id . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

e-counters

| | |
|------------|--|
| Synopsis | Enter the e-counters context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters |
| Tree | e-counters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-octets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the in-profile octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i> |
| Tree | in-profile-octets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-octets-forwarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the in-profile octets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-octets-forwarded-count <i>boolean</i> |
| Tree | in-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-packets-discarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the in-profile packets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-packets-discarded-count <i>boolean</i> |
| Tree | in-profile-packets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-packets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the in-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters in-profile-packets-forwarded-count <i>boolean</i> |
| Tree | in-profile-packets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-octets-discarded-count *boolean*

| | |
|----------|--|
| Synopsis | Include the out-profile octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-octets-discarded-count <i>boolean</i> |
| Tree | out-profile-octets-discarded-count |

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-octets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the out-of-profile octets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-octets-forwarded-count <i>boolean</i> |
| Tree | out-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-packets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the out-profile packets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-packets-discarded-count <i>boolean</i> |
| Tree | out-profile-packets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-packets-forwarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the out-of-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue e-counters out-profile-packets-forwarded-count <i>boolean</i> |
| Tree | out-profile-packets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

i-counters

| | |
|------------|--|
| Synopsis | Enter the i-counters context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters |
| Tree | i-counters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

all-octets-offered-count *boolean*

| | |
|------------|--|
| Synopsis | Include the all octets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters all-octets-offered-count <i>boolean</i> |
| Tree | all-octets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

all-packets-offered-count *boolean*

| | |
|------------|---|
| Synopsis | Include all packets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters all-packets-offered-count <i>boolean</i> |
| Tree | all-packets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-octets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the high octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters high-octets-discarded-count <i>boolean</i> |
| Tree | high-octets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-octets-offered-count *boolean*

Synopsis Include the high octets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [high-octets-offered-count](#) *boolean*

Tree [high-octets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-discarded-count *boolean*

Synopsis Include the high packets discarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [high-packets-discarded-count](#) *boolean*

Tree [high-packets-discarded-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

high-packets-offered-count *boolean*

Synopsis Include the high packets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [high-packets-offered-count](#) *boolean*

Tree [high-packets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

in-profile-octets-forwarded-count *boolean*

Synopsis Include the in-profile octets forwarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [in-profile-octets-forwarded-count](#) *boolean*

| | |
|------------|---|
| Tree | in-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

in-profile-packets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the in-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters in-profile-packets-forwarded-count <i>boolean</i> |
| Tree | in-profile-packets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

low-octets-discarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the low octets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-octets-discarded-count <i>boolean</i> |
| Tree | low-octets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

low-octets-offered-count *boolean*

| | |
|------------|--|
| Synopsis | Include the low octets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-octets-offered-count <i>boolean</i> |
| Tree | low-octets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

low-packets-discarded-count *boolean*

| | |
|------------|---|
| Synopsis | Include the low packets discarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-packets-discarded-count <i>boolean</i> |
| Tree | low-packets-discarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

low-packets-offered-count *boolean*

| | |
|------------|---|
| Synopsis | Include the low packets offered count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters low-packets-offered-count <i>boolean</i> |
| Tree | low-packets-offered-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-octets-forwarded-count *boolean*

| | |
|------------|--|
| Synopsis | Include the out-of-profile octets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters out-profile-octets-forwarded-count <i>boolean</i> |
| Tree | out-profile-octets-forwarded-count |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

out-profile-packets-forwarded-count *boolean*

| | |
|----------|---|
| Synopsis | Include the out-of-profile packets forwarded count |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record ref-queue i-counters out-profile-packets-forwarded-count <i>boolean</i> |
| Tree | out-profile-packets-forwarded-count |
| Default | false |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-octets-offered-count *boolean*

Synopsis Include the uncolored octets offered count
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [uncoloured-octets-offered-count](#) *boolean*
 Tree [uncoloured-octets-offered-count](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

uncoloured-packets-offered-count *boolean*

Synopsis Include the uncolored packets offered count
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [uncoloured-packets-offered-count](#) *boolean*
 Tree [uncoloured-packets-offered-count](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

id *reference*

Synopsis Queue ID
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [id](#) *reference*
 Tree [id](#)
 Reference **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number*
 Notes The following elements are part of a choice: **all** or **id**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

significant-change *number*

| | |
|------------|--|
| Synopsis | Significant change required to generate the record |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> custom-record significant-change <i>number</i> |
| Tree | significant-change |
| Range | 0 to 4294967295 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

delay-start-time *number*

| | |
|------------|--|
| Synopsis | Accounting start delay |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> delay-start-time <i>number</i> |
| Tree | delay-start-time |
| Range | 1 to 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-accounting

| | |
|------------|---|
| Synopsis | Enter the host-accounting context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> host-accounting |
| Tree | host-accounting |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of per-host accounting |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> host-accounting admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interim-update *boolean*

| | |
|------------|---|
| Synopsis | Allow interim-update accounting messages to be sent |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> host-accounting interim-update <i>boolean</i> |
| Tree | interim-update |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-radius-attribute

| | |
|------------|--|
| Synopsis | Enter the include-radius-attribute context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute |
| Tree | include-radius-attribute |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

access-loop-options *boolean*

| | |
|----------|---|
| Synopsis | Include access loop information |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute access-loop-options <i>boolean</i> |
| Tree | access-loop-options |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-authentic *boolean*

Synopsis Enable/disable include of the acct-authentic attribute.
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-authentic](#) *boolean*
Tree [acct-authentic](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-delay-time *boolean*

Synopsis Include the acct-delay-time RADIUS attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-delay-time](#) *boolean*
Tree [acct-delay-time](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

acct-triggered-reason *boolean*

Synopsis Include Alc-Acct-Triggered-Reason attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-triggered-reason](#) *boolean*
Tree [acct-triggered-reason](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

all-authorized-session-addresses *boolean*

Synopsis Include all included and authorized address/prefix attributes in session accounting

| | |
|------------|--|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute all-authorized-session-addresses <i>boolean</i> |
| Tree | all-authorized-session-addresses |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

apn boolean

| | |
|------------|---|
| Synopsis | Enable/disable include of the APN attribute. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute apn <i>boolean</i> |
| Tree | apn |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bearer-fteid boolean

| | |
|------------|--|
| Synopsis | Include bearer-fteid attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute bearer-fteid <i>boolean</i> |
| Tree | bearer-fteid |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bonding-active-connections boolean

| | |
|------------|--|
| Synopsis | Include the RADIUS Alc-Bonding-Active-Connection VSA |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute bonding-active-connections <i>boolean</i> |
| Tree | bonding-active-connections |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

bonding-id *boolean*

| | |
|------------|--|
| Synopsis | Include the Alc-Bonding-Id VSA |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute bonding-id <i>boolean</i> |
| Tree | bonding-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

brg-num-active-sessions *boolean*

| | |
|------------|---|
| Synopsis | Include the RADIUS Alc-BRG-Num-Active-Sessions VSA |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute brg-num-active-sessions <i>boolean</i> |
| Tree | brg-num-active-sessions |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

called-station-id *boolean*

| | |
|------------|---|
| Synopsis | Include called-station-id attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute called-station-id <i>boolean</i> |
| Tree | called-station-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

calling-station-id

| | |
|----------|---|
| Synopsis | Enable the calling-station-id context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute calling-station-id |
| Tree | calling-station-id |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type *keyword*

Synopsis Format of the Calling-Station-ID attribute
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **calling-station-id** *type* **keyword**
Tree **type**
Default sap-string
Options sap-string, mac, sap-id, remote-id, llid
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

circuit-id *boolean*

Synopsis Include circuit-id attribute
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **circuit-id** *boolean*
Tree **circuit-id**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

delegated-ipv6-prefix *boolean*

Synopsis Include delegated-ipv6-prefix attribute
Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **delegated-ipv6-prefix** *boolean*
Tree **delegated-ipv6-prefix**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

detailed-acct-attributes *boolean*

| | |
|------------|--|
| Synopsis | Include more detailed accounting attributes |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute detailed-acct-attributes <i>boolean</i> |
| Tree | detailed-acct-attributes |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp-vendor-class-id *boolean*

| | |
|------------|--|
| Synopsis | Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute dhcp-vendor-class-id <i>boolean</i> |
| Tree | dhcp-vendor-class-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

error-code *boolean*

| | |
|------------|--|
| Synopsis | Include detailed error codes |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute error-code <i>boolean</i> |
| Tree | error-code |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

firewall-info *boolean*

| | |
|----------|---|
| Synopsis | Include the Firewall Information VSA in AAA protocols |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute firewall-info <i>boolean</i> |
| Tree | firewall-info |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-interface-id *boolean*

Synopsis Include framed-interface-id attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [framed-interface-id](#) *boolean*
Tree [framed-interface-id](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ip-address *boolean*

Synopsis Include framed-ip-address attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [framed-ip-address](#) *boolean*
Tree [framed-ip-address](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ip-netmask *boolean*

Synopsis Include framed-ip-netmask attribute
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [framed-ip-netmask](#) *boolean*
Tree [framed-ip-netmask](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

framed-ipv6-prefix *boolean*

Synopsis Include framed-ipv6-prefix attribute

| | |
|------------|--|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute framed-ipv6-prefix <i>boolean</i> |
| Tree | framed-ipv6-prefix |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

framed-ipv6-route *boolean*

| | |
|------------|---|
| Synopsis | Include framed-ipv6-route attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute framed-ipv6-route <i>boolean</i> |
| Tree | framed-ipv6-route |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

framed-route *boolean*

| | |
|------------|--|
| Synopsis | Include framed-route attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute framed-route <i>boolean</i> |
| Tree | framed-route |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

imei *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable include of the IMEI attribute. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute imei <i>boolean</i> |
| Tree | imei |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

imsi *boolean*

| | |
|------------|--|
| Synopsis | Include the IMSI attribute for FWA sessions |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute imsi <i>boolean</i> |
| Tree | imsi |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ipv6-address *boolean*

| | |
|------------|--|
| Synopsis | Include the IPv6 address attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute ipv6-address <i>boolean</i> |
| Tree | ipv6-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lanext-bridge-id *boolean*

| | |
|------------|--|
| Synopsis | Include Alc-Bridge-Id in RADIUS accounting packets |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-bridge-id <i>boolean</i> |
| Tree | lanext-bridge-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lanext-device-type *boolean*

| | |
|----------|--|
| Synopsis | Include Alc-HLE-Device-type in accounting packets |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-device-type <i>boolean</i> |
| Tree | lanext-device-type |

| | |
|------------|------------------------------------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lanext-route-distinguisher *boolean*

| | |
|------------|--|
| Synopsis | Include route distinguisher (Alc-RD) in RADIUS packets |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-route-distinguisher <i>boolean</i> |
| Tree | lanext-route-distinguisher |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lanext-route-target *boolean*

| | |
|------------|---|
| Synopsis | Include route target (Alc-RT) in RADIUS packets |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-route-target <i>boolean</i> |
| Tree | lanext-route-target |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

lanext-vni *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable include of the lanext-vni attribute. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute lanext-vni <i>boolean</i> |
| Tree | lanext-vni |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-address *boolean*

| | |
|------------|---|
| Synopsis | Include the client MAC address in the RADIUS message |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute mac-address <i>boolean</i> |
| Tree | mac-address |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

msisdn *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable include of the MSISDN attribute. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute msisdn <i>boolean</i> |
| Tree | msisdn |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nas-identifier *boolean*

| | |
|------------|--|
| Synopsis | Enable/disable include of the NAS-Identifier attribute. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i> |
| Tree | nas-identifier |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port

| | |
|------------|---|
| Synopsis | Enable the nas-port context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port |
| Tree | nas-port |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

bit-spec *string*

Synopsis RADIUS NAS-Port attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **nas-port** **bit-spec** *string*

Tree [bit-spec](#)

String Length 1 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nas-port-id

Synopsis Enable the **nas-port-id** context

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **nas-port-id**

Tree [nas-port-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

prefix-string *string*

Synopsis String to be prefixed to the NAS-Port-Id attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **nas-port-id** **prefix-string** *string*

Tree [prefix-string](#)

String Length 1 to 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

suffix *keyword*

Synopsis String to be suffixed to the NAS-Port-Id attribute

| | |
|------------|--|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port-id suffix <i>keyword</i> |
| Tree | suffix |
| Options | circuit-id, remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port-type

| | |
|------------|--|
| Synopsis | Enable the nas-port-type context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port-type |
| Tree | nas-port-type |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type (*keyword* | *number*)

| | |
|------------|--|
| Synopsis | Value for RADIUS NAS-Port-Type attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nas-port-type type (<i>keyword</i> <i>number</i>) |
| Tree | type |
| Range | 0 to 255 |
| Default | rfc-aligned |
| Options | rfc-aligned |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nat-port-range *boolean*

| | |
|------------|--|
| Synopsis | Include NAT port range attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute nat-port-range <i>boolean</i> |
| Tree | nat-port-range |
| Default | false |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

Synopsis Include remote-id attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **remote-id** *boolean*

Tree [remote-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *boolean*

Synopsis Include sla-profile attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **sla-profile** *boolean*

Tree [sla-profile](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

spi-sharing-id *boolean*

Synopsis Include spi-sharing-id attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **spi-sharing-id** *boolean*

Tree [spi-sharing-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

std-acct-attributes *boolean*

Synopsis Include standard accounting attributes

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **std-acct-attributes** *boolean*

| | |
|------------|---|
| Tree | std-acct-attributes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

steering-profile *boolean*

| | |
|------------|--|
| Synopsis | Include the RADIUS Alc-Steering-Profile VSA |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute steering-profile <i>boolean</i> |
| Tree | steering-profile |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *boolean*

| | |
|------------|---|
| Synopsis | Include sub-profile attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute sub-profile <i>boolean</i> |
| Tree | sub-profile |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subscriber-id *boolean*

| | |
|------------|---|
| Synopsis | Include subscriber-id attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute subscriber-id <i>boolean</i> |
| Tree | subscriber-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tunnel-client-attrs *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable include of tunnel-client attributes. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute tunnel-client-attrs <i>boolean</i> |
| Tree | tunnel-client-attrs |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tunnel-server-attrs *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable include of tunnel-server attributes. |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute tunnel-server-attrs <i>boolean</i> |
| Tree | tunnel-server-attrs |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

uli *boolean*

| | |
|------------|---|
| Synopsis | Generate the ULI RADIUS attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute uli <i>boolean</i> |
| Tree | uli |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

user-name *boolean*

| | |
|----------|---|
| Synopsis | Include the user-name attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute user-name <i>boolean</i> |
| Tree | user-name |
| Default | false |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

v6-aggregate-stats *boolean*

Synopsis Report IPv6 aggregated forwarded octet and packet counters using RADIUS VSAs
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [v6-aggregate-stats](#) *boolean*
Tree [v6-aggregate-stats](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-num-attached-ues *boolean*

Synopsis Include the RADIUS Alc-Num-Attached-UEs VSA
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [wifi-num-attached-ues](#) *boolean*
Tree [wifi-num-attached-ues](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-rssi *boolean*

Synopsis Include 802.11 received signal strength indicator
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [wifi-rssi](#) *boolean*
Tree [wifi-rssi](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-ssid-vlan *boolean*

Synopsis Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA

| | |
|------------|--|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute wifi-ssid-vlan <i>boolean</i> |
| Tree | wifi-ssid-vlan |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

xconnect-tunnel-home-address *boolean*

| | |
|------------|--|
| Synopsis | Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> include-radius-attribute xconnect-tunnel-home-address <i>boolean</i> |
| Tree | xconnect-tunnel-home-address |
| Default | false |
| Introduced | 16.0.R3 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mcs-interval

| | |
|------------|--|
| Synopsis | Enter the mcs-interval context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> mcs-interval |
| Tree | mcs-interval |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval (*keyword* | *number*)

| | |
|-------------|--|
| Synopsis | MCS synchronization interval of usage counters |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> mcs-interval interval (<i>keyword</i> <i>number</i>) |
| Tree | interval |
| Description | This command specifies the interval at which the active BNG in a dual-homed deployment synchronizes subscriber accounting data using MCS to the standby BNG. The MCS interval is a statically configured value or equal to the configured RADIUS accounting update-interval. |
| Range | 5 to 60 |
| Units | minutes |

| | |
|------------|---|
| Options | none, use-update-interval |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queue-instance-accounting

| | |
|------------|---|
| Synopsis | Enter the queue-instance-accounting context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> queue-instance-accounting |
| Tree | queue-instance-accounting |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of per-queue instance accounting |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> queue-instance-accounting admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interim-update *boolean*

| | |
|------------|---|
| Synopsis | Send accounting interim-update messages for the queue instance |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> queue-instance-accounting interim-update <i>boolean</i> |
| Tree | interim-update |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-server-policy *reference*

| | |
|----------|---------------------------------|
| Synopsis | Referenced RADIUS server policy |
|----------|---------------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> radius-server-policy <i>reference</i> |
| Tree | radius-server-policy |
| Reference | configure aaa radius server-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-accounting

| | |
|------------|--|
| Synopsis | Enter the session-accounting context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting |
| Tree | session-accounting |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of per-session accounting |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-update *boolean*

| | |
|------------|---|
| Synopsis | Allow host updates |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting host-update <i>boolean</i> |
| Tree | host-update |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interim-update *boolean*

| | |
|------------|--|
| Synopsis | Allow interim-update accounting messages to be sent |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> session-accounting interim-update <i>boolean</i> |
| Tree | interim-update |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-id-format *keyword*

| | |
|------------|--|
| Synopsis | Format used in accounting session ID attributes |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> session-id-format <i>keyword</i> |
| Tree | session-id-format |
| Default | description |
| Options | description, number |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

triggered-updates

| | |
|-------------|---|
| Synopsis | Enter the triggered-updates context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates |
| Tree | triggered-updates |
| Description | Commands in this context configure non-periodic accounting updates that are triggered by specific events. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gtp-change

| | |
|----------|--|
| Synopsis | Enter the gtp-change context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-change |
| Tree | gtp-change |

| | |
|-------------|--|
| Description | Commands in this context configure which GTP-related changes trigger an interim accounting update.

This command is mutually exclusive with the legacy gtp-mobility command, which triggers interim accounting updates for all changes. |
| Notes | The following elements are part of a choice: gtp-change or gtp-mobility . |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

s1-release *boolean*

| | |
|------------|---|
| Synopsis | Send an IU for S1 release (idle) procedure |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-change s1-release <i>boolean</i> |
| Tree | s1-release |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

service-request *boolean*

| | |
|------------|--|
| Synopsis | Send an IU for service request (reactivation) procedure |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-change service-request <i>boolean</i> |
| Tree | service-request |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

teidc-change *boolean*

| | |
|-------------|---|
| Synopsis | Send an IU when GTP-C TEIDs are changed |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-change teidc-change <i>boolean</i> |
| Tree | teidc-change |
| Description | When configured to true , the router sends an interim accounting update when GTP-C TEIDs are changed. Changes to GTP-C TEIDs typically indicate an MME change. |
| Default | false |

| | |
|------------|------------------------------------|
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

teidu-change *boolean*

| | |
|-------------|---|
| Synopsis | Send an IU when GTP-U TEIDs are changed |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-change teidu-change <i>boolean</i> |
| Tree | teidu-change |
| Description | When configured to true , the router sends an interim accounting update when GTP-U TEIDs are changed. This update typically happens during mobility, idling, or service request procedures |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

uli-change *boolean*

| | |
|------------|---|
| Synopsis | Send an IU when a user location change is detected |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-change uli-change <i>boolean</i> |
| Tree | uli-change |
| Default | false |
| Introduced | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gtp-mobility *boolean*



WARNING:

This element is deprecated and will be removed in a future release.

| | |
|----------|---|
| Synopsis | Send updates for mobility events |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> triggered-updates gtp-mobility <i>boolean</i> |
| Tree | gtp-mobility |
| Default | false |
| Notes | The following elements are part of a choice: gtp-change or gtp-mobility . |

| | |
|------------|------------------------------------|
| Introduced | 16.0.R5 |
| Deprecated | 23.3.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

update-interval

| | |
|-------------|---|
| Synopsis | Enter the update-interval context |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> update-interval |
| Tree | update-interval |
| Description | Commands in this context configure the attributes of the intermediate update interval. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|-------------|---|
| Synopsis | Intermediate update interval |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> update-interval <i>interval number</i> |
| Tree | interval |
| Description | <p>This command specifies the interval at which accounting data of subscriber hosts is updated in a RADIUS Accounting Interim-Update message. The interim-update option must be enabled when specifying the accounting mode in the RADIUS accounting policy.</p> <p>A RADIUS-specified interim interval (attribute [85] Acct-Interim-Interval) overrides the CLI configured value.</p> |
| Range | 5 to 259200 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

jitter (*keyword* | *number*)

| | |
|----------|--|
| Synopsis | Maximum random delay for intermediate update interval |
| Context | configure subscriber-mgmt radius-accounting-policy <i>string</i> update-interval <i>jitter (keyword number)</i> |
| Tree | jitter |

| | |
|-------------|--|
| Description | This command specifies the absolute maximum random delay introduced on the update interval between two accounting interim update messages. The effective maximum random delay value is the minimum of the configured absolute jitter value and 10% of the configured update-interval.

A value of zero sends the accounting interim update message without introducing an additional random delay. |
| Range | 0 to 3600 |
| Default | auto |
| Units | seconds |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-authentication-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the radius-authentication-policy list instance |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> |
| Tree | radius-authentication-policy |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | RADIUS authentication policy name |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> |
| Tree | radius-authentication-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

Context **configure subscriber-mgmt radius-authentication-policy** *string description string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

fallback

Synopsis Enter the **fallback** context
Context **configure subscriber-mgmt radius-authentication-policy** *string fallback*
Tree [fallback](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

action

Synopsis Enter the **action** context
Context **configure subscriber-mgmt radius-authentication-policy** *string fallback action*
Tree [action](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accept

Synopsis Automatically accept all authentication requests
Context **configure subscriber-mgmt radius-authentication-policy** *string fallback action accept*
Tree [accept](#)
Notes The following elements are part of a choice: **accept** or **user-db**.
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-db *string*

Synopsis Local user database used to authenticate to the server

| | |
|---------------|---|
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> fallback action user-db <i>string</i> |
| Tree | user-db |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: accept or user-db . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

force-probing *boolean*

| | |
|------------|---|
| Synopsis | Enable force probing |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> fallback force-probing <i>boolean</i> |
| Tree | force-probing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

include-radius-attribute

| | |
|------------|--|
| Synopsis | Enter the include-radius-attribute context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute |
| Tree | include-radius-attribute |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

access-loop-options *boolean*

| | |
|------------|---|
| Synopsis | Include access loop information |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute access-loop-options <i>boolean</i> |
| Tree | access-loop-options |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

acct-session-id

| | |
|------------|--|
| Synopsis | Enable the acct-session-id context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute acct-session-id |
| Tree | acct-session-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|---|
| Synopsis | Format of the accounting session ID attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute acct-session-id type <i>keyword</i> |
| Tree | type |
| Default | host |
| Options | host, session |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

apn boolean

| | |
|------------|---|
| Synopsis | Enable/disable include of the APN attribute. |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute apn <i>boolean</i> |
| Tree | apn |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

called-station-id boolean

| | |
|----------|---|
| Synopsis | Include called-station-id attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute called-station-id <i>boolean</i> |
| Tree | called-station-id |

| | |
|------------|---|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

calling-station-id

| | |
|------------|---|
| Synopsis | Enable the calling-station-id context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute calling-station-id |
| Tree | calling-station-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type *keyword*

| | |
|------------|--|
| Synopsis | Format of the Calling-Station-ID attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute calling-station-id type <i>keyword</i> |
| Tree | type |
| Default | sap-string |
| Options | sap-string, mac, sap-id, remote-id, llid |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

circuit-id *boolean*

| | |
|------------|--|
| Synopsis | Include circuit-id attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute circuit-id <i>boolean</i> |
| Tree | circuit-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp-options *boolean*

| | |
|------------|--|
| Synopsis | Generate the DHCP options RADIUS attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute dhcp-options <i>boolean</i> |
| Tree | dhcp-options |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp-vendor-class-id *boolean*

| | |
|------------|--|
| Synopsis | Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute dhcp-vendor-class-id <i>boolean</i> |
| Tree | dhcp-vendor-class-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp6-options *boolean*

| | |
|------------|---|
| Synopsis | Generate the DHCPv6 options RADIUS attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute dhcp6-options <i>boolean</i> |
| Tree | dhcp6-options |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gprs-negotiated-qos-profile *boolean*

| | |
|----------|---|
| Synopsis | Generate the GPRS negotiated QoS profile RADIUS attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute gprs-negotiated-qos-profile <i>boolean</i> |
| Tree | gprs-negotiated-qos-profile |
| Default | false |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imei *boolean*

Synopsis Enable/disable include of the IMEI attribute.
Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **imei** *boolean*
Tree **imei**
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

imsi *boolean*

Synopsis Include the IMSI attribute for FWA sessions
Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **imsi** *boolean*
Tree **imsi**
Default false
Introduced 22.2.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mac-address *boolean*

Synopsis Include the client MAC address in the RADIUS message
Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **mac-address** *boolean*
Tree **mac-address**
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

msisdn *boolean*

Synopsis Enable/disable include of the MSISDN attribute.

| | |
|------------|---|
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute msisdn <i>boolean</i> |
| Tree | msisdn |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

nas-identifier *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable include of the NAS-Identifier attribute. |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-identifier <i>boolean</i> |
| Tree | nas-identifier |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port

| | |
|------------|--|
| Synopsis | Enable the nas-port context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port |
| Tree | nas-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bit-spec *string*

| | |
|---------------|---|
| Synopsis | RADIUS NAS-Port attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port bit-spec <i>string</i> |
| Tree | bit-spec |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port-id

| | |
|------------|--|
| Synopsis | Enable the nas-port-id context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port-id |
| Tree | nas-port-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-string *string*

| | |
|---------------|--|
| Synopsis | String to be prefixed to the NAS-Port-Id attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port-id prefix-string <i>string</i> |
| Tree | prefix-string |
| String Length | 1 to 8 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

suffix *keyword*

| | |
|------------|--|
| Synopsis | String to be suffixed to the NAS-Port-Id attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port-id suffix <i>keyword</i> |
| Tree | suffix |
| Options | circuit-id, remote-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nas-port-type

| | |
|------------|--|
| Synopsis | Enable the nas-port-type context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute nas-port-type |
| Tree | nas-port-type |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

type (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute

Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **nas-port-type** **type** (*keyword* | *number*)

Tree [type](#)

Range 0 to 255

Default rfc-aligned

Options rfc-aligned

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-service-name *boolean*

Synopsis Generate the pppoe-service-name RADIUS attribute

Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **pppoe-service-name** *boolean*

Tree [pppoe-service-name](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rat-type *boolean*

Synopsis Generate the RAT type RADIUS attribute

Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **rat-type** *boolean*

Tree [rat-type](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-id *boolean*

| | |
|------------|---|
| Synopsis | Include remote-id attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute remote-id <i>boolean</i> |
| Tree | remote-id |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-session-index *boolean*

| | |
|------------|---|
| Synopsis | Generate the per-SAP unique session index |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute sap-session-index <i>boolean</i> |
| Tree | sap-session-index |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tunnel-server-attrs *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable include of tunnel-server attributes. |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute tunnel-server-attrs <i>boolean</i> |
| Tree | tunnel-server-attrs |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

uli *boolean*

| | |
|----------|---|
| Synopsis | Generate the ULI RADIUS attribute |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> include-radius-attribute uli <i>boolean</i> |
| Tree | uli |
| Default | false |

Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

wifi-num-attached-ues *boolean*

Synopsis Include the RADIUS Alc-Num-Attached-UEs VSA
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [wifi-num-attached-ues](#) *boolean*
Tree [wifi-num-attached-ues](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

wifi-ssid-vlan *boolean*

Synopsis Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [wifi-ssid-vlan](#) *boolean*
Tree [wifi-ssid-vlan](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

xconnect-tunnel-home-address *boolean*

Synopsis Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [xconnect-tunnel-home-address](#) *boolean*
Tree [xconnect-tunnel-home-address](#)
Default false
Introduced 16.0.R5
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

password *string*

Synopsis RADIUS request password

| | |
|---------------|---|
| Context | configure subscriber-mgmt radius-authentication-policy <i>string password string</i> |
| Tree | password |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp-user-name

| | |
|------------|---|
| Synopsis | Enter the ppp-user-name context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string ppp-user-name</i> |
| Tree | ppp-user-name |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-name *string*

| | |
|---------------|--|
| Synopsis | Domain name |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string ppp-user-name domain-name string</i> |
| Tree | domain-name |
| String Length | 1 to 128 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

domain-operation *keyword*

| | |
|-------------|---|
| Synopsis | Operation to perform on the PAP or CHAP username |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string ppp-user-name domain-operation keyword</i> |
| Tree | domain-operation |
| Description | This command specifies the operation to perform on the PAP or CHAP username.
When unconfigured, there is no operation and the PAP or CHAP username is not changed. |
| Options | append, strip, replace, default |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-access-method *keyword*

| | |
|------------|--|
| Synopsis | PPPoE access method |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> pppoe-access-method <i>keyword</i> |
| Tree | pppoe-access-method |
| Default | padi |
| Options | none, padi, pap-chap |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-server-policy *reference*

| | |
|------------|---|
| Synopsis | Referenced RADIUS server policy |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> radius-server-policy <i>reference</i> |
| Tree | radius-server-policy |
| Reference | configure aaa radius server-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

re-authentication *boolean*

| | |
|------------|--|
| Synopsis | Enable re-authentication on IPOE renewal |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> re-authentication <i>boolean</i> |
| Tree | re-authentication |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

send-acct-stop-on-fail

| | |
|------------|--|
| Synopsis | Enter the send-acct-stop-on-fail context |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> send-acct-stop-on-fail |
| Tree | send-acct-stop-on-fail |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-accept-failure *boolean*

Synopsis Send an accounting stop message when a failure occurs

Context **configure subscriber-mgmt radius-authentication-policy** *string* **send-acct-stop-on-fail on-accept-failure** *boolean*

Tree [on-accept-failure](#)

Description When configured to **true**, the system sends an accounting stop message when a failure occurs after the reception of a RADIUS Access-Accept message (such as a duplicate IP address).

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-reject *boolean*

Synopsis Send an accounting stop message for Access-Reject

Context **configure subscriber-mgmt radius-authentication-policy** *string* **send-acct-stop-on-fail on-reject** *boolean*

Tree [on-reject](#)

Description When configured to **true**, the system sends an accounting stop message when an Access-Reject message is received.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

on-request-failure *boolean*

Synopsis Send an accounting stop message for failures

Context **configure subscriber-mgmt radius-authentication-policy** *string* **send-acct-stop-on-fail on-request-failure** *boolean*

Tree [on-request-failure](#)

Description When configured to **true**, the system sends an accounting stop message when a RADIUS Access-Request message cannot be sent (for example, there is no server configured, or timeout).

Default false

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

user-name

Synopsis Enter the **user-name** context
 Context **configure subscriber-mgmt radius-authentication-policy string user-name**
 Tree [user-name](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-name string

Synopsis Domain name
 Context **configure subscriber-mgmt radius-authentication-policy string user-name domain-name string**
 Tree [domain-name](#)
 String Length 1 to 128
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

domain-operation keyword

Synopsis Operation to perform on the username
 Context **configure subscriber-mgmt radius-authentication-policy string user-name domain-operation keyword**
 Tree [domain-operation](#)
 Description This command specifies the operation to perform on the username.
 When unconfigured, there is no operation and the username is not changed.
 Options append, strip, replace, default
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

format keyword

Synopsis User name format in the RADIUS message

| | |
|------------|---|
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> <i>user-name</i> <i>format</i> <i>keyword</i> |
| Tree | format |
| Default | mac |
| Options | mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, ppp-user-name |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gtp-format *keyword*

| | |
|-------------|---|
| Synopsis | Username format used for FWA sessions |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> <i>user-name</i> gtp-format <i>keyword</i> |
| Tree | gtp-format |
| Description | This command specifies the username format to use for FWA sessions. If a PAP message is present in the PCO IE of the Create Session request, the system uses that for authentication instead of the format specified for this command. If you specify a format that includes APN, the separator is an @ character; for example, msisdn@apn. |
| Default | imsi |
| Options | imsi, imsi-apn, msisdn, msisdn-apn |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mac-format *string*

| | |
|---------------|---|
| Synopsis | MAC address format when contacting a RADIUS server |
| Context | configure subscriber-mgmt radius-authentication-policy <i>string</i> <i>user-name</i> mac-format <i>string</i> |
| Tree | mac-format |
| String Length | 2 to 7 |
| Default | aa: |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rip-policy [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the rip-policy list instance |
| Context | configure subscriber-mgmt rip-policy <i>string</i> |
| Tree | rip-policy |
| Max. Instances | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | RIP policy name |
| Context | configure subscriber-mgmt rip-policy <i>string</i> |
| Tree | rip-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication-key *string*

| | |
|---------------|--|
| Synopsis | Authentication key |
| Context | configure subscriber-mgmt rip-policy <i>string</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 51 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

authentication-type *keyword*

| | |
|------------|--|
| Synopsis | Authentication type used between RIP neighbors |
| Context | configure subscriber-mgmt rip-policy <i>string</i> authentication-type <i>keyword</i> |
| Tree | authentication-type |
| Options | password, message-digest, message-digest-20 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description

Context **configure** [subscriber-mgmt rip-policy](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

router-advertisement-policy [[name](#)] *string*

Synopsis Enter the **router-advertisement-policy** list instance

Context **configure** [subscriber-mgmt router-advertisement-policy](#) *string*

Tree [router-advertisement-policy](#)

Max. 16

Instances

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Router advertisement policy name

Context **configure** [subscriber-mgmt router-advertisement-policy](#) *string*

Tree [router-advertisement-policy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

force-mcast *keyword*

Synopsis Protocol with forced multicast

Context **configure** [subscriber-mgmt router-advertisement-policy](#) *string* [force-mcast](#) *keyword*

| | |
|------------|---|
| Tree | force-mcast |
| Options | ip, ip-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

max-advertisement-interval *number*

| | |
|------------|---|
| Synopsis | Maximum advertisement interval |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> max-advertisement-interval <i>number</i> |
| Tree | max-advertisement-interval |
| Range | 900 to 1800 |
| Default | 1800 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

min-advertisement-interval *number*

| | |
|------------|---|
| Synopsis | Minimum advertisement interval |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> min-advertisement-interval <i>number</i> |
| Tree | min-advertisement-interval |
| Range | 900 to 1350 |
| Default | 900 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|--|
| Synopsis | Enter the options context |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options |
| Tree | options |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

current-hop-limit *number*

Synopsis Hop limit to be advertised

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [current-hop-limit](#) *number*

Tree [current-hop-limit](#)

Range 0 to 255

Default 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dns

Synopsis Enter the **dns** context

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [dns](#)

Tree [dns](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

include-rdnss *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [dns](#) [include-rdnss](#) *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rdnss-lifetime (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [dns](#) [rdnss-lifetime](#) (*number* | *keyword*)

| | |
|------------|---|
| Tree | rdnss-lifetime |
| Range | 900 to 3600 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

managed-configuration *boolean*

| | |
|------------|---|
| Synopsis | Managed address configuration flag |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options managed-configuration <i>boolean</i> |
| Tree | managed-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mtu (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Advertised MTU value |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options mtu (<i>number</i> <i>keyword</i>) |
| Tree | mtu |
| Range | 1280 to 9212 |
| Default | not-included |
| Units | bytes |
| Options | not-included |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

other-stateful-configuration *boolean*

| | |
|----------|--|
| Synopsis | Other stateful configuration flag |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options other-stateful-configuration <i>boolean</i> |

| | |
|------------|---|
| Tree | other-stateful-configuration |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

reachable-time *number*

| | |
|------------|---|
| Synopsis | Neighbor discovery reachable time that is advertised for this group interface |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options reachable-time <i>number</i> |
| Tree | reachable-time |
| Range | 0 to 3600000 |
| Default | 0 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retransmit-timer *number*

| | |
|------------|---|
| Synopsis | Neighbor discovery retransmit timer that is advertised for this group interface |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options retransmit-timer <i>number</i> |
| Tree | retransmit-timer |
| Range | 0 to 1800000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-lifetime (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Router lifetime |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> options router-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | router-lifetime |
| Range | 2700 to 9000 |

| | |
|------------|---|
| Default | 4500 |
| Units | seconds |
| Options | no-default-router |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix-options

| | |
|------------|---|
| Synopsis | Enter the prefix-options context |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options |
| Tree | prefix-options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stateful

| | |
|------------|--|
| Synopsis | Enter the stateful context |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateful |
| Tree | stateful |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

auto-lifetimes *boolean*

| | |
|------------|--|
| Synopsis | Use automatic lifetimes for stateful prefixes |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateful auto-lifetimes <i>boolean</i> |
| Tree | auto-lifetimes |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-link *boolean*

| | |
|----------|---|
| Synopsis | Assign the prefix to an interface on the specified link |
|----------|---|

| | |
|------------|--|
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateful on-link <i>boolean</i> |
| Tree | on-link |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain preferred |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateful preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain valid |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateful valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 0 to 4294967294 |
| Default | 86400 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stateless

| | |
|----------|------------------------------------|
| Synopsis | Enter the stateless context |
|----------|------------------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateless |
| Tree | stateless |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

on-link *boolean*

| | |
|------------|--|
| Synopsis | Assign the prefix to an interface on the specified link |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateless on-link <i>boolean</i> |
| Tree | on-link |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preferred-lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time for a prefix to remain preferred |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateless preferred-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | preferred-lifetime |
| Range | 0 to 4294967294 |
| Default | 3600 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

valid-lifetime (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | Time for a prefix to remain valid |
| Context | configure subscriber-mgmt router-advertisement-policy <i>string</i> prefix-options stateless valid-lifetime (<i>number</i> <i>keyword</i>) |
| Tree | valid-lifetime |
| Range | 0 to 4294967294 |
| Default | 86400 |

| | |
|------------|---|
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-template [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the sap-template list instance |
| Context | configure subscriber-mgmt sap-template <i>string</i> |
| Tree | sap-template |
| Description | Commands in this context configure a template for automatically-generated subscriber SAPs that is used when creating CUPS sessions. A template with name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned. |
| Max. Instances | 256 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | SAP template name |
| Context | configure subscriber-mgmt sap-template <i>string</i> |
| Tree | sap-template |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cpu-protection

| | |
|------------|---|
| Synopsis | Enter the cpu-protection context |
| Context | configure subscriber-mgmt sap-template <i>string</i> cpu-protection |
| Tree | cpu-protection |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

ip-src-monitoring

| | |
|------------|---|
| Synopsis | Apply CPU protection policy on IP sources |
| Context | configure subscriber-mgmt sap-template string cpu-protection ip-src-monitoring |
| Tree | ip-src-monitoring |
| Notes | The following elements are part of a choice: ip-src-monitoring or mac-monitoring . |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

mac-monitoring

| | |
|------------|--|
| Synopsis | Apply CPU protection policy on MAC sources |
| Context | configure subscriber-mgmt sap-template string cpu-protection mac-monitoring |
| Tree | mac-monitoring |
| Notes | The following elements are part of a choice: ip-src-monitoring or mac-monitoring . |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

policy-id *reference*

| | |
|------------|---|
| Synopsis | CPU protection policy ID |
| Context | configure subscriber-mgmt sap-template string cpu-protection policy-id reference |
| Tree | policy-id |
| Reference | configure system security cpu-protection policy number |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt sap-template string description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dist-cpu-protection *reference*

| | |
|------------|---|
| Synopsis | Distributed CPU protection policy name |
| Context | configure subscriber-mgmt sap-template <i>string</i> dist-cpu-protection <i>reference</i> |
| Tree | dist-cpu-protection |
| Reference | configure system security dist-cpu-protection policy <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time (*number* | *keyword*)

| | |
|-------------|--|
| Synopsis | Time to hold a SAP after last PFCP session is removed |
| Context | configure subscriber-mgmt sap-template <i>string</i> hold-time (<i>number</i> <i>keyword</i>) |
| Tree | hold-time |
| Description | This command configures the time for which an SAP will be kept after the last session has been removed. Idle SAPs can be forcefully removed by the command clear subscriber-mgmt sap-template template-name idle-saps . |
| Range | 0 30 to 2592000 |
| Default | 30 |
| Units | seconds |
| Options | infinite |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

shcv-policy [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the shcv-policy list instance |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> |
| Tree | shcv-policy |
| Max. Instances | 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|--|
| Synopsis | SHCV policy name |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> |
| Tree | shcv-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

layer-3

| | |
|------------|--|
| Synopsis | Enter the layer-3 context |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> layer-3 |
| Tree | layer-3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip-origin *keyword*

| | |
|------------|--|
| Synopsis | Source IP address to be used for SHCV messages |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> layer-3 source-ip-origin <i>keyword</i> |
| Tree | source-ip-origin |
| Default | interface |
| Options | interface, vrrp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

unnumbered-source-ip *string*

| | |
|-------------|---|
| Synopsis | Source IPv4 address for unnumbered subscriber hosts |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> layer-3 unnumbered-source-ip <i>string</i> |
| Tree | unnumbered-source-ip |
| Description | This command configures the source IPv4 address (also known as the sender IP address) used in SHCV ARP requests for unnumbered hosts. When unconfigured, 0.0.0.0 is used as the source IPv4 address in SHCV ARP requests. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

periodic

| | |
|------------|---|
| Synopsis | Enter the periodic context |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> periodic |
| Tree | periodic |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action *keyword*

| | |
|------------|---|
| Synopsis | Action when periodic connectivity verification fails |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> periodic action <i>keyword</i> |
| Tree | action |
| Default | alarm |
| Options | alarm, remove |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of periodic connectivity check |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> periodic admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

interval *number*

| | |
|-------------|---|
| Synopsis | Time interval which all known sources are verified |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> periodic interval <i>number</i> |
| Tree | interval |
| Description | This command specifies the time interval which all known sources are verified. The actual rate is dependent on the number of known hosts and intervals. |
| Range | 1 to 6000 |
| Default | 30 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retry-count *number*

| | |
|------------|---|
| Synopsis | Number of retransmissions in connectivity verification |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> periodic retry-count <i>number</i> |
| Tree | retry-count |
| Range | 1 to 29 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|---|
| Synopsis | Timeout before connectivity verification retransmitted |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> periodic timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

trigger

Synopsis Enter the **trigger** context

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger](#)

Tree [trigger](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-limit-exceeded

Synopsis Enter the **host-limit-exceeded** context

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger](#) [host-limit-exceeded](#)

Tree [host-limit-exceeded](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of trigger for host-limit exceeded

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger](#) [host-limit-exceeded](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Number of retransmissions in periodic connectivity test

Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger](#) [host-limit-exceeded](#) [retry-count](#) *number*

Tree [retry-count](#)

Range 1 to 29

| | |
|------------|---|
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|---|
| Synopsis | Timeout before a retransmission |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger host-limit-exceeded timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

inactivity

| | |
|------------|---|
| Synopsis | Enter the inactivity context |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity |
| Tree | inactivity |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the trigger for inactive hosts |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retry-count *number*

| | |
|------------|---|
| Synopsis | Number of retransmissions in periodic connectivity test |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity retry-count <i>number</i> |
| Tree | retry-count |
| Range | 1 to 29 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|---|
| Synopsis | Timeout before a retransmission |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger inactivity timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-conflict

| | |
|------------|--|
| Synopsis | Enter the ip-conflict context |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger ip-conflict |
| Tree | ip-conflict |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the trigger for IP conflict |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger ip-conflict admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

retry-count *number*

Synopsis Number of retransmissions in periodic connectivity test
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#) **retry-count** *number*
Tree [retry-count](#)
Range 1 to 29
Default 1
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

timeout *number*

Synopsis Timeout before a retransmission
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger ip-conflict](#) **timeout** *number*
Tree [timeout](#)
Range 1 to 60
Default 1
Units seconds
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mac-learning

Synopsis Enter the **mac-learning** context
Context **configure** [subscriber-mgmt shcv-policy](#) *string* [trigger mac-learning](#)
Tree [mac-learning](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of trigger for MAC learning

| | |
|------------|--|
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retry-count *number*

| | |
|------------|--|
| Synopsis | Number of retransmissions in periodic connectivity test |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning retry-count <i>number</i> |
| Tree | retry-count |
| Range | 1 to 29 |
| Default | 2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|--|
| Synopsis | Timeout before a retransmission |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mac-learning timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mobility

| | |
|------------|--|
| Synopsis | Enter the mobility context |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility |
| Tree | mobility |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of trigger for SAP IP/MAC conflict |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retry-count *number*

| | |
|------------|--|
| Synopsis | Number of retransmissions in periodic connectivity test |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility retry-count <i>number</i> |
| Tree | retry-count |
| Range | 1 to 29 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|--|
| Synopsis | Timeout before a retransmission |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> trigger mobility timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vpls

| | |
|----------|---|
| Synopsis | Enter the vpls context |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> vpls |

| | |
|------------|---|
| Tree | vpls |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-ip *string*

| | |
|------------|--|
| Synopsis | Source IPv4 address for connectivity verification |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> vpls source-ip <i>string</i> |
| Tree | source-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

source-mac *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Source MAC address for connectivity verification |
| Context | configure subscriber-mgmt shcv-policy <i>string</i> vpls source-mac <i>string</i> |
| Tree | source-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile [[name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the sla-profile list instance |
| Context | configure subscriber-mgmt sla-profile <i>string</i> |
| Tree | sla-profile |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|----------|--|
| Synopsis | SLA profile name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> |

| | |
|---------------|---|
| Tree | sla-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

control

| | |
|-------------|---|
| Synopsis | Enter the control context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> control |
| Tree | control |
| Description | Commands in this context determine which sessions can use the SLA profile.
By default, only sessions set up by the local system can use the SLA profile, but the SLA profile can also be enabled for sessions set up by a BNG CUPS Control Plane Function (CPF). |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cups *boolean*

| | |
|-------------|--|
| Synopsis | Allow the CUPS control plane to use the profile |
| Context | configure subscriber-mgmt sla-profile <i>string</i> control cups <i>boolean</i> |
| Tree | cups |
| Description | When configured to true , the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF). |
| Default | false |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local *boolean*

| | |
|-------------|---|
| Synopsis | Allow the local control plane to use the profile |
| Context | configure subscriber-mgmt sla-profile <i>string</i> control local <i>boolean</i> |
| Tree | local |
| Description | When configured to true , the profile can be used by sessions set up by the local system. |
| Default | true |

Introduced 20.5.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

credit-control-policy *reference*

Synopsis Credit policy for this SLA profile
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [credit-control-policy](#) *reference*
 Tree [credit-control-policy](#)
 Reference **configure** [subscriber-mgmt](#) [credit-control-policy](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

def-instance-sharing *keyword*

Synopsis Default method for SLA Profile Instance sharing of IPoE and PPPoE sessions
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [def-instance-sharing](#) *keyword*
 Tree [def-instance-sharing](#)
 Default per-sap
 Options per-sap, per-session
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

description *string*

Synopsis Text description
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

egress

Synopsis Enter the **egress** context
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress](#)

| | |
|------------|---|
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

bonding-selection

| | |
|------------|---|
| Synopsis | Enter the bonding-selection context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection |
| Tree | bonding-selection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rate-thresholds

| | |
|------------|---|
| Synopsis | Enter the rate-thresholds context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection rate-thresholds |
| Tree | rate-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

high number

| | |
|------------|--|
| Synopsis | High threshold rate percentage |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection rate-thresholds
high number |
| Tree | high |
| Range | 56 to 99 |
| Default | 90 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

low number

| | |
|----------|-------------------------------|
| Synopsis | Low threshold rate percentage |
|----------|-------------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection rate-thresholds <i>low number</i> |
| Tree | low |
| Range | 55 to 98 |
| Default | 80 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

weight

| | |
|------------|--|
| Synopsis | Enter the weight context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection weight |
| Tree | weight |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

change number

| | |
|------------|---|
| Synopsis | Weight change of the preferred connection |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection weight change <i>number</i> |
| Tree | change |
| Range | 0 to 10 |
| Default | 5 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

initial number

| | |
|----------|--|
| Synopsis | Initial weight of the preferred connection |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress bonding-selection weight initial <i>number</i> |
| Tree | initial |
| Range | 1 to 100 |

| | |
|------------|--|
| Default | 100 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-filter *reference*

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress ip-filter <i>reference</i> |
| Tree | ip-filter |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-filter *reference*

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress ipv6-filter <i>reference</i> |
| Tree | ipv6-filter |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|---|
| Synopsis | Enter the qos context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hs-agg-rate *number*

| | |
|----------|---|
| Synopsis | Maximum rate for expanded egress HS queues |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos hs-agg-rate <i>number</i> |

| | |
|------------|-----------------------------|
| Tree | hs-agg-rate |
| Range | 1 to 100000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

qos-marking-from-sap *boolean*

| | |
|------------|---|
| Synopsis | Set policy where egress QoS marking rules are applied |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos qos-marking-from-sap <i>boolean</i> |
| Tree | qos-marking-from-sap |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sap-egress

| | |
|------------|--|
| Synopsis | Enter the sap-egress context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress |
| Tree | sap-egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hs-queue-stat-mode *keyword*

| | |
|----------|--|
| Synopsis | Egress HS queue stats mode |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-queue-stat-mode <i>keyword</i> |

| | |
|------------|------------------------------------|
| Tree | hs-queue-stat-mode |
| Options | v4-v6 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-group [*id*] *reference*

| | |
|------------|--|
| Synopsis | Enter the hs-wrr-group list instance |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> |
| Tree | hs-wrr-group |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

[id] *reference*

| | |
|------------|--|
| Synopsis | HS WRR group ID to override in the QoS policy table |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> |
| Tree | hs-wrr-group |
| Reference | configure qos sap-egress <i>string</i> hs-wrr-group <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-class-weight *number*

| | |
|------------|--|
| Synopsis | Class weight override for WRR group |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR rate override for WRR group |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides hs-wrr-group <i>reference</i> rate (<i>number</i> <i>keyword</i>) |
| Tree | rate |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

policer [*id*] *reference*

| | |
|------------|---|
| Synopsis | Enter the policer list instance |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[id] *reference*

| | |
|------------|---|
| Synopsis | Policer ID |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> |
| Tree | policer |
| Reference | configure qos sap-egress <i>string</i> policer <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cbs (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | CBS |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer <i>reference</i> cbs (<i>number</i> <i>keyword</i>) |

| | |
|------------|--|
| Tree | cbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 268435456 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

packet-byte-offset *number*

| | |
|------------|---|
| Synopsis | Packet byte offset |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> packet-byte-offset <i>number</i> |
| Tree | packet-byte-offset |
| Range | -64 to 31 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides policer
<i>reference</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cir (*number* | *keyword*)

Synopsis CIR override for the packet byte offset

Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos sap-egress overrides policer](#)
reference [rate cir](#) (*number* | *keyword*)

Tree [cir](#)

Range 0 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

pir (*number* | *keyword*)

Synopsis PIR override for the packet byte offset

Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos sap-egress overrides policer](#)
reference [rate pir](#) (*number* | *keyword*)

Tree [pir](#)

Range 1 to 2000000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

stat-mode *keyword*

Synopsis Stat mode for the policer

Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos sap-egress overrides policer](#)
reference [stat-mode](#) *keyword*

Tree [stat-mode](#)

Options no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir,
offered-limited-capped-cir, offered-profile-capped-cir, v4-v6, offered-total-cir-exceed,
offered-four-profile-no-cir, offered-total-cir-four-profile

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

queue [*id*] *reference*

Synopsis Enter the **queue** list instance

Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos sap-egress overrides queue reference](#)

Tree [queue](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[id] *reference*

Synopsis Queue ID

Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos sap-egress overrides queue reference](#)

Tree [queue](#)

Reference **configure** [qos sap-egress](#) *string queue number*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

avg-frame-overhead *decimal-number*

Synopsis Average frame overhead

Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number](#)

Tree [avg-frame-overhead](#)

Range 0.00 to 100.00

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis CBS

| | |
|------------|---|
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference cbs (<i>number keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-prio-only (*number | keyword*)

| | |
|------------|--|
| Synopsis | High priority burst size |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference high-prio-only (<i>number keyword</i>) |
| Tree | high-prio-only |
| Range | 0 to 100 |
| Units | percent |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hs-class-weight *number*

| | |
|------------|---|
| Synopsis | Class-weight override for expanded egress HS queues |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-class-weight <i>number</i> |
| Tree | hs-class-weight |
| Range | 1 2 4 8 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-wred-queue

| | |
|----------|---|
| Synopsis | Enter the hs-wred-queue context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue |

| | |
|------------|-------------------------------|
| Tree | hs-wred-queue |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR-7/12/12e |

policy reference

| | |
|------------|---|
| Synopsis | Name of the slope-policy override applied to HS queue |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-wred-queue policy reference |
| Tree | policy |
| Reference | configure qos slope-policy <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR-7/12/12e |

hs-wrr-weight number

| | |
|------------|--|
| Synopsis | Maximum rate for expanded egress HS queues |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference hs-wrr-weight <i>number</i> |
| Tree | hs-wrr-weight |
| Range | 1 to 127 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

mbs (number | keyword)

| | |
|------------|--|
| Synopsis | MBS |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference mbs (<i>number keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR for the queue |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR for the queue |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue
<i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stat-mode *keyword*

| | |
|----------|---------------------------|
| Synopsis | Stat mode for the policer |
|----------|---------------------------|

| | |
|------------|---|
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress overrides queue reference stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | v4-v6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | SAP-egress QoS policy |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-egress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

port-parent-location *keyword*

| | |
|------------|--|
| Synopsis | Scheduling type for queued traffic |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos sap-egress port-parent-location <i>keyword</i> |
| Tree | port-parent-location |
| Default | port |
| Options | port, vport |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler [[scheduler-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the scheduler list instance |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[scheduler-name] *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> |
| Tree | scheduler |
| Reference | configure qos scheduler-policy <i>string</i> <i>tier</i> <i>number</i> scheduler <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Administrative CIR |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 3200000000 |
| Default | sum |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Administrative PIR |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy overrides scheduler reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 3200000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|--|
| Synopsis | Scheduler policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-ingress-l2tp-dscp *boolean*

| | |
|-------------|---|
| Synopsis | Use outer L2TP header for LAC sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress qos use-ingress-l2tp-dscp <i>boolean</i> |
| Tree | use-ingress-l2tp-dscp |
| Description | When configured to true , egress classification is based on the outer L2TP header DSCP instead of the inner IP header for LAC sessions.
This command is ignored for non-LAC sessions. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

report-rate

| | |
|------------|---|
| Synopsis | Enter the report-rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress report-rate |
| Tree | report-rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|------------|---|
| Synopsis | Report the aggregate rate |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress report-rate agg-rate |
| Tree | agg-rate |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policer *number*

| | |
|----------|---|
| Synopsis | Report the rate of the specified policer |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress report-rate policer <i>number</i> |
| Tree | policer |

| | |
|------------|---|
| Range | 1 to 63 |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe-actual-rate

| | |
|------------|---|
| Synopsis | Report rate from the DSL characteristics PPPoE tags |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress report-rate pppoe-actual-rate |
| Tree | pppoe-actual-rate |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rfc5515-actual-rate

| | |
|------------|---|
| Synopsis | Report the rate as specified in RFC5515 |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress report-rate rfc5515-actual-rate |
| Tree | rfc5515-actual-rate |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|---|
| Synopsis | Report the rate of the specified scheduler |
| Context | configure subscriber-mgmt sla-profile <i>string</i> egress report-rate scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

host-limits

| | |
|------------|--|
| Synopsis | Enter the host-limits context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits |
| Tree | host-limits |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4

| | |
|------------|---|
| Synopsis | Enter the ipv4 context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 |
| Tree | ipv4 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

arp *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv4 ARP hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 arp <i>number</i> |
| Tree | arp |
| Description | This command configures the maximum number of IPv4 ARP hosts per SLA profile instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv4 DHCP hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 dhcp <i>number</i> |
| Tree | dhcp |
| Description | This command configures the maximum number of IPv4 DHCP hosts per SLA profile instance. |

| | |
|------------|---|
| | The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv4 hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 overall <i>number</i> |
| Tree | overall |
| Description | This command configures the maximum number of IPv4 hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv4 PPP hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv4 ppp <i>number</i> |
| Tree | ppp |
| Description | This command configures the maximum number of IPv4 PPP hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|----------|--|
| Synopsis | Enter the ipv6 context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 |
| Tree | ipv6 |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall number

| | |
|-------------|---|
| Synopsis | Maximum number of IPv6 hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 overall number |
| Tree | overall |
| Description | This command configures the maximum number of IPv6 hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-ipoe-dhcp number

| | |
|-------------|---|
| Synopsis | Maximum number of IPv6 IPoE DHCP PD hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 pd-ipoe-dhcp number |
| Tree | pd-ipoe-dhcp |
| Description | This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-overall number

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 DHCP PD hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 pd-overall number |
| Tree | pd-overall |
| Description | The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. |

The operational maximum value may be smaller due to equipped hardware dependencies.

| | |
|------------|---|
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-ppp-dhcp *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 PPPoE DHCP PD hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 pd-ppp-dhcp <i>number</i> |
| Tree | pd-ppp-dhcp |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ipoe-dhcp *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv6 IPoE DHCP WAN hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-ipoe-dhcp <i>number</i> |
| Tree | wan-ipoe-dhcp |
| Description | This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per SLA profile instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ipoe-slaac *number*

| | |
|----------|---|
| Synopsis | Maximum number of IPv6 IPoE SLAAC WAN hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-ipoe-slaac <i>number</i> |
| Tree | wan-ipoe-slaac |

| | |
|-------------|--|
| Description | This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-overall *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv6 WAN hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-overall <i>number</i> |
| Tree | wan-overall |
| Description | This command configures the maximum number of IPv6 WAN hosts per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ppp-dhcp *number*

| | |
|-------------|--|
| Synopsis | Maximum number IPv6 PPPoE DHCP WAN hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-ppp-dhcp <i>number</i> |
| Tree | wan-ppp-dhcp |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts (IA-NA) per SLA profile instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ppp-slaac *number*

| | |
|----------|--|
| Synopsis | Maximum number of IPv6 PPPoE SLAAC WAN hosts |
|----------|--|

| | |
|-------------|--|
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits ipv6 wan-ppp-slaac <i>number</i> |
| Tree | wan-ppp-slaac |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per SLA profile instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lac-overall *number*

| | |
|-------------|---|
| Synopsis | Maximum number of L2TP LAC hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits lac-overall <i>number</i> |
| Tree | lac-overall |
| Description | This command configures the maximum number of L2TP LAC hosts per SLA profile instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall *number*

| | |
|-------------|---|
| Synopsis | Maximum number of subscriber hosts |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits overall <i>number</i> |
| Tree | overall |
| Description | This command configures the maximum number of subscriber hosts per SLA profile instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 1 to 131071 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

remove-oldest *boolean*

| | |
|------------|--|
| Synopsis | Remove oldest |
| Context | configure subscriber-mgmt sla-profile <i>string</i> host-limits remove-oldest <i>boolean</i> |
| Tree | remove-oldest |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

idle-timeout

| | |
|------------|--|
| Synopsis | Enable the idle-timeout context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> idle-timeout |
| Tree | idle-timeout |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

category [[category-name](#)] *reference*

| | |
|----------------|--|
| Synopsis | Enter the category list instance |
| Context | configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category <i>reference</i> |
| Tree | category |
| Max. Instances | 16 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[category-name] *reference*

| | |
|-------------|--|
| Synopsis | Category name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category <i>reference</i> |
| Tree | category |
| Description | This command specifies the category name where the queues and policers are defined for the idle-timeout monitoring for subscriber hosts. |
| Reference | configure subscriber-mgmt category-map <i>string</i> category <i>string</i> |
| Notes | This element is part of a list key. |

| | |
|------------|---|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

action *keyword*

| | |
|-------------|--|
| Synopsis | Action when the idle-timeout is reached |
| Context | configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category <i>reference</i> action <i>keyword</i> |
| Tree | action |
| Description | This command specifies the action to be executed when the idle-timeout is reached. The action is performed for all hosts associated with the SLA profile instance. |
| Default | terminate |
| Options | terminate, shcv |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|------------|--|
| Synopsis | Time the category can stay below its activity threshold |
| Context | configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category <i>reference</i> timeout <i>number</i> |
| Tree | timeout |
| Range | 60 to 15552000 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

category-map-name *reference*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-----------|--|
| Synopsis | Category map name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> idle-timeout category-map-name <i>reference</i> |
| Tree | category-map-name |
| Reference | configure subscriber-mgmt category-map <i>string</i> |

| | |
|------------|---|
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ingress

| | |
|------------|---|
| Synopsis | Enter the ingress context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress |
| Tree | ingress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-filter reference

| | |
|------------|--|
| Synopsis | IPv4 filter policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress ip-filter <i>reference</i> |
| Tree | ip-filter |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6-filter reference

| | |
|------------|--|
| Synopsis | IPv6 filter policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress ipv6-filter <i>reference</i> |
| Tree | ipv6-filter |
| Reference | configure filter ipv6-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|----------|--|
| Synopsis | Enter the qos context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos |
| Tree | qos |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sap-ingress

Synopsis Enter the **sap-ingress** context
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress](#)
 Tree [sap-ingress](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress overrides](#)
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer [*id*] *reference*

Synopsis Enter the **policer** list instance
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress overrides policer](#) *reference*
 Tree [policer](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[*id*] *reference*

Synopsis Policer ID
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress overrides policer](#) *reference*
 Tree [policer](#)
 Reference **configure** [qos sap-ingress](#) *string* [policer](#) *number*
 Notes This element is part of a list key.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

cbs (*number* | *keyword*)

Synopsis CBS
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress overrides policer](#)
reference [cbs](#) (*number* | *keyword*)
 Tree [cbs](#)
 Range 0 to 268435456
 Units bytes
 Options auto
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

mbs (*number* | *keyword*)

Synopsis MBS
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress overrides policer](#)
reference [mbs](#) (*number* | *keyword*)
 Tree [mbs](#)
 Range 0 to 268435456
 Units bytes
 Options auto
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

packet-byte-offset *number*

Synopsis Packet byte offset
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress qos sap-ingress overrides policer](#)
reference [packet-byte-offset](#) *number*
 Tree [packet-byte-offset](#)
 Range -32 to 31
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR override for the packet byte offset |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | PIR override for the packet byte offset |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer
<i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

stat-mode *keyword*

| | |
|----------|---------------------------|
| Synopsis | Stat mode for the policer |
|----------|---------------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides policer <i>reference</i> stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, v4-v6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue [*id*] *reference*

| | |
|------------|---|
| Synopsis | Enter the queue list instance |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[id] *reference*

| | |
|------------|---|
| Synopsis | Queue ID |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> |
| Tree | queue |
| Reference | configure qos sap-ingress <i>string</i> queue <i>number</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cbs (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | CBS |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue <i>reference</i> cbs (<i>number</i> <i>keyword</i>) |
| Tree | cbs |
| Range | 0 to 1048576 |
| Units | kilobytes |

| | |
|------------|---|
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

high-prio-only (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | High priority burst size |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue reference high-prio-only (<i>number</i> <i>keyword</i>) |
| Tree | high-prio-only |
| Range | 0 to 100 |
| Units | percent |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

mbs (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue reference mbs (<i>number</i> <i>keyword</i>) |
| Tree | mbs |
| Range | 0 to 1073741824 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue reference rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | CIR for the queue |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR for the queue |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

stat-mode *keyword*

| | |
|------------|---|
| Synopsis | Stat mode for the policer |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress overrides queue
<i>reference</i> stat-mode <i>keyword</i> |
| Tree | stat-mode |
| Options | v4-v6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | SAP-ingress QoS policy |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos sap-ingress <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queuing-type *keyword*

| | |
|------------|--|
| Synopsis | Queuing type |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress qos sap-ingress queuing-type <i>keyword</i> |
| Tree | queuing-type |
| Default | service |
| Options | service, shared, multipoint-shared |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

report-rate

| | |
|------------|--|
| Synopsis | Enter the report-rate context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate |
| Tree | report-rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|------------|---|
| Synopsis | Report the aggregate rate |
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate agg-rate |
| Tree | agg-rate |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer *number*

Synopsis Report the rate of the specified policer

Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress report-rate](#) [policer](#) *number*

Tree [policer](#)

Range 1 to 63

Notes The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe-actual-rate

Synopsis Report rate from the DSL characteristics PPPoE tags

Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress report-rate](#) [pppoe-actual-rate](#)

Tree [pppoe-actual-rate](#)

Notes The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

rfc5515-actual-rate

Synopsis Report the rate as specified in RFC5515

Context **configure** [subscriber-mgmt sla-profile](#) *string* [ingress report-rate](#) [rfc5515-actual-rate](#)

Tree [rfc5515-actual-rate](#)

Notes The following elements are part of a choice: **agg-rate**, **policer**, **pppoe-actual-rate**, **rfc5515-actual-rate**, or **scheduler**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler *string*

Synopsis Report the rate of the specified scheduler

| | |
|---------------|---|
| Context | configure subscriber-mgmt sla-profile <i>string</i> ingress report-rate scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: agg-rate , policer , pppoe-actual-rate , rfc5515-actual-rate , or scheduler . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

one-time-http-redirection

| | |
|------------|--|
| Synopsis | Enter the one-time-http-redirection context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> one-time-http-redirection |
| Tree | one-time-http-redirection |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ip-filter *reference*

| | |
|------------|---|
| Synopsis | IPv4 filter policy name |
| Context | configure subscriber-mgmt sla-profile <i>string</i> one-time-http-redirection ip-filter <i>reference</i> |
| Tree | ip-filter |
| Reference | configure filter ip-filter <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pfc-p mappings

| | |
|-------------|---|
| Synopsis | Enter the pfc-p mappings context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-p mappings |
| Tree | pfc-p mappings |
| Description | Commands in this context configure the mapping of packet forwarding control protocol (PFCP) QoS IEs (such as QoS enforcement rule (QER) GBR/MBR IEs), to local QoS overrides (such as queue and policer rates). |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

session-qer

| | |
|-------------|--|
| Synopsis | Enter the session-qer context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer |
| Tree | session-qer |
| Description | <p>Commands in this context configure the mapping of the PFCP session QER rate to the local QoS rate.</p> <p>If a signaled PFCP QER rate applies to all data-plane rules, it is interpreted as the session QER rate and is mapped to the QoS overrides in the configuration. Examples of such QER rates are APN-AMBR for 4G FWA sessions and session-AMBR for 5G FWA sessions.</p> <p>A QER that contains a QER correlation ID does not use the QER mapping because it is assumed not to be a per-session construct.</p> |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

downlink

| | |
|-------------|--|
| Synopsis | Enter the downlink context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink |
| Tree | downlink |
| Description | Commands in this context configure the downlink MBR/GBR to QoS override mapping. |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

aggregate-rate

| | |
|------------|---|
| Synopsis | Map MBR/GBR to a rate override for the aggregate rate |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink aggregate-rate |
| Tree | aggregate-rate |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arbiter string

| | |
|---------------|--|
| Synopsis | Arbiter target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink arbiter <i>string</i> |
| Tree | arbiter |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer number

| | |
|------------|--|
| Synopsis | Policer target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink policer <i>number</i> |
| Tree | policer |
| Range | 1 to 8 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue number

| | |
|------------|--|
| Synopsis | Queue target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink queue <i>number</i> |
| Tree | queue |
| Range | 1 to 8 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|--|
| Synopsis | Scheduler target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer downlink scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: aggregate-rate , arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

uplink

| | |
|-------------|--|
| Synopsis | Enter the uplink context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink |
| Tree | uplink |
| Description | Commands in this context configure the uplink MBR/GBR to QoS override mapping. |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

arbiter *string*

| | |
|---------------|--|
| Synopsis | Arbiter target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink arbiter <i>string</i> |
| Tree | arbiter |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policer *number*

| | |
|----------|--|
| Synopsis | Policer target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink policer <i>number</i> |

| | |
|------------|---|
| Tree | policer |
| Range | 1 to 63 |
| Notes | The following elements are part of a choice: arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queue *number*

| | |
|------------|--|
| Synopsis | Queue target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink queue <i>number</i> |
| Tree | queue |
| Range | 1 to 32 |
| Notes | The following elements are part of a choice: arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler *string*

| | |
|---------------|--|
| Synopsis | Scheduler target of MBR/GBR override |
| Context | configure subscriber-mgmt sla-profile <i>string</i> pfc-mappings session-qer uplink scheduler <i>string</i> |
| Tree | scheduler |
| String Length | 1 to 32 |
| Notes | The following elements are part of a choice: arbiter , policer , queue , or scheduler . |
| Introduced | 21.10.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

session-limits

| | |
|------------|---|
| Synopsis | Enter the session-limits context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits |
| Tree | session-limits |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe number

| | |
|-------------|--|
| Synopsis | Maximum number of IPoE sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits ipoe number |
| Tree | ipoe |
| Description | This command configures the maximum number of IPoE sessions per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

l2tp

| | |
|------------|---|
| Synopsis | Enter the l2tp context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits l2tp |
| Tree | l2tp |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lns number

| | |
|-------------|--|
| Synopsis | Maximum number of L2TP LNS sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits l2tp lns number |
| Tree | lns |
| Description | This command configures the maximum number of L2TP LNS sessions per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lts number

| | |
|----------|--|
| Synopsis | Maximum number of L2TP LTS sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits l2tp lts number |
| Tree | lts |

| | |
|-------------|---|
| Description | This command configures the maximum number of L2TP LTS sessions per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall *number*

| | |
|-------------|---|
| Synopsis | Maximum number of L2TP sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits l2tp overall <i>number</i> |
| Tree | overall |
| Description | This command configures the maximum number of L2TP sessions per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall *number*

| | |
|------------|---|
| Synopsis | Maximum number of subscriber sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits overall <i>number</i> |
| Tree | overall |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pppoe

| | |
|------------|---|
| Synopsis | Enter the pppoe context |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe |
| Tree | pppoe |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lac number

| | |
|-------------|---|
| Synopsis | Maximum number of PPPoE L2TP LAC sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe lac <i>number</i> |
| Tree | lac |
| Description | This command configures the maximum number of PPPoE L2TP LAC sessions per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local number

| | |
|-------------|---|
| Synopsis | Maximum number of PPPoE local terminated sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe local <i>number</i> |
| Tree | local |
| Description | This command configures the maximum number of PPPoE local terminated sessions (PTA) per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall number

| | |
|-------------|---|
| Synopsis | Maximum number of PPPoE sessions |
| Context | configure subscriber-mgmt sla-profile <i>string</i> session-limits pppoe overall <i>number</i> |
| Tree | overall |
| Description | This command configures the maximum number of PPPoE sessions per SLA profile instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

steering-profile [[name](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the steering-profile list instance |
|----------|---|

| | |
|----------------|---|
| Context | configure subscriber-mgmt steering-profile <i>string</i> |
| Tree | steering-profile |
| Max. Instances | 32 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | Steering profile name |
| Context | configure subscriber-mgmt steering-profile <i>string</i> |
| Tree | steering-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

access

| | |
|------------|---|
| Synopsis | Enter the access context |
| Context | configure subscriber-mgmt steering-profile <i>string</i> access |
| Tree | access |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router instance to be used as an access VAS router |
| Context | configure subscriber-mgmt steering-profile <i>string</i> access router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt steering-profile <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

network

| | |
|------------|---|
| Synopsis | Enter the network context |
| Context | configure subscriber-mgmt steering-profile <i>string</i> network |
| Tree | network |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

next-hop *string*

| | |
|------------|--|
| Synopsis | Next-hop IP address used for network next-hop |
| Context | configure subscriber-mgmt steering-profile <i>string</i> network next-hop <i>string</i> |
| Tree | next-hop |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router instance to be used as an access VAS router |
| Context | configure subscriber-mgmt steering-profile <i>string</i> network router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-ident-policy [[name](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the sub-ident-policy list instance |
|----------|---|

| | |
|------------|--|
| Context | configure subscriber-mgmt sub-ident-policy string |
| Tree | sub-ident-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[name] string

| | |
|---------------|--|
| Synopsis | Subscriber identification policy name |
| Context | configure subscriber-mgmt sub-ident-policy string |
| Tree | sub-ident-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

app-profile-map

| | |
|------------|--|
| Synopsis | Enter the app-profile-map context |
| Context | configure subscriber-mgmt sub-ident-policy string app-profile-map |
| Tree | app-profile-map |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

entry [app-profile-string] string

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt sub-ident-policy string app-profile-map entry string |
| Tree | entry |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[app-profile-string] string

| | |
|----------|---|
| Synopsis | Application profile string |
| Context | configure subscriber-mgmt sub-ident-policy string app-profile-map entry string |

| | |
|---------------|--|
| Tree | entry |
| String Length | 1 to 16 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

app-profile *reference*

| | |
|------------|--|
| Synopsis | Application profile name |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> app-profile-map entry <i>string</i> app-profile <i>reference</i> |
| Tree | app-profile |
| Reference | configure application-assurance group <i>number</i> partition <i>number</i> policy app-profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

use-direct-map-as-default *boolean*

| | |
|------------|--|
| Synopsis | Enable direct mapping of application profile as default |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> app-profile-map use-direct-map-as-default <i>boolean</i> |
| Tree | use-direct-map-as-default |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

primary

| | |
|------------|---|
| Synopsis | Enter the primary context |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> primary |
| Tree | primary |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of script execution |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> primary admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

script-url *string*

| | |
|---------------|---|
| Synopsis | Identification script URL |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> primary script-url <i>string</i> |
| Tree | script-url |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

secondary

| | |
|------------|---|
| Synopsis | Enter the secondary context |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> secondary |
| Tree | secondary |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of script execution |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> secondary admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

script-url *string*

| | |
|---------------|---|
| Synopsis | Identification script URL |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> secondary script-url <i>string</i> |
| Tree | script-url |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile-map

| | |
|------------|--|
| Synopsis | Enter the sla-profile-map context |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map |
| Tree | sla-profile-map |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [[sla-profile-string](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map entry <i>string</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[sla-profile-string] *string*

| | |
|---------------|---|
| Synopsis | SLA profile string |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map entry <i>string</i> |
| Tree | entry |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile *reference*

| | |
|------------|--|
| Synopsis | SLA profile |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map entry <i>string</i> sla-profile <i>reference</i> |
| Tree | sla-profile |
| Reference | configure subscriber-mgmt sla-profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-direct-map-as-default *boolean*

| | |
|------------|--|
| Synopsis | Allow direct mapping of SLA profile as default |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sla-profile-map use-direct-map-as-default <i>boolean</i> |
| Tree | use-direct-map-as-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

strings-from-option *number*

| | |
|----------|---|
| Synopsis | IPOE option to get the identification strings |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> strings-from-option <i>number</i> |

| | |
|------------|---|
| Tree | strings-from-option |
| Range | 1 to 254 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile-map

| | |
|------------|---|
| Synopsis | Enter the sub-profile-map context |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map |
| Tree | sub-profile-map |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

entry [[sub-profile-string](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map entry <i>string</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[sub-profile-string](#)] *string*

| | |
|---------------|--|
| Synopsis | Subscriber identification string |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map entry <i>string</i> |
| Tree | entry |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile *reference*

| | |
|----------|--------------------|
| Synopsis | Subscriber profile |
|----------|--------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map entry <i>string</i> sub-profile <i>reference</i> |
| Tree | sub-profile |
| Reference | configure subscriber-mgmt sub-profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

use-direct-map-as-default *boolean*

| | |
|------------|--|
| Synopsis | Allow direct mapping of subscriber profile as default |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> sub-profile-map use-direct-map-as-default <i>boolean</i> |
| Tree | use-direct-map-as-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

tertiary

| | |
|------------|--|
| Synopsis | Enter the tertiary context |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> tertiary |
| Tree | tertiary |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of script execution |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> tertiary admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

script-url *string*

| | |
|---------------|---|
| Synopsis | Identification script URL |
| Context | configure subscriber-mgmt sub-ident-policy <i>string</i> tertiary script-url <i>string</i> |
| Tree | script-url |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-mcac-policy [[name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the sub-mcac-policy list instance |
| Context | configure subscriber-mgmt sub-mcac-policy <i>string</i> |
| Tree | sub-mcac-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

[name] *string*

| | |
|---------------|--|
| Synopsis | Policy name |
| Context | configure subscriber-mgmt sub-mcac-policy <i>string</i> |
| Tree | sub-mcac-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the subscriber MCAC policy |
| Context | configure subscriber-mgmt sub-mcac-policy <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

bandwidth

Synopsis Enter the **bandwidth** context

Context **configure** [subscriber-mgmt](#) [sub-mcac-policy](#) *string* [bandwidth](#)

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [subscriber-mgmt](#) [sub-mcac-policy](#) *string* [bandwidth](#) [mandatory](#) (*number* | *keyword*)

Tree [mandatory](#)

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure** [subscriber-mgmt](#) [sub-mcac-policy](#) *string* [bandwidth](#) [total](#) (*number* | *keyword*)

Tree [total](#)

Range 0 to 2147483647

Default unlimited

Options unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

description *string*

Synopsis Text description

Context **configure subscriber-mgmt sub-mcac-policy** *string description string*
 Tree **description**
 String Length 1 to 80
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

sub-profile [*name*] *string*

Synopsis Enter the **sub-profile** list instance
 Context **configure subscriber-mgmt sub-profile** *string*
 Tree **sub-profile**
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis Subscriber profile name
 Context **configure subscriber-mgmt sub-profile** *string*
 Tree **sub-profile**
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accounting-policy *reference*

Synopsis Accounting policy
 Context **configure subscriber-mgmt sub-profile** *string accounting-policy reference*
 Tree **accounting-policy**
 Reference **configure log accounting-policy** *number*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

accu-stats-policy *reference*

| | |
|------------|---|
| Synopsis | Accumulated statistics policy |
| Context | configure subscriber-mgmt sub-profile <i>string</i> accu-stats-policy <i>reference</i> |
| Tree | accu-stats-policy |
| Reference | configure subscriber-mgmt accu-stats-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp

| | |
|------------|---|
| Synopsis | Enter the ancp context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ancp |
| Tree | ancp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ancp-policy *reference*

| | |
|------------|--|
| Synopsis | ANCP policy for this subscriber profile |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ancp ancp-policy <i>reference</i> |
| Tree | ancp-policy |
| Reference | configure subscriber-mgmt ancp ancp-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

collect-stats *boolean*

| | |
|------------|---|
| Synopsis | Collect statistics |
| Context | configure subscriber-mgmt sub-profile <i>string</i> collect-stats <i>boolean</i> |
| Tree | collect-stats |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

control

| | |
|-------------|--|
| Synopsis | Enter the control context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> control |
| Tree | control |
| Description | Commands in this context determine which sessions can use the subscriber profile.
By default, only sessions set up by the local system can use the profile, however, the profile can also be enabled for sessions set up by a BNG CUPS CPF. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cups *boolean*

| | |
|-------------|---|
| Synopsis | Allow the CUPS control plane to use the profile |
| Context | configure subscriber-mgmt sub-profile <i>string</i> control cups <i>boolean</i> |
| Tree | cups |
| Description | When configured to true , the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF). |
| Default | false |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local *boolean*

| | |
|-------------|--|
| Synopsis | Allow the local control plane to use the profile |
| Context | configure subscriber-mgmt sub-profile <i>string</i> control local <i>boolean</i> |
| Tree | local |
| Description | When configured to true , the profile can be used by sessions set up by the local system. |
| Default | true |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|----------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt sub-profile <i>string</i> description <i>string</i> |

| | |
|---------------|---|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

egress

| | |
|------------|--|
| Synopsis | Enter the egress context |
| Context | configure subscriber-mgmt sub-profile string egress |
| Tree | egress |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lag-per-link-hash

| | |
|------------|--|
| Synopsis | Enter the lag-per-link-hash context |
| Context | configure subscriber-mgmt sub-profile string egress lag-per-link-hash |
| Tree | lag-per-link-hash |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

class number

| | |
|------------|---|
| Synopsis | Class used to select a LAG link |
| Context | configure subscriber-mgmt sub-profile string egress lag-per-link-hash class number |
| Tree | class |
| Range | 1 to 3 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

weight number

| | |
|----------|--|
| Synopsis | Weight associated with SAP when selecting a LAG link |
| Context | configure subscriber-mgmt sub-profile string egress lag-per-link-hash weight number |

| | |
|------------|---|
| Tree | weight |
| Range | 1 to 1024 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

qos

| | |
|------------|--|
| Synopsis | Enter the qos context |
| Context | configure subscriber-mgmt sub-profile string egress qos |
| Tree | qos |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

agg-rate

| | |
|------------|---|
| Synopsis | Enter the agg-rate context |
| Context | configure subscriber-mgmt sub-profile string egress qos agg-rate |
| Tree | agg-rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

adaptation-rule *keyword*

| | |
|-------------|--|
| Synopsis | Adaptation rule for operational PIR value of subscriber |
| Context | configure subscriber-mgmt sub-profile string egress qos agg-rate adaptation-rule keyword |
| Tree | adaptation-rule |
| Description | This command configures the adaptation rule for the PIR value of the subscriber aggregate rate. This rule determines which configured value is adapted to oper-agg-rate based on hardware capabilities. |
| Default | closest |
| Options | max, min, closest |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

burst-limit (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Burst limit of the subscriber aggregate rate |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos agg-rate burst-limit (<i>number</i> <i>keyword</i>) |
| Tree | burst-limit |
| Range | 1 to 14000000 |
| Default | auto |
| Units | bytes |
| Options | auto |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR-1, 7750 SR-s |

min-resv-bw *number*

| | |
|------------|---|
| Synopsis | Reserved minimum total rate of all egress queues |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos agg-rate min-resv-bw <i>number</i> |
| Tree | min-resv-bw |
| Range | 0 to 800000000 |
| Default | 1 |
| Units | kilobps |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

queue-frame-based-accounting *boolean*

| | |
|------------|---|
| Synopsis | Enable frame-based accounting on all policers and queues associated with context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos agg-rate queue-frame-based-accounting <i>boolean</i> |
| Tree | queue-frame-based-accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate number

| | |
|------------|---|
| Synopsis | Maximum total rate of all egress queues |
| Context | configure subscriber-mgmt sub-profile string egress qos agg-rate rate number |
| Tree | rate |
| Range | 1 to 800000000 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

encap-offset

| | |
|------------|---|
| Synopsis | Enable the encap-offset context |
| Context | configure subscriber-mgmt sub-profile string egress qos encap-offset |
| Tree | encap-offset |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

type keyword

| | |
|------------|--|
| Synopsis | Offset type |
| Context | configure subscriber-mgmt sub-profile string egress qos encap-offset type keyword |
| Tree | type |
| Options | pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hs-agg-rate number

| | |
|----------|---|
| Synopsis | Maximum rate for single egress HS queues |
| Context | configure subscriber-mgmt sub-profile string egress qos hs-agg-rate number |
| Tree | hs-agg-rate |
| Range | 1 to 100000000 |

| | |
|------------|------------------|
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-7/12/12e |

hs-low-burst-max-class *number*

| | |
|------------|---|
| Synopsis | Scheduling classes to map the low burst limit threshold |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos hs-low-burst-max-class <i>number</i> |
| Tree | hs-low-burst-max-class |
| Range | 1 to 6 |
| Default | 6 |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR-7/12/12e |

hs-min-resv-bw *number*

| | |
|------------|---|
| Synopsis | Reserved minimum total rate of all egress queues |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos hs-min-resv-bw <i>number</i> |
| Tree | hs-min-resv-bw |
| Range | 0 to 100000000 |
| Default | 1 |
| Units | kilobps |
| Introduced | 19.10.R1 |
| Platforms | 7750 SR-7/12/12e |

policer-control-policy

| | |
|------------|---|
| Synopsis | Enter the policer-control-policy context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy |
| Tree | policer-control-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

root

| | |
|------------|---|
| Synopsis | Enable the root context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root |
| Tree | root |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

max-rate (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum rate |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority-mbs-thresholds

| | |
|------------|---|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Minimum threshold separation |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority [[level](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the priority list instance |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[level] *number*

| | |
|------------|--|
| Synopsis | Strict priority level |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|----------|----------|
| Synopsis | MBS size |
|----------|----------|

| | |
|------------|--|
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Policer control policy name |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos policer-control-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

scheduler-policy

| | |
|------------|--|
| Synopsis | Enter the scheduler-policy context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy |
| Tree | scheduler-policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overrides

| | |
|------------|--|
| Synopsis | Enter the overrides context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides |
| Tree | overrides |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

scheduler [[scheduler-name](#)] *reference*

| | |
|------------|---|
| Synopsis | Enter the scheduler list instance |
| Context | configure subscriber-mgmt sub-profile string egress qos scheduler-policy overrides scheduler reference |
| Tree | scheduler |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[scheduler-name] *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure subscriber-mgmt sub-profile string egress qos scheduler-policy overrides scheduler reference |
| Tree | scheduler |
| Reference | configure qos scheduler-policy string tier number scheduler string |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sub-profile string egress qos scheduler-policy overrides scheduler reference rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|----------|---|
| Synopsis | CIR to override administrative CIR used by scheduler |
| Context | configure subscriber-mgmt sub-profile string egress qos scheduler-policy overrides scheduler reference rate cir (number keyword) |
| Tree | cir |
| Range | 0 to 3200000000 |
| Default | sum |

| | |
|------------|---|
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | PIR to override administrative PIR used by scheduler |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy overrides scheduler <i>reference</i> rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 3200000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|------------|---|
| Synopsis | Scheduler policy name |
| Context | configure subscriber-mgmt sub-profile <i>string</i> egress qos scheduler-policy policy-name <i>reference</i> |
| Tree | policy-name |
| Reference | configure qos scheduler-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

firewall-policy *reference*

| | |
|------------|---|
| Synopsis | Firewall policy |
| Context | configure subscriber-mgmt sub-profile <i>string</i> firewall-policy <i>reference</i> |
| Tree | firewall-policy |
| Reference | configure service nat firewall-policy <i>string</i> |
| Introduced | 16.0.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

host-limits

Synopsis Enter the **host-limits** context

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits**

Tree [host-limits](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ipv4

Synopsis Enter the **ipv4** context

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4**

Tree [ipv4](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

arp number

Synopsis Maximum number of IPv4 ARP hosts

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4 arp number**

Tree [arp](#)

Description This command configures the maximum number of IPv4 ARP hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

dhcp number

Synopsis Maximum number of IPv4 DHCP hosts

Context **configure** [subscriber-mgmt sub-profile string](#) **host-limits ipv4 dhcp number**

Tree [dhcp](#)

| | |
|-------------|---|
| Description | This command configures the maximum number of IPv4 DHCP hosts per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall number

| | |
|-------------|--|
| Synopsis | Maximum number of IPv4 hosts |
| Context | configure subscriber-mgmt sub-profile string host-limits ipv4 overall number |
| Tree | overall |
| Description | This command configures the maximum number of IPv4 hosts per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ppp number

| | |
|-------------|--|
| Synopsis | Maximum number of IPv4 PPP hosts |
| Context | configure subscriber-mgmt sub-profile string host-limits ipv4 ppp number |
| Tree | ppp |
| Description | This command configures the maximum number of IPv4 PPP hosts per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv6

| | |
|----------|-------------------------------|
| Synopsis | Enter the ipv6 context |
|----------|-------------------------------|

| | |
|------------|--|
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 |
| Tree | ipv6 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 overall <i>number</i> |
| Tree | overall |
| Description | This command configures the maximum number of IPv6 hosts per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-ipoe-dhcp *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 IPoE DHCP PD hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 pd-ipoe-dhcp <i>number</i> |
| Tree | pd-ipoe-dhcp |
| Description | This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-overall *number*

| | |
|----------|---|
| Synopsis | Maximum number of IPv6 DHCP PD hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 pd-overall <i>number</i> |
| Tree | pd-overall |

| | |
|-------------|--|
| Description | The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pd-ppp-dhcp *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv6 PPPoE DHCP PD hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 pd-ppp-dhcp <i>number</i> |
| Tree | pd-ppp-dhcp |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ipoe-dhcp *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 IPoE DHCP WAN hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ipoe-dhcp <i>number</i> |
| Tree | wan-ipoe-dhcp |
| Description | This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per subscriber instance.
The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ipoe-slaac *number*

| | |
|----------|---|
| Synopsis | Maximum number of IPv6 IPoE SLAAC WAN hosts |
|----------|---|

| | |
|-------------|---|
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ipoe-slaac <i>number</i> |
| Tree | wan-ipoe-slaac |
| Description | This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-overall *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 WAN hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-overall <i>number</i> |
| Tree | wan-overall |
| Description | This command configures the maximum number of IPv6 WAN hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ppp-dhcp *number*

| | |
|-------------|---|
| Synopsis | Maximum number of IPv6 PPPoE DHCP WAN hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ppp-dhcp <i>number</i> |
| Tree | wan-ppp-dhcp |
| Description | This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

wan-ppp-slaac *number*

| | |
|-------------|--|
| Synopsis | Maximum number of IPv6 PPPoE SLAAC WAN hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits ipv6 wan-ppp-slaac <i>number</i> |
| Tree | wan-ppp-slaac |
| Description | This command configures the maximum number of IPv6 PPPoE SLAAC WAN hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lac-overall *number*

| | |
|-------------|--|
| Synopsis | Maximum number of L2TP LAC hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits lac-overall <i>number</i> |
| Tree | lac-overall |
| Description | This command configures the maximum number of L2TP LAC hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 0 to 131071 |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall *number*

| | |
|-------------|--|
| Synopsis | Maximum number of subscriber hosts |
| Context | configure subscriber-mgmt sub-profile <i>string</i> host-limits overall <i>number</i> |
| Tree | overall |
| Description | This command configures the maximum number of subscriber hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies. |
| Range | 1 to 131071 |
| Introduced | 20.5.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

host-tracking-policy *reference*

Synopsis Host tracking policy
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [host-tracking-policy](#) *reference*
 Tree [host-tracking-policy](#)
 Reference **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

hs-sla-mode *keyword*

Synopsis HS board subscriber SLA mode
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [hs-sla-mode](#) *keyword*
 Tree [hs-sla-mode](#)
 Default expanded
 Options expanded, single
 Introduced 16.0.R1
 Platforms 7750 SR-7/12/12e

igmp-policy *reference*

Synopsis IGMP policy
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [igmp-policy](#) *reference*
 Tree [igmp-policy](#)
 Reference **configure** [subscriber-mgmt](#) [igmp-policy](#) *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

ingress

Synopsis Enter the **ingress** context
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#)
 Tree [ingress](#)

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

qos

Synopsis Enter the **qos** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos](#)
Tree [qos](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policer-control-policy

Synopsis Enter the **policer-control-policy** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos policer-control-policy](#)
Tree [policer-control-policy](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos policer-control-policy overrides](#)
Tree [overrides](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

root

Synopsis Enable the **root** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos policer-control-policy overrides root](#)
Tree [root](#)
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

max-rate (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum rate |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root max-rate (<i>number</i> <i>keyword</i>) |
| Tree | max-rate |
| Range | 1 to 2000000000 |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority-mbs-thresholds

| | |
|------------|--|
| Synopsis | Enter the priority-mbs-thresholds context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds |
| Tree | priority-mbs-thresholds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

min-thresh-separation (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Minimum threshold separation |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i> <i>keyword</i>) |
| Tree | min-thresh-separation |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority [[level](#)] *number*

| | |
|----------|---|
| Synopsis | Enter the priority list instance |
|----------|---|

| | |
|------------|---|
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[level] *number*

| | |
|------------|---|
| Synopsis | Strict priority level |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> |
| Tree | priority |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mbs-contribution (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | MBS size |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy overrides root priority-mbs-thresholds priority <i>number</i> mbs-contribution (<i>number</i> <i>keyword</i>) |
| Tree | mbs-contribution |
| Range | 0 to 16777216 |
| Units | bytes |
| Options | auto |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy-name *reference*

| | |
|----------|--|
| Synopsis | Policer control policy name |
| Context | configure subscriber-mgmt sub-profile <i>string</i> ingress qos policer-control-policy policy-name <i>reference</i> |
| Tree | policy-name |

Reference **configure qos policer-control-policy** *string*
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

scheduler-policy

Synopsis Enter the **scheduler-policy** context
 Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy
 Tree [scheduler-policy](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overrides

Synopsis Enter the **overrides** context
 Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy overrides
 Tree [overrides](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

scheduler [[scheduler-name](#)] *reference*

Synopsis Enter the **scheduler** list instance
 Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy overrides
[scheduler](#) *reference*
 Tree [scheduler](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[scheduler-name] *reference*

Synopsis Scheduler policy name
 Context **configure subscriber-mgmt sub-profile** *string* ingress qos scheduler-policy overrides
[scheduler](#) *reference*
 Tree [scheduler](#)
 Reference **configure qos scheduler-policy** *string* tier number scheduler *string*

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

rate

| | |
|------------|---|
| Synopsis | Enter the rate context |
| Context | configure subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

cir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | CIR to override administrative CIR used by scheduler |
| Context | configure subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 3200000000 |
| Default | sum |
| Units | kilobps |
| Options | sum, max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

pir (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | PIR to override administrative PIR used by scheduler |
| Context | configure subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 3200000000 |
| Default | max |
| Units | kilobps |
| Options | max |

Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

policy-name *reference*

Synopsis Scheduler policy name
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos scheduler-policy](#) [policy-name](#) *reference*
Tree [policy-name](#)
Reference **configure** [qos scheduler-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

mld-policy *reference*

Synopsis MLD policy
Context **configure** [subscriber-mgmt sub-profile](#) *string* [mld-policy](#) *reference*
Tree [mld-policy](#)
Reference **configure** [subscriber-mgmt](#) [mld-policy](#) *string*
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

nat

Synopsis Enter the **nat** context
Context **configure** [subscriber-mgmt sub-profile](#) *string* [nat](#)
Tree [nat](#)
Introduced 16.0.R4
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

access-mode *keyword*

Synopsis The subscriber NAT access mode
Context **configure** [subscriber-mgmt sub-profile](#) *string* [nat access-mode](#) *keyword*
Tree [access-mode](#)

| | |
|------------|--|
| Default | auto |
| Options | auto, bridged |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

allow-bypass *boolean*

| | |
|-------------|---|
| Synopsis | Allow traffic to bypass NAT |
| Context | configure subscriber-mgmt sub-profile <i>string</i> nat allow-bypass <i>boolean</i> |
| Tree | allow-bypass |
| Description | When configured to true , the system enables L2-Aware NAT subscribers for NAT bypass. When enabled, the IP filter configuration applied in the subscriber profile determines whether the traffic is bypassed.

When configured to false , traffic is subject to L2-Aware NAT operation. |
| Default | false |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|------------|---|
| Synopsis | NAT policy associated with the subscriber profile |
| Context | configure subscriber-mgmt sub-profile <i>string</i> nat policy <i>reference</i> |
| Tree | policy |
| Reference | configure service nat nat-policy <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

prefix-list *reference*

| | |
|------------|--|
| Synopsis | NAT prefix list name |
| Context | configure subscriber-mgmt sub-profile <i>string</i> nat prefix-list <i>reference</i> |
| Tree | prefix-list |
| Reference | configure service nat prefix-list <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

pim-policy *reference*

| | |
|------------|---|
| Synopsis | Protocol Independent Multicast (PIM) policy |
| Context | configure subscriber-mgmt sub-profile <i>string</i> pim-policy reference |
| Tree | pim-policy |
| Reference | configure subscriber-mgmt pim-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

preference *number*

| | |
|------------|--|
| Synopsis | Relative preference value for the subscriber profile |
| Context | configure subscriber-mgmt sub-profile <i>string</i> preference number |
| Tree | preference |
| Range | 1 to 10 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-accounting

| | |
|------------|--|
| Synopsis | Enter the radius-accounting context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> radius-accounting |
| Tree | radius-accounting |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

policy *reference*

| | |
|----------------|---|
| Synopsis | RADIUS accounting policies |
| Context | configure subscriber-mgmt sub-profile <i>string</i> radius-accounting policy reference |
| Tree | policy |
| Reference | configure subscriber-mgmt radius-accounting-policy <i>string</i> |
| Max. Instances | 5 |

| | |
|------------|---|
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-optimized-stop *boolean*

| | |
|------------|--|
| Synopsis | Optimize PPPoE session accounting stop behavior |
| Context | configure subscriber-mgmt sub-profile <i>string</i> radius-accounting session-optimized-stop <i>boolean</i> |
| Tree | session-optimized-stop |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

secondary-shaper-hashing *boolean*

| | |
|------------|--|
| Synopsis | Include LAG hashing on secondary shaper |
| Context | configure subscriber-mgmt sub-profile <i>string</i> secondary-shaper-hashing <i>boolean</i> |
| Tree | secondary-shaper-hashing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

session-limits

| | |
|------------|---|
| Synopsis | Enter the session-limits context |
| Context | configure subscriber-mgmt sub-profile <i>string</i> session-limits |
| Tree | session-limits |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipoe *number*

| | |
|----------|--|
| Synopsis | Maximum number of IPoE sessions |
| Context | configure subscriber-mgmt sub-profile <i>string</i> session-limits ipoe <i>number</i> |

| | |
|-------------|--|
| Tree | ipoe |
| Description | This command configures the maximum number of IPoE sessions per subscriber instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

I2tp

| | |
|------------|---|
| Synopsis | Enter the I2tp context |
| Context | configure subscriber-mgmt sub-profile string session-limits I2tp |
| Tree | I2tp |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

Ins number

| | |
|-------------|---|
| Synopsis | Maximum number of L2TP LNS sessions |
| Context | configure subscriber-mgmt sub-profile string session-limits I2tp Ins <i>number</i> |
| Tree | Ins |
| Description | This command configures the maximum number of L2TP LNS sessions per subscriber instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

I2ts number

| | |
|-------------|--|
| Synopsis | Maximum number of L2TP LTS sessions |
| Context | configure subscriber-mgmt sub-profile string session-limits I2tp I2ts <i>number</i> |
| Tree | I2ts |
| Description | This command configures the maximum number of L2TP LTS sessions per subscriber instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis Maximum number of L2TP sessions

Context **configure** [subscriber-mgmt sub-profile string session-limits l2tp overall number](#)

Tree [overall](#)

Description This command configures the maximum number of L2TP sessions per subscriber instance.

Range 0 to 131071

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

overall number

Synopsis Maximum number of subscriber sessions

Context **configure** [subscriber-mgmt sub-profile string session-limits overall number](#)

Tree [overall](#)

Description This command configures the maximum number of subscriber sessions per subscriber instance.

Range 0 to 131071

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

pppoe

Synopsis Enter the **pppoe** context

Context **configure** [subscriber-mgmt sub-profile string session-limits pppoe](#)

Tree [pppoe](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

lac number

Synopsis Maximum number of PPPoE L2TP LAC sessions

Context **configure** [subscriber-mgmt sub-profile string session-limits pppoe lac number](#)

| | |
|-------------|--|
| Tree | lac |
| Description | This command configures the maximum number of PPPoE L2TP LAC sessions per subscriber instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

local number

| | |
|-------------|---|
| Synopsis | Maximum number of PPPoE local-terminated sessions |
| Context | configure subscriber-mgmt sub-profile string session-limits pppoe local number |
| Tree | local |
| Description | This command configures the maximum number of PPPoE local-terminated sessions (PTA) per subscriber instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

overall number

| | |
|-------------|---|
| Synopsis | Maximum number of PPPoE sessions |
| Context | configure subscriber-mgmt sub-profile string session-limits pppoe overall number |
| Tree | overall |
| Description | This command configures the maximum number of PPPoE sessions per subscriber instance. |
| Range | 0 to 131071 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile-map

| | |
|------------|---|
| Synopsis | Enter the sla-profile-map context |
| Context | configure subscriber-mgmt sub-profile string sla-profile-map |
| Tree | sla-profile-map |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

entry [sla-profile-string] *string*

Synopsis Enter the **entry** list instance
 Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

[sla-profile-string] *string*

Synopsis SLA profile string
 Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string*
 Tree [entry](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

sla-profile *reference*

Synopsis SLA profile
 Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map entry *string* sla-profile *reference*
 Tree [sla-profile](#)
 Reference **configure** subscriber-mgmt sla-profile *string*
 Notes This element is mandatory.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

use-direct-map-as-default *boolean*

Synopsis Allow direct mapping of SLA profile as default
 Context **configure** subscriber-mgmt sub-profile *string* sla-profile-map use-direct-map-as-default *boolean*

| | |
|------------|---|
| Tree | use-direct-map-as-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-mcac-policy *reference*

| | |
|------------|---|
| Synopsis | Subscriber MCAC policy |
| Context | configure subscriber-mgmt sub-profile <i>string</i> sub-mcac-policy <i>reference</i> |
| Tree | sub-mcac-policy |
| Reference | configure subscriber-mgmt sub-mcac-policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s |

upnp-policy *reference*

| | |
|-------------|---|
| Synopsis | UPnP policy for the subscriber profile |
| Context | configure subscriber-mgmt sub-profile <i>string</i> upnp-policy <i>reference</i> |
| Tree | upnp-policy |
| Description | This command specifies the Universal Plug 'n Play policy (UPnP) IGD service for the subscriber profile. All ESM hosts of the subscriber can use the UPnP protocol to create port mapping. This feature only supports L2-Aware NAT hosts. The UPnP parameters are defined in the referenced UPnP policy configured in the configure service upnp context. |
| Reference | configure service upnp policy <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

volume-stats-type *keyword*

| | |
|------------|---|
| Synopsis | Include non-IP headers in the accounting statistics |
| Context | configure subscriber-mgmt sub-profile <i>string</i> volume-stats-type <i>keyword</i> |
| Tree | volume-stats-type |
| Default | l2 |
| Options | l2, ip |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

vport-hashing *boolean*

Synopsis Include LAG hashing on Vport
Context **configure** [subscriber-mgmt sub-profile string vport-hashing boolean](#)
Tree [vport-hashing](#)
Default false
Introduced 16.0.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

subscriber-interface-statistics

Synopsis Enter the **subscriber-interface-statistics** context
Context **configure** [subscriber-mgmt subscriber-interface-statistics](#)
Tree [subscriber-interface-statistics](#)
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state for statistics collection
Context **configure** [subscriber-mgmt subscriber-interface-statistics admin-state keyword](#)
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 21.10.R1
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

svlan-statistics

Synopsis Enter the **svlan-statistics** context
Context **configure** [subscriber-mgmt svlan-statistics](#)
Tree [svlan-statistics](#)
Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

admin-state *keyword*

Synopsis Administrative state of statistics collection

Context **configure** [subscriber-mgmt](#) [svlan-statistics](#) **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

system-behavior

Synopsis Enter the **system-behavior** context

Context **configure** [subscriber-mgmt](#) [system-behavior](#)

Tree [system-behavior](#)

Description Commands in this context configure the attributes of system-wide subscriber management behavior.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

legacy-dns-nbns *boolean*

Synopsis Restrict authentication origins for name servers

Context **configure** [subscriber-mgmt](#) [system-behavior](#) **legacy-dns-nbns** *boolean*

Tree [legacy-dns-nbns](#)

Description When configured to **true**, this command enables legacy DNS NBNS behavior, which restricts the supported default extended authentication origins for DNS and NBNS name servers. The main differences include:

- only support DHCP server as origin for DHCP relay: IPoE DHCPv4/DHCPv6 and PPPoE DHCPv6
- Local Address Assignment (LAA) is highest priority origin: IPoE and PPPoE SLAAC DNSv6 and PPPoE DNSv4
- no default DNS for IPoE DHCPv4 proxy

When configured to **false**, this command reverts to the recommended default extended DNS and NBNS name server origin priorities.

| | |
|------------|---|
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

up-resiliency

| | |
|-------------|--|
| Synopsis | Enter the up-resiliency context |
| Context | configure subscriber-mgmt up-resiliency |
| Tree | up-resiliency |
| Description | Commands in this context configure the inter-UPF resiliency in a CUPS system. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

fate-sharing-group-template [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the fate-sharing-group-template list instance |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> |
| Tree | fate-sharing-group-template |
| Description | Commands in this context configure resiliency parameters per FSG. |
| Max. Instances | 256 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[\[name\]](#) *string*

| | |
|---------------|--|
| Synopsis | FSG template ID |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> |
| Tree | fate-sharing-group-template |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

gratuitous-arp *keyword*

| | |
|------------|--|
| Synopsis | Granularity for sending GARP packets on switchover |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> gratuitous-arp <i>keyword</i> |
| Tree | gratuitous-arp |
| Default | one-per-sap |
| Options | one-per-outer-tag, one-per-sap |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

redundant-interface

| | |
|-------------|---|
| Synopsis | Enter the redundant-interface context |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> redundant-interface |
| Tree | redundant-interface |
| Description | Commands in this context configure downstream traffic shunting from a standby BNG UPF to an active BNG UPF. Downstream traffic that is received for standby sessions is sent over the redundant interface to the active BNG UPF. This requires the configuration of the multi-chassis-shunt-id in the service that receives the session traffic. |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|----------|--------------------------|
| Synopsis | Redundant interface name |
|----------|--------------------------|

| | |
|---------------|--|
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> redundant-interface name <i>string</i> |
| Tree | name |
| Description | This command configures the name of the redundant interface. It must exist in the service that contains the redundant interface. |
| String Length | 1 to 32 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

service *string*

| | |
|---------------|--|
| Synopsis | Service that contains the redundant interface |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> redundant-interface service <i>string</i> |
| Tree | service |
| Description | This command configures the service that contains the redundant interface. It can be different from the service where the session traffic is terminated. |
| String Length | 1 to 64 |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

uplink-forwarding-while-standby *boolean*

| | |
|-------------|--|
| Synopsis | Allows a standby BNG UPF to forward packets |
| Context | configure subscriber-mgmt up-resiliency fate-sharing-group-template <i>string</i> uplink-forwarding-while-standby <i>boolean</i> |
| Tree | uplink-forwarding-while-standby |
| Description | This command allows a standby BNG UPF to forward uplink traffic. To prevent the possibility of packet replication towards the network, this command should only be enabled if the access network is provisioned not to replicate unicast packets to the BNG UPF. |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

vrgw

| | |
|------------|---|
| Synopsis | Enter the vrgw context |
| Context | configure subscriber-mgmt vrgw |
| Tree | vrgw |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

brg-profile [[brg-profile-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the brg-profile list instance |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> |
| Tree | brg-profile |
| Max. Instances | 16 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[[brg-profile-name](#)] *string*

| | |
|---------------|---|
| Synopsis | BRG profile name |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> |
| Tree | brg-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

connectivity-verification

| | |
|------------|---|
| Synopsis | Enter the connectivity-verification context |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification |
| Tree | connectivity-verification |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BRG connectivity verification |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

count *number*

| | |
|------------|---|
| Synopsis | Connection attempts before BRG is considered down |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification count <i>number</i> |
| Tree | count |
| Range | 1 to 5 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

retry-time *number*

| | |
|------------|--|
| Synopsis | Time the system will wait after a successful connectivity check before starting a new check |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification retry-time <i>number</i> |
| Tree | retry-time |
| Range | 300 to 3600 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

timeout *number*

| | |
|----------|---|
| Synopsis | Timeout after which a message is considered unanswered |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> connectivity-verification timeout <i>number</i> |

| | |
|------------|---|
| Tree | timeout |
| Range | 5 to 60 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hold-time *number*

| | |
|------------|---|
| Synopsis | The time to hold on to a BRG after it went down |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> hold-time <i>number</i> |
| Tree | hold-time |
| Range | 0 30 to 2592000 |
| Default | 0 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

home-pool

| | |
|------------|---|
| Synopsis | Enter the home-pool context |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool |
| Tree | home-pool |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lease-time *number*

| | |
|------------|--|
| Synopsis | Lease time used when allocating addresses from the pool |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool lease-time <i>number</i> |
| Tree | lease-time |
| Range | 300 to 315446399 |
| Default | 21600 |
| Units | seconds |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

option [[number](#)] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Enter the option list instance |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[number] (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | DHCP option to send identification strings to client |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) |
| Tree | option |
| Range | 1 to 254 |
| Options | subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ascii-string *string*

| | |
|----------|---|
| Synopsis | ASCII string of the DHCP option |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>)
ascii-string <i>string</i> |

| | |
|---------------|---|
| Tree | ascii-string |
| String Length | 1 to 127 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

duration *number*

| | |
|------------|---|
| Synopsis | DHCP option as time duration. |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>)
duration <i>number</i> |
| Tree | duration |
| Range | 10 to 315446399 |
| Units | seconds |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

empty

| | |
|------------|---|
| Synopsis | Empty DHCP option. |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>)
empty |
| Tree | empty |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

hex-string *string*

| | |
|----------|---|
| Synopsis | DHCP option as a hexadecimal string |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>)
hex-string <i>string</i> |
| Tree | hex-string |

| | |
|---------------|---|
| String Length | 1 to 256 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

ipv4-address *string*

| | |
|----------------|---|
| Synopsis | DHCP option as a list of IPv4 addresses |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) ipv4-address <i>string</i> |
| Tree | ipv4-address |
| Max. Instances | 4 |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type .
This element is ordered by the user. |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

netbios-node-type *keyword*

| | |
|------------|--|
| Synopsis | DHCP option as NetBIOS node type. |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool option (<i>number</i> <i>keyword</i>) netbios-node-type <i>keyword</i> |
| Tree | netbios-node-type |
| Options | b-node, p-node, m-node, h-node |
| Notes | The following elements are part of a mandatory choice: ascii-string , duration , empty , hex-string , ipv4-address , or netbios-node-type . |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

standby-ip-lifetime *number*

| | |
|----------|--|
| Synopsis | The lifetime of the standby IP addresses |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool standby-ip-lifetime <i>number</i> |

| | |
|------------|---|
| Tree | standby-ip-lifetime |
| Range | 300 to 315446399 |
| Default | 21600 |
| Units | seconds |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

subnet

| | |
|------------|--|
| Synopsis | Enter the subnet context |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet |
| Tree | subnet |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end string

| | |
|------------|--|
| Synopsis | Upper bound of the IP address range |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet end <i>string</i> |
| Tree | end |
| Default | 192.168.0.254 |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

prefix string

| | |
|------------|---|
| Synopsis | Prefix and default-gateway to be used inside the home |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet prefix <i>string</i> |
| Tree | prefix |
| Default | 192.168.0.1/24 |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start *string*

| | |
|------------|--|
| Synopsis | Lower bound of the IP address range |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> home-pool subnet start <i>string</i> |
| Tree | start |
| Default | 192.168.0.2 |
| Introduced | 16.0.R7 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

initial-hold-time *number*

| | |
|------------|---|
| Synopsis | Hold time for BRG instances created without any hosts |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> initial-hold-time <i>number</i> |
| Tree | initial-hold-time |
| Range | 0 to 900 |
| Default | 300 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-authentication

| | |
|------------|---|
| Synopsis | Enter the radius-authentication context |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-authentication |
| Tree | radius-authentication |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

password *string*

| | |
|---------------|--|
| Synopsis | Password used for authentication |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-authentication password <i>string</i> |
| Tree | password |
| String Length | 1 to 115 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

server-policy *reference*

| | |
|------------|---|
| Synopsis | Radius servers to be used for authentication |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-authentication server-policy reference |
| Tree | server-policy |
| Reference | configure aaa radius server-policy <i>string</i> |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

radius-proxy-server [[router-instance](#)] *string name string*

| | |
|----------------|--|
| Synopsis | Add a list entry for radius-proxy-server |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-proxy-server string name string |
| Tree | radius-proxy-server |
| Max. Instances | 4 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

[router-instance] *string*

| | |
|------------|--|
| Synopsis | router-instance |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-proxy-server string name string |
| Tree | radius-proxy-server |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

name *string*

| | |
|----------|--|
| Synopsis | RADIUS proxy server name |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> radius-proxy-server string name string |

| | |
|---------------|---|
| Tree | radius-proxy-server |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sla-profile-string *string*

| | |
|---------------|--|
| Synopsis | Default SLA profile string on BRG level, overridable via AAA |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> sla-profile-string <i>string</i> |
| Tree | sla-profile-string |
| String Length | 0 to 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

sub-profile-string *string*

| | |
|---------------|--|
| Synopsis | Default subscriber profile string on BRG level, overridable via AAA |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> sub-profile-string <i>string</i> |
| Tree | sub-profile-string |
| String Length | 0 to 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

uplink-initial-wait *number*

| | |
|------------|---|
| Synopsis | Wait time for non-routed uplink to become operational |
| Context | configure subscriber-mgmt vrgw brg-profile <i>string</i> uplink-initial-wait <i>number</i> |
| Tree | uplink-initial-wait |
| Range | 10 to 300 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lanext

| | |
|------------|--|
| Synopsis | Enter the lanext context |
| Context | configure subscriber-mgmt vrgw lanext |
| Tree | lanext |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-target-as-number *number*

| | |
|------------|--|
| Synopsis | AS number that derives the route target and distinguisher for vRGW LAN Extension bridge domains |
| Context | configure subscriber-mgmt vrgw lanext router-target-as-number <i>number</i> |
| Tree | router-target-as-number |
| Range | 1 to 65535 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw

| | |
|------------|--|
| Synopsis | Enter the wlan-gw context |
| Context | configure subscriber-mgmt wlan-gw |
| Tree | wlan-gw |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

queries

| | |
|------------|--|
| Synopsis | Enter the queries context |
| Context | configure subscriber-mgmt wlan-gw queries |
| Tree | queries |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the tunnel list instance |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> |
| Tree | tunnel |
| Max. Instances | 1024 |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[name] *string*

| | |
|---------------|---|
| Synopsis | Tunnel query name |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> |
| Tree | tunnel |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

access-point-mac-address-learning-status *keyword*

| | |
|------------|---|
| Synopsis | Matching criteria of tunnels based on learning status |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> access-point-mac-address-learning-status <i>keyword</i> |
| Tree | access-point-mac-address-learning-status |
| Options | failed, succeeded |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

calculate-counts *boolean*

| | |
|----------|---|
| Synopsis | Count the number of tunnels matching the criteria |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> calculate-counts <i>boolean</i> |
| Tree | calculate-counts |
| Default | false |

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

encapsulation

Synopsis Enable the **encapsulation** context
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#)
Tree [encapsulation](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

gre *boolean*

Synopsis Controls whether the query returns Soft GRE tunnels
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#) [gre](#) *boolean*
Tree [gre](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis Enable matching on Layer 2 tunnels
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#) [l2](#) *boolean*
Tree [l2](#)
Default true
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2tp *boolean*

Synopsis Controls whether the query returns Soft L2TPv3 tunnels
Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [encapsulation](#) [l2tp](#) *boolean*
Tree [l2tp](#)
Default true

| | |
|------------|------------------------------------|
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vxlan boolean

| | |
|------------|---|
| Synopsis | Controls whether the query returns VXLAN tunnels |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> encapsulation vxlan boolean |
| Tree | vxlan |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

I2

| | |
|------------|--|
| Synopsis | Enter the I2 context |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> I2 |
| Tree | I2 |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

inner-vlan number

| | |
|------------|--|
| Synopsis | Value to match the Layer 2 access point of the tunnel |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> I2 inner-vlan number |
| Tree | inner-vlan |
| Range | 0 to 4095 |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

outer-vlan number

| | |
|----------|--|
| Synopsis | Layer 2 access point matching with a specified S-VLAN |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string</i> I2 outer-vlan number |
| Tree | outer-vlan |
| Range | 0 to 4095 |

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

sap string

Synopsis Value to match the L2-AP Access Point of the tunnel
Context **configure subscriber-mgmt wlan-gw queries tunnel string l2 sap string**
Tree [sap](#)
String Length 1 to 45
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l3

Synopsis Enter the **l3** context
Context **configure subscriber-mgmt wlan-gw queries tunnel string l3**
Tree [l3](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address-type keyword

Synopsis Address type to match
Context **configure subscriber-mgmt wlan-gw queries tunnel string l3 address-type keyword**
Tree [address-type](#)
Options ipv4, ipv6
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

local-address (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis IP address as local endpoint to match
Context **configure subscriber-mgmt wlan-gw queries tunnel string l3 local-address (ipv4-address-no-zone | ipv6-address-no-zone)**
Tree [local-address](#)
Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

remote-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address as remote endpoint to match

Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string l3 remote-address* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [remote-address](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

router-instance *string*

Synopsis Router instance to match

Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string l3 router-instance* *string*

Tree [router-instance](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ues

Synopsis Enter the **ues** context

Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string ues*

Tree [ues](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

maximum *number*

Synopsis Maximum number of UEs

Context **configure** [subscriber-mgmt wlan-gw queries tunnel](#) *string ues maximum* *number*

Tree [maximum](#)

Max. Range 0 to 4294967295

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

minimum *number*

| | |
|------------|--|
| Synopsis | Minimum number of UEs |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string ues minimum number</i> |
| Tree | minimum |
| Max. Range | 0 to 4294967295 |
| Default | 1 |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

state

| | |
|------------|---|
| Synopsis | Enable the state context |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string ues state</i> |
| Tree | state |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cross-connect *boolean*

| | |
|------------|---|
| Synopsis | Match on tunnels with cross-connect UEs |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string ues state cross-connect boolean</i> |
| Tree | cross-connect |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dsm *boolean*

| | |
|------------|---|
| Synopsis | Match on DSM UEs |
| Context | configure subscriber-mgmt wlan-gw queries tunnel <i>string ues state dsm boolean</i> |
| Tree | dsm |
| Default | true |
| Introduced | 19.5.R1 |

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

esm *boolean*

Synopsis Match on ESM UEs
 Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **esm** *boolean*
 Tree [esm](#)
 Default true
 Introduced 19.5.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

l2 *boolean*

Synopsis Match on tunnels with L2W UEs
 Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **l2** *boolean*
 Tree [l2](#)
 Default true
 Introduced 19.5.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

migrant *boolean*

Synopsis Match on tunnels with migrant UEs
 Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) [tunnel](#) *string* [ues](#) [state](#) **migrant** *boolean*
 Tree [migrant](#)
 Default true
 Introduced 19.5.R1
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ue [[name](#)] *string*

Synopsis Enter the **ue** list instance
 Context **configure** [subscriber-mgmt](#) [wlan-gw](#) [queries](#) **ue** *string*
 Tree [ue](#)
 Max. Instances 1024

Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

[name] *string*

Synopsis UE query name
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string*
Tree [ue](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

address

Synopsis Enter the **address** context
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* **address**
Tree [address](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

dhcp6-na *string*

Synopsis DHCPv6 IA-NA address to match for UEs
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* **address dhcp6-na** *string*
Tree [dhcp6-na](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

ipv4 *string*

Synopsis IPv4 address to match for UEs
Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* **address ipv4** *string*
Tree [ipv4](#)
Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

slaac string

Synopsis SLAAC prefix to match for UEs
Context **configure subscriber-mgmt wlan-gw queries ue string address slaac string**
Tree [slaac](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

type keyword

Synopsis Address type to match for UEs
Context **configure subscriber-mgmt wlan-gw queries ue string address type keyword**
Tree [type](#)
Options ipv4, ipv6, ipv4-only, ipv6-only, ipv4v6
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

bridge-domain number

Synopsis Bridge Domain to match for UEs
Context **configure subscriber-mgmt wlan-gw queries ue string bridge-domain number**
Tree [bridge-domain](#)
Range 0 to 4294967294
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

connection-state

Synopsis Enable the **connection-state** context
Context **configure subscriber-mgmt wlan-gw queries ue string connection-state**
Tree [connection-state](#)
Introduced 19.5.R1
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

already-signed-in *boolean*

| | |
|------------|---|
| Synopsis | Enable matching on UEs that are already signed in |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state already-signed-in <i>boolean</i> |
| Tree | already-signed-in |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

authorized-only *boolean*

| | |
|------------|---|
| Synopsis | Enable matching on UEs in an authorized state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state authorized-only <i>boolean</i> |
| Tree | authorized-only |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

cross-connect *boolean*

| | |
|------------|---|
| Synopsis | Enable matching on cross-connected UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state cross-connect <i>boolean</i> |
| Tree | cross-connect |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

data-triggered *boolean*

| | |
|----------|--|
| Synopsis | Enable matching on UEs in a data-triggered state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state data-triggered <i>boolean</i> |
| Tree | data-triggered |

| | |
|------------|------------------------------------|
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

delete-pending *boolean*

| | |
|------------|--|
| Synopsis | Enable matching on UEs in a delete-pending state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state delete-pending <i>boolean</i> |
| Tree | delete-pending |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-triggered *boolean*

| | |
|------------|--|
| Synopsis | Enable matching on UEs in DHCP-triggered state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state dhcp-triggered <i>boolean</i> |
| Tree | dhcp-triggered |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dsm *boolean*

| | |
|------------|---|
| Synopsis | Controls whether the query returns UEs in DSM state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state dsm <i>boolean</i> |
| Tree | dsm |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

esm *boolean*

| | |
|----------|---|
| Synopsis | Controls whether the query returns UEs in ESM state |
|----------|---|

| | |
|------------|--|
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string connection-state esm boolean</i> |
| Tree | esm |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

gtp-authorized *boolean*

| | |
|------------|---|
| Synopsis | Enable matching on UEs in GTP-authorized state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string connection-state gtp-authorized boolean</i> |
| Tree | gtp-authorized |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-assigned *boolean*

| | |
|------------|--|
| Synopsis | Controls whether the query returns UEs in IP-assigned state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string connection-state ip-assigned boolean</i> |
| Tree | ip-assigned |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

ip-assigned-authorized *boolean*

| | |
|------------|---|
| Synopsis | Controls whether the query returns UEs in IP-assigned-authorized state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string connection-state ip-assigned-authorized boolean</i> |
| Tree | ip-assigned-authorized |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

l2 boolean

| | |
|------------|---|
| Synopsis | Match on Layer-2 wholesale state for UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state l2 boolean |
| Tree | l2 |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

portal boolean

| | |
|------------|---|
| Synopsis | Controls whether the query returns UEs in portal state |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> connection-state portal boolean |
| Tree | portal |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

mac-address string

| | |
|------------|--|
| Synopsis | MAC address to use for matching on UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> mac-address string |
| Tree | mac-address |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

soft-quota-exhausted boolean

| | |
|------------|--|
| Synopsis | Send interim update message when the quota is reached |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> soft-quota-exhausted boolean |
| Tree | soft-quota-exhausted |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

tunnel

| | |
|------------|---|
| Synopsis | Enter the tunnel context |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> tunnel |
| Tree | tunnel |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

encapsulation *keyword*

| | |
|------------|--|
| Synopsis | Tunnel type to match for active UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> tunnel encapsulation <i>keyword</i> |
| Tree | encapsulation |
| Options | gre, l2tp, l2, vxlan |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

local-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | IP address as local tunnel endpoint to match for UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> tunnel local-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-address |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

remote-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | IP address as remote tunnel endpoint to match for UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> tunnel remote-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | remote-address |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

router-instance *string*

| | |
|------------|--|
| Synopsis | Router instance of tunnels to match for UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> tunnel router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

vlan *number*

| | |
|------------|--|
| Synopsis | VLAN tag within the tunnel to match for UEs |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> vlan <i>number</i> |
| Tree | vlan |
| Range | 0 to 4095 |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

wlan-gw-group

| | |
|------------|---|
| Synopsis | Enable the wlan-gw-group context |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> wlan-gw-group |
| Tree | wlan-gw-group |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

id *number*

| | |
|------------|--|
| Synopsis | WLAN-GW ISA group ID |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> wlan-gw-group id <i>number</i> |
| Tree | id |
| Range | 1 to 4 |
| Notes | This element is mandatory. |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

member number

| | |
|------------|--|
| Synopsis | The member of the WLAN-GW ISA group |
| Context | configure subscriber-mgmt wlan-gw queries ue <i>string</i> wlan-gw-group member <i>number</i> |
| Tree | member |
| Range | 1 to 1024 |
| Introduced | 19.5.R1 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

virtual-chassis-identifier string

| | |
|---------------|---|
| Synopsis | WLAN Gateway virtual chassis ID or dual homing key |
| Context | configure subscriber-mgmt wlan-gw virtual-chassis-identifier <i>string</i> |
| Tree | virtual-chassis-identifier |
| String Length | 1 to 16 |
| Introduced | 16.0.R4 |
| Platforms | 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

3.46 system commands

```

configure
- system
- alarm-contact-in-power boolean
- alarm-contact-input number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-message string
- description string
- normal-state keyword
- trigger-message string
- alarms
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- max-cleared number
- allow-boot-license-violations boolean
- apply-groups reference
- apply-groups-exclude reference
- bluetooth
- admin-state keyword
- advertising-timeout number
- apply-groups reference
- apply-groups-exclude reference
- device string
- apply-groups reference
- apply-groups-exclude reference
- description string
- module string
- apply-groups reference
- apply-groups-exclude reference
- provisioned-identifier string
- pairing-button boolean
- passkey string
- power-mode keyword
- boot-bad-exec string
- boot-good-exec string
- central-frequency-clock
- apply-groups reference
- apply-groups-exclude reference
- bits
- input
- admin-state keyword
- interface-type keyword
- output
- admin-state keyword
- line-length keyword
- ql-minimum keyword
- source keyword
- sqlch boolean
- ql-override keyword
- ssm-bit number
- gnss
- admin-state keyword
- ql-override keyword
- ptp
- admin-state keyword
- ql-override keyword
- ql-minimum keyword

```

configure system central-frequency-clock ql-selection

- **ql-selection** *boolean*
- **ref-order**
 - **fifth** *keyword*
 - **first** *keyword*
 - **fourth** *keyword*
 - **second** *keyword*
 - **sixth** *keyword*
 - **third** *keyword*
- **ref1**
 - **admin-state** *keyword*
 - **ql-override** *keyword*
 - **source-port** *string*
- **ref2**
 - **admin-state** *keyword*
 - **ql-override** *keyword*
 - **source-port** *string*
- **revert** *boolean*
- **synce**
 - **admin-state** *keyword*
 - **ql-override** *keyword*
- **wait-to-restore** *number*
- **cli-code** *string*
- **congestion-management** *boolean*
- **contact** *string*
- **coordinates** *string*
- **cpm-http-redirect**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **optimized-mode** *boolean*
- **cron**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **schedule** *string* **owner** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **count** *number*
 - **day-of-month** *number*
 - **description** *string*
 - **end-time**
 - **date-and-time** *string*
 - **day** *keyword*
 - **time** *string*
 - **hour** *number*
 - **interval** *number*
 - **minute** *number*
 - **month** (*keyword* | *number*)
 - **script-policy**
 - **name** *string*
 - **owner** *string*
 - **type** *keyword*
 - **weekday** (*keyword* | *number*)
- **dhcp6**
 - **adv-noaddrs-global** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **dns**
 - **address-pref** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dnssec**
 - **ad-validation** *keyword*
- **efm-oam**
 - **apply-groups** *reference*

configure system efm-oam apply-groups-exclude

- **apply-groups-exclude** *reference*
- **dying-gasp-tx-on-reset** *boolean*
- **grace-tx** *boolean*
- **eth-cfm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **grace** *boolean*
 - **md-auto-id**
 - **ma-index-range**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
 - **md-index-range**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end** *number*
 - **start** *number*
 - **redundancy**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mc-lag**
 - **propagate-hold-time** (*number* | *keyword*)
 - **standby-mep** *boolean*
 - **sender-id**
 - **local-name** *string*
 - **type** *keyword*
 - **slm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timer** *number*
- **grpc**
 - **admin-state** *keyword*
 - **allow-unsecure-connection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **gnmi**
 - **admin-state** *keyword*
 - **auto-config-save** *boolean*
 - **proto-version** *keyword*
 - **gnoi**
 - **cert-mgmt**
 - **admin-state** *keyword*
 - **file**
 - **admin-state** *keyword*
 - **system**
 - **admin-state** *keyword*
 - **max-msg-size** *number*
 - **md-cli**
 - **admin-state** *keyword*
 - **rib-api**
 - **admin-state** *keyword*
 - **purge-timeout** *number*
 - **tcp-keepalive**
 - **admin-state** *keyword*
 - **idle-time** *number*
 - **interval** *number*
 - **retries** *number*
 - **tls-server-profile** *reference*
- **grpc-tunnel**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **destination-group** *string*
 - **allow-unsecure-connection**

configure system grpc-tunnel destination-group apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- description string
- destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
- apply-groups reference
- apply-groups-exclude reference
- local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- originated-qos-marking keyword
- router-instance string
- tcp-keepalive
- admin-state keyword
- idle-time number
- interval number
- retries number
- tls-client-profile reference
- tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- destination-group reference
- handler string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- port number
- target-type
- custom-type string
- grpc-server
- ssh-server
- target-name
- custom-string string
- node-name
- user-agent
- icmp-vse boolean
- ip
- allow-qinq-network-interface boolean
- apply-groups reference
- apply-groups-exclude reference
- enforce-unique-if-index boolean
- forward-6in4 boolean
- forward-ip-over-gre boolean
- ipv6-eh keyword
- mpls
- label-stack-statistics-count number
- l2tp
- apply-groups reference
- apply-groups-exclude reference
- non-multi-chassis-tunnel-id-range
- end number
- start number
- lacp
- apply-groups reference
- apply-groups-exclude reference
- system-priority number
- lldp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- message-fast-tx number
- message-fast-tx-init number
- notification-interval number
- reinit-delay number

```

configure system lldp tx-credit-max

- **tx-credit-max** *number*
- **tx-hold-multiplier** *number*
- **tx-interval** *number*
- **load-balancing**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **l2tp-load-balancing** *boolean*
 - **l4-load-balancing** *boolean*
 - **lsr-load-balancing** *keyword*
 - **mc-enh-load-balancing** *boolean*
 - **service-id-lag-hashing** *boolean*
 - **system-ip-load-balancing** *boolean*
- **location** *string*
- **login-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **exponential-backoff** *boolean*
 - **ftp**
 - **inbound-max-sessions** *number*
 - **idle-timeout** (*keyword* | *number*)
 - **login-banner** *boolean*
 - **login-scripts**
 - **global-script** *string*
 - **per-user-script**
 - **file-name** *string*
 - **user-directory** *string*
- **motd**
 - **text** *string*
 - **url** *string*
- **pre-login-message**
 - **message** *string*
 - **name** *boolean*
- **ssh**
 - **graceful-shutdown** *boolean*
 - **inbound-max-sessions** *number*
 - **outbound-max-sessions** *number*
 - **ttl-security** *number*
- **telnet**
 - **graceful-shutdown** *boolean*
 - **inbound-max-sessions** *number*
 - **outbound-max-sessions** *number*
 - **ttl-security** *number*
- **management-interface**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **classic-cli**
 - **allow-immediate** *boolean*
 - **rollback**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-checkpoints** *number*
 - **location** *string*
 - **remote-checkpoints** *number*
 - **rescue**
 - **location** *string*
 - **cli-engine** *keyword*
 - **md-cli**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **auto-config-save** *boolean*
 - **environment**

configure system management-interface cli md-cli environment command-alias

```

- command-alias
  - alias string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cli-command string
    - description string
    - mount-point (keyword | string)
    - python-script reference
  - command-completion
    - enter boolean
    - space boolean
    - tab boolean
  - console
    - length number
    - width number
  - info-output
    - always-display
      - admin-state boolean
  - message-severity-level
    - cli keyword
  - more boolean
  - progress-indicator
    - admin-state keyword
    - delay number
    - type keyword
  - prompt
    - context boolean
    - newline boolean
    - timestamp boolean
    - uncommitted-changes-indicator boolean
  - python
    - memory-reservation number
    - minimum-available-memory number
    - timeout number
    - time-display keyword
    - time-format keyword
- commit-history number
- configuration-mode keyword
- configuration-save
  - apply-groups reference
  - apply-groups-exclude reference
  - configuration-backups number
  - incremental-saves boolean
- netconf
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-config-save boolean
  - capabilities
    - candidate boolean
  - port number
- operations
  - apply-groups reference
  - apply-groups-exclude reference
  - global-timeouts
    - asynchronous-execution (number | keyword)
    - asynchronous-retention (number | keyword)
    - synchronous-execution (number | keyword)
- remote-management
  - admin-state keyword
  - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference

```

configure system management-interface remote-management client-tls-profile

```

- client-tls-profile reference
- connection-timeout number
- device-label string
- device-name string
- hello-interval number
- manager string
  - admin-state keyword
  - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - client-tls-profile reference
  - connection-timeout number
  - description string
  - device-label string
  - device-name string
  - manager-address (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)
  - manager-port number
  - router-instance string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-port (number | keyword)
- router-instance string
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-port (number | keyword)
- schema-path string
- snmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - engine-id string
  - general-port number
  - max-bulk-duration number
  - packet-size number
  - streaming
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- yang-modules
  - apply-groups reference
  - apply-groups-exclude reference
  - nmda
    - nmda-support boolean
  - nokia-combined-modules boolean
  - nokia-submodules boolean
  - openconfig-modules boolean
- name string
- network-element-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - generate-traps boolean
  - profile string
    - apply-groups reference
    - apply-groups-exclude reference
  - neid string
  - neip
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-generate
      - ipv4
        - vendor-id-value number
      - ipv6
        - vendor-id-value number
    - ipv4 string
    - ipv6 string

```

configure system network-element-discovery profile platform-type

- **platform-type** *string*
- **system-mac** *string*
- **vendor-id** *string*
- **ospf-dynamic-hostnames** *boolean*
- **persistence**
 - **ancp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **application-assurance**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **nat-port-forwarding**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **options**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dhcp-lease-time-threshold** *number*
 - **python-policy-cache**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
 - **subscriber-mgmt**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *keyword*
- **power-management power-zone** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mode** *keyword*
 - **power-safety-alert** *number*
 - **power-safety-level** *number*
- **ptp**
 - **admin-state** *keyword*
 - **alternate-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **domain** *number*
 - **log-announce-interval** *number*
 - **profile** *keyword*
 - **announce-receipt-timeout** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **clock-type** *keyword*
 - **domain** *number*
 - **local-priority** *number*
 - **log-announce-interval** *number*
 - **network-type** *keyword*

configure system ptp port

- **port** *reference*
 - **address** *string*
 - **admin-state** *keyword*
 - **alternate-profile** *reference*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-priority** *number*
 - **log-delay-interval** *number*
 - **log-sync-interval** *number*
 - **master-only** *boolean*
- **priority1** *number*
- **priority2** *number*
- **profile** *keyword*
- **ptsf**
 - **monitor-ptsf-unusable**
 - **admin-state** *keyword*
- **router** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **peer** (*ipv4-address-no-zone | ipv6-address-no-zone*)
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **local-priority** *number*
 - **log-sync-interval** *number*
 - **peer-limit** *number*
 - **tx-while-sync-uncertain** *boolean*
- **script-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **script** *string* **owner** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **location** *string*
 - **script-policy** *string* **owner** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **expire-time** (*number | keyword*)
 - **lifetime** (*number | keyword*)
 - **lock-override** *boolean*
 - **max-completed** *number*
 - **python-lifetime** *number*
 - **python-script**
 - **name** *reference*
 - **results** *string*
 - **script**
 - **name** *string*
 - **owner** *string*
- **security**
 - **aaa**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-session-group** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **combined-max-sessions** *number*
 - **description** *string*
 - **ssh-max-sessions** *number*
 - **telnet-max-sessions** *number*
 - **health-check** (*number | keyword*)

configure system security aaa local-profiles

- **local-profiles**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cli-session-group** *reference*
 - **combined-max-sessions** *number*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **match** *string*
 - **grpc**
 - **rpc-authorization**
 - **gnmi-capabilities** *keyword*
 - **gnmi-get** *keyword*
 - **gnmi-set** *keyword*
 - **gnmi-subscribe** *keyword*
 - **gnoi-cert-mgmt-cangenerate** *keyword*
 - **gnoi-cert-mgmt-getcert** *keyword*
 - **gnoi-cert-mgmt-install** *keyword*
 - **gnoi-cert-mgmt-revoke** *keyword*
 - **gnoi-cert-mgmt-rotate** *keyword*
 - **gnoi-file-get** *keyword*
 - **gnoi-file-put** *keyword*
 - **gnoi-file-remove** *keyword*
 - **gnoi-file-stat** *keyword*
 - **gnoi-file-transfertoremote** *keyword*
 - **gnoi-system-cancelreboot** *keyword*
 - **gnoi-system-ping** *keyword*
 - **gnoi-system-reboot** *keyword*
 - **gnoi-system-rebootstatus** *keyword*
 - **gnoi-system-setpackage** *keyword*
 - **gnoi-system-switchcontrolprocessor** *keyword*
 - **gnoi-system-time** *keyword*
 - **gnoi-system-traceroute** *keyword*
 - **md-cli-session** *keyword*
 - **rib-api-getversion** *keyword*
 - **rib-api-modify** *keyword*
 - **li** *boolean*
 - **netconf**
 - **base-op-authorization**
 - **action** *boolean*
 - **cancel-commit** *boolean*
 - **close-session** *boolean*
 - **commit** *boolean*
 - **copy-config** *boolean*
 - **create-subscription** *boolean*
 - **delete-config** *boolean*
 - **discard-changes** *boolean*
 - **edit-config** *boolean*
 - **get** *boolean*
 - **get-config** *boolean*
 - **get-data** *boolean*
 - **get-schema** *boolean*
 - **kill-session** *boolean*
 - **lock** *boolean*
 - **validate** *boolean*
 - **ssh-max-sessions** *number*
 - **telnet-max-sessions** *number*
- **management-interface**

configure system security aaa management-interface apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **md-cli**
 - **command-accounting-during-load** *boolean*
- **output-authorization**
 - **md-interfaces** *boolean*
 - **telemetry-data** *boolean*
- **remote-servers**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ldap**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **public-key-authentication** *boolean*
 - **route-preference** *keyword*
 - **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bind-authentication**
 - **password** *string*
 - **root-dn** *string*
 - **search**
 - **base-dn** *string*
 - **server-name** *string*
 - **tls-profile** *reference*
 - **server-retry** *number*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
 - **radius**
 - **access-algorithm** *keyword*
 - **accounting** *boolean*
 - **accounting-port** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization** *boolean*
 - **interactive-authentication** *boolean*
 - **port** *number*
 - **route-preference** *keyword*
 - **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticator** *keyword*
 - **secret** *string*
 - **tls-client-profile** *reference*
 - **server-retry** *number*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
 - **tacplus**
 - **accounting**
 - **record-type** *keyword*
 - **admin-control**
 - **tacplus-map-to-priv-lvl** *number*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authorization**

configure system security aaa remote-servers tacplus authorization request-format

- **request-format**
 - **access-operation-cmd** *keyword*
 - **use-priv-lvl** *boolean*
- **interactive-authentication** *boolean*
- **priv-lvl-map**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **priv-lvl** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **user-profile-name** *reference*
- **route-preference** *keyword*
- **server** *number*
 - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **port** *number*
 - **secret** *string*
 - **server-timeout** *number*
 - **use-default-template** *boolean*
- **vprn-server**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inband** *reference*
 - **outband** *reference*
 - **vprn** *reference*
- **user-template** *keyword*
 - **access**
 - **console** *boolean*
 - **ftp** *boolean*
 - **grpc** *boolean*
 - **li** *boolean*
 - **netconf** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **console**
 - **login-exec** *string*
 - **home-directory** (*sat-url* | *cflash-without-slot-url*)
 - **profile** *string*
 - **restricted-to-home** *boolean*
 - **save-when-restricted** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cli-script**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **authorization**
 - **cron**
 - **cli-user** *reference*
 - **event-handler**
 - **cli-user** *reference*
- **cpm-filter**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **ip-filter**
 - **admin-state** *keyword*
 - **entry** *number*
 - **action**
 - **accept**
 - **default**
 - **drop**
 - **queue** *reference*
 - **apply-groups** *reference*

configure system security cpm-filter ip-filter entry apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- log reference
- match
  - dscp keyword
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - mask number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
  - icmp
    - code number
    - type number
  - ip-option
    - mask number
    - type number
  - multiple-option boolean
  - option-present boolean
  - port
    - eq number
    - mask number
    - port-list reference
    - range
      - end number
      - start number
  - protocol (number | keyword)
  - router-instance string
  - src-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask string
  - src-port
    - eq number
    - mask number
    - port-list reference
    - range
      - end number
      - start number
  - tcp-flags
    - ack boolean
    - syn boolean
- ipv6-filter
  - admin-state keyword
  - entry number
  - action
    - accept
    - default
    - drop
    - queue reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - log reference
  - match
    - dscp keyword
    - dst-ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)

```


configure system security cpm-filter ipv6-filter entry match dst-ip ipv6-prefix-list

```

    - ipv6-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - mask number
    - port-list reference
    - range
      - end number
      - start number
  - extension-header
    - hop-by-hop boolean
  - flow-label number
  - fragment keyword
  - icmp
    - code number
    - type number
  - next-header (number | keyword)
  - port
    - eq number
    - mask number
    - port-list reference
    - range
      - end number
      - start number
  - router-instance string
  - src-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask string
  - src-port
    - eq number
    - mask number
    - port-list reference
    - range
      - end number
      - start number
  - tcp-flags
    - ack boolean
    - syn boolean
- mac-filter
  - admin-state keyword
  - entry number
    - action
      - accept
      - default
      - drop
      - queue reference
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - log reference
    - match
      - cfm-opcode
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword

```

configure system security cpm-filter mac-filter entry match llc-dsap

- **llc-dsap**
 - **dsap** *number*
 - **mask** *number*
- **llc-ssap**
 - **mask** *number*
 - **ssap** *number*
- **service** *reference*
- **src-mac**
 - **address** *string*
 - **mask** *string*
- **cpm-queue**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **queue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cbs** *number*
 - **mbs** *number*
 - **rate**
 - **cir** (*number* | *keyword*)
 - **pir** (*number* | *keyword*)
- **cpu-protection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-src-monitoring**
 - **included-protocols**
 - **dhcp** *boolean*
 - **gtp** *boolean*
 - **icmp** *boolean*
 - **igmp** *boolean*
 - **link-specific-rate** (*number* | *keyword*)
 - **policy** *number*
 - **alarm** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **eth-cfm**
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **level start** *number* **end** *number*
 - **opcode start** *number* **end** *number*
 - **pir** (*number* | *keyword*)
 - **out-profile-rate**
 - **log-events** *boolean*
 - **pir** (*number* | *keyword*)
 - **overall-rate** (*number* | *keyword*)
 - **per-source-parameters**
 - **ip-src-monitoring**
 - **limit-dhcp-ci-addr-zero** *boolean*
 - **per-source-rate** (*number* | *keyword*)
 - **port-overall-rate**
 - **action-low-priority** *boolean*
 - **pir** (*number* | *keyword*)
 - **protocol-protection**
 - **allow-sham-links** *boolean*
 - **block-pim-tunneled** *boolean*
- **dist-cpu-protection**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **policy** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*

configure system security dist-cpu-protection policy local-monitoring-policer

- **local-monitoring-policer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **exceed-action** *keyword*
 - **log-events** *keyword*
 - **rate**
 - **kbps**
 - **limit** (*keyword | number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword | number*)
 - **within** *number*
- **protocol** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dynamic-parameters**
 - **detection-time** *number*
 - **exceed-action**
 - **action** *keyword*
 - **hold-down** (*keyword | number*)
 - **log-events** *keyword*
 - **rate**
 - **kbps**
 - **limit** (*keyword | number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword | number*)
 - **within** *number*
- **enforcement**
 - **dynamic**
 - **mon-policer-name** *reference*
 - **dynamic-local-mon-bypass**
 - **static**
 - **policer-name** *reference*
- **static-policer** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **detection-time** *number*
 - **exceed-action**
 - **action** *keyword*
 - **hold-down** (*keyword | number*)
 - **log-events** *keyword*
 - **rate**
 - **kbps**
 - **limit** (*keyword | number*)
 - **mbs** *number*
 - **packets**
 - **initial-delay** *number*
 - **limit** (*keyword | number*)
 - **within** *number*
- **type** *keyword*
- **dot1x**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **radius-policy** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **retry** *number*

configure system security dot1x radius-policy server

- **server** *number*
 - **accounting-port** *number*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-port** *number*
 - **secret** *string*
 - **type** *keyword*
- **source-address** *string*
- **timeout** *number*
- **ftp-server** *boolean*
- **hash-control**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **management-interface**
 - **classic-cli**
 - **read-algorithm** *keyword*
 - **write-algorithm** *keyword*
 - **grpc**
 - **hash-algorithm** *keyword*
 - **md-cli**
 - **hash-algorithm** *keyword*
 - **netconf**
 - **hash-algorithm** *keyword*
- **keychains**
 - **keychain** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **bidirectional**
 - **entry** *number*
 - **admin-state** *keyword*
 - **algorithm** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **begin-time** *string*
 - **option** *keyword*
 - **tolerance** (*number* | *keyword*)
 - **description** *string*
 - **receive**
 - **entry** *number*
 - **admin-state** *keyword*
 - **algorithm** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **begin-time** *string*
 - **end-time** *string*
 - **tolerance** (*number* | *keyword*)
 - **send**
 - **entry** *number*
 - **admin-state** *keyword*
 - **algorithm** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-key** *string*
 - **begin-time** *string*
 - **tcp-option-number**
 - **receive** *keyword*
 - **send** *keyword*
- **management**
 - **allow-ftp** *boolean*
 - **allow-grpc** *boolean*

configure system security management allow-netconf

- **allow-netconf** *boolean*
- **allow-ssh** *boolean*
- **allow-telnet** *boolean*
- **allow-telnet6** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **management-access-filter**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ip-filter**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log-events** *boolean*
 - **match**
 - **dst-port**
 - **mask** *number*
 - **port** *number*
 - **mgmt-port**
 - **cpm**
 - **lag** *string*
 - **port-id** *string*
 - **protocol** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv4-prefix* | *ipv4-address*)
 - **ip-prefix-list** *reference*
 - **mask** *string*
 - **src-port**
 - **mask** *number*
 - **port** *number*
- **ipv6-filter**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **default-action** *keyword*
 - **entry** *number*
 - **action** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **log-events** *boolean*
 - **match**
 - **dst-port**
 - **mask** *number*
 - **port** *number*
 - **flow-label** *number*
 - **mgmt-port**
 - **cpm**
 - **lag** *string*
 - **port-id** *string*
 - **next-header** (*number* | *keyword*)
 - **router-instance** *string*
 - **src-ip**
 - **address** (*ipv6-prefix* | *ipv6-address*)
 - **ipv6-prefix-list** *reference*
 - **mask** *string*
 - **src-port**

configure system security management-access-filter ipv6-filter entry match src-port mask

```

        - mask number
        - port number
- mac-filter
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - entry number
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - log-events boolean
    - match
      - cfm-opcode
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - dot1p
        - mask number
        - priority number
      - dst-mac
        - address string
        - mask string
      - etype string
      - frame-type keyword
      - llc-dsap
        - dsap number
        - mask number
      - llc-ssap
        - mask number
        - ssap number
      - service string
      - snap-oui keyword
      - snap-pid number
      - src-mac
        - address string
        - mask string
- per-peer-queuing boolean
- pki
  - apply-groups reference
  - apply-groups-exclude reference
  - ca-profile string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-crl-update
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - url-urls
        - url-entry number
          - apply-groups reference
          - apply-groups-exclude reference
          - transmission-profile reference
          - url http-url-path-loose
    - periodic-update-interval number
    - pre-update-time number
    - retry-interval number
    - schedule-type keyword
  - cert-file string

```

configure system security pki ca-profile cmpv2

- **cmpv2**
 - **accept-unprotected-message**
 - **error-message** *boolean*
 - **pkiconf-message** *boolean*
 - **always-set-sender-for-ir** *boolean*
 - **http**
 - **response-timeout** *number*
 - **version** *keyword*
 - **key-list**
 - **key** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **password** *string*
 - **recipient-subject** *string*
 - **response-signing-cert** *string*
 - **response-signing-use-extracert**
 - **same-recipient-nonce-for-poll-request** *boolean*
 - **signing-cert-subject** *string*
 - **url**
 - **service-name** *string*
 - **transmission-profile** *reference*
 - **url-string** *http-optional-url-loose*
 - **use-ca-subject**
- **crl-file** *string*
- **description** *string*
- **ocsp**
 - **responder-url** *http-optional-url-loose*
 - **service-name** *string*
 - **transmission-profile** *reference*
- **revocation-check** *keyword*
- **certificate-auto-update** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key-file-name** *string*
 - **profile** *reference*
- **certificate-display-format** *keyword*
- **certificate-expiration-warning**
 - **hours** *number*
 - **repeat-hours** *number*
- **certificate-update-profile** *string*
 - **after-issue** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **before-expiry** *number*
- **cmpv2**
 - **ca-profile** *reference*
- **dsa**
 - **key-size** *number*
- **ecdsa**
 - **curve** *keyword*
- **est**
 - **est-profile** *reference*
- **hash-algorithm** *keyword*
- **retry-interval** *number*
- **rsa**
 - **key-size** *number*
- **same-as-existing-key**
- **common-name-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **common-name** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **cn-type** *keyword*

configure system security pki common-name-list common-name cn-value

```

    - cn-value string
  - crl-expiration-warning
    - hours number
    - repeat-hours number
  - est-profile string
    - apply-groups reference
    - apply-groups-exclude reference
    - check-id-kp-cmcra-only boolean
    - client-tls-profile string
    - http-authentication
      - password string
      - username string
    - server
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - port number
    - transmission-profile string
  - imported-format keyword
  - maximum-cert-chain-depth number
  - python-script
    - apply-groups reference
    - apply-groups-exclude reference
    - authorization
      - cron
        - cli-user reference
      - event-handler
        - cli-user reference
  - snmp
    - access string context string security-model keyword security-level keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - notify string
    - prefix-match keyword
    - read string
    - write string
    - apply-groups reference
    - apply-groups-exclude reference
    - attempts
      - apply-groups reference
      - apply-groups-exclude reference
      - count number
      - lockout number
      - time number
    - community string
      - access-permissions keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - source-access-list reference
      - version keyword
    - source-access-list string
      - apply-groups reference
      - apply-groups-exclude reference
      - source-host string
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference
    - usm-community string
      - apply-groups reference
      - apply-groups-exclude reference
      - group string
      - source-access-list reference
    - view string subtree string
      - apply-groups reference

```


configure system security snmp view apply-groups-exclude

- **apply-groups-exclude** *reference*
- **mask** *string*
- **type** *keyword*
- **source-address**
 - **ipv4** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **interface-name** *string*
 - **ipv6** *keyword*
 - **address** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **ssh**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **client-cipher-list-v2**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-kex-list-v2**
 - **kex** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **client-mac-list-v2**
 - **mac** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **key-re-exchange**
 - **client**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbytes** (*number* | *keyword*)
 - **minutes** (*number* | *keyword*)
 - **server**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **mbytes** (*number* | *keyword*)
 - **minutes** (*number* | *keyword*)
 - **permit-empty-passwords** *boolean*
 - **preserve-key** *boolean*
 - **server-admin-state** *keyword*
 - **server-cipher-list-v2**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **server-kex-list-v2**
 - **kex** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **server-mac-list-v2**
 - **mac** *number*
 - **apply-groups** *reference*

configure system security ssh server-mac-list-v2 mac apply-groups-exclude

- **apply-groups-exclude** *reference*
 - **name** *keyword*
- **system-passwords**
 - **admin-password** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **tech-support**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **ts-location** (*ts-sat-url* | *cflash-url* | *string*)
- **telnet-server** *boolean*
- **telnet6-server** *boolean*
- **tls**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **entry** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **certificate-file** *string*
 - **key-file** *string*
 - **send-chain**
 - **ca-profile** *reference*
- **client-cipher-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls12-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
 - **tls13-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **client-group-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **client-signature-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-signature** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **client-tls-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **cert-profile** *reference*
 - **cipher-list** *reference*
 - **group-list** *reference*
 - **protocol-version** *keyword*
 - **signature-list** *reference*
 - **trust-anchor-profile** *reference*
- **server-cipher-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*

configure system security tls server-cipher-list tls12-cipher

- **tls12-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **tls13-cipher** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-group-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-group** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-signature-list** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **tls13-signature** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **name** *keyword*
- **server-tls-profile** *string*
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authenticate-client**
 - **common-name-list** *reference*
 - **trust-anchor-profile** *reference*
 - **cert-profile** *reference*
 - **cipher-list** *reference*
 - **group-list** *reference*
 - **protocol-version** *keyword*
 - **signature-list** *reference*
 - **tls-re-negotiate-timer** *number*
- **trust-anchor-profile** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **trust-anchor** *reference*
- **user-params**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **attempts**
 - **count** *number*
 - **lockout** *number*
 - **time** *number*
 - **authentication-order**
 - **exit-on-reject** *boolean*
 - **order** *keyword*
 - **local-user**
 - **password**
 - **aging** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **complexity-rules**
 - **allow-user-name** *boolean*
 - **credits**
 - **lowercase** *number*
 - **numeric** *number*
 - **special-character** *number*
 - **uppercase** *number*
 - **minimum-classes** *number*
 - **minimum-length** *number*
 - **repeated-characters** *number*

configure system security user-params local-user password complexity-rules required

```

- required
  - lowercase number
  - numeric number
  - special-character number
  - uppercase number
- hashing keyword
- history-size number
- minimum-age number
- minimum-change number
- user string
- access
  - console boolean
  - ftp boolean
  - grpc boolean
  - li boolean
  - netconf boolean
  - snmp boolean
- apply-groups reference
- apply-groups-exclude reference
- cli-engine keyword
- console
  - cannot-change-password boolean
  - login-exec (sat-url | cflash-url | ftp-tftp-url | filename)
  - member reference
  - new-password-at-login boolean
- home-directory (sat-url | cflash-without-slot-url)
- password string
- public-keys
  - ecdsa
    - ecdsa-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - key-value string
  - rsa
    - rsa-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - key-value string
- restricted-to-home boolean
- save-when-restricted boolean
- snmp
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - authentication-key string
    - authentication-protocol keyword
  - privacy
    - privacy-key string
    - privacy-protocol keyword
  - group string
- vprn-network-exceptions
  - count number
  - window number
- selective-fib boolean
- software-repository string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - primary-location string
  - secondary-location string
  - tertiary-location string
- switch-fabric

```

configure system switch-fabric apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- failure-recovery
  - admin-state keyword
  - sfm-loss-threshold number
- telemetry
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-group string
    - allow-unsecure-connection
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name)
  - port number
    - apply-groups reference
    - apply-groups-exclude reference
    - router-instance string
  - tcp-keepalive
    - admin-state keyword
    - idle-time number
    - interval number
    - retries number
  - tls-client-profile reference
- notification-bundling
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - max-msg-count number
  - max-time-granularity number
- persistent-subscriptions
  - subscription string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination-group reference
    - encoding keyword
    - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - mode keyword
    - originated-qos-marking keyword
    - sample-interval number
    - sensor-group reference
  - sensor-groups
    - sensor-group string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - path string
- thresholds
  - cflash-cap-alarm-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
  - cflash-cap-warn-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number

```

configure system thresholds cflash-cap-warn-percent rmon-event-type

- **rmon-event-type** *keyword*
- **startup-alarm** *keyword*
- **kb-memory-use-alarm**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
- **kb-memory-use-warn**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-threshold** *number*
 - **interval** *number*
 - **rising-threshold** *number*
 - **rmon-event-type** *keyword*
 - **startup-alarm** *keyword*
- **rmon**
 - **alarm** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **falling-event** *number*
 - **falling-threshold** *number*
 - **interval** *number*
 - **owner** *string*
 - **rising-event** *number*
 - **rising-threshold** *number*
 - **sample-type** *keyword*
 - **startup-alarm** *keyword*
 - **variable-oid** *string*
 - **event** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **event-type** *keyword*
 - **owner** *string*
- **time**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **dst-zone** *string*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **end**
 - **day** *keyword*
 - **hours-minutes** *string*
 - **month** *keyword*
 - **week** *keyword*
 - **offset** *number*
 - **start**
 - **day** *keyword*
 - **hours-minutes** *string*
 - **month** *keyword*
 - **week** *keyword*
- **ntp**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **authentication-check** *boolean*
 - **authentication-key** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **key** *string*
 - **type** *keyword*

configure system time ntp broadcast

```

- broadcast reference interface-name string
  - apply-groups reference
  - apply-groups-exclude reference
  - key-id reference
  - ttl number
  - version number
- broadcast-client string interface-name string
  - apply-groups reference
  - apply-groups-exclude reference
  - authenticate boolean
- multicast
  - apply-groups reference
  - apply-groups-exclude reference
  - key-id reference
  - version number
- multicast-client
  - apply-groups reference
  - apply-groups-exclude reference
  - authenticate boolean
- ntp-server
  - authenticate boolean
- peer (ipv4-address-no-zone | ipv6-address-no-zone) router-instance string
  - apply-groups reference
  - apply-groups-exclude reference
  - key-id reference
  - prefer boolean
  - version number
- server (ipv4-address-no-zone | ipv6-address-no-zone | keyword) router-
instance string
  - apply-groups reference
  - apply-groups-exclude reference
  - key-id reference
  - prefer boolean
  - version number
- prefer-local-time boolean
- sntp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - server (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - interval number
    - prefer boolean
    - version number
  - sntp-state keyword
- zone
  - non-standard
    - name string
    - offset string
  - standard
    - name keyword
- transmission-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - http-version keyword
  - ipv4-source-address string
  - ipv6-source-address string
  - redirection number
  - retry number
  - router-instance string
  - timeout number
- usb keyword
  - admin-state keyword

```

configure system usb apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*

3.46.1 system command descriptions

system

| | |
|------------|---------------------------------|
| Synopsis | Enter the system context |
| Context | configure system |
| Tree | system |
| Introduced | 16.0.R1 |
| Platforms | All |

alarm-contact-in-power *boolean*

| | |
|------------|--|
| Synopsis | Power the output pin on the CPM alarm interface port |
| Context | configure system alarm-contact-in-power boolean |
| Tree | alarm-contact-in-power |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-a |

alarm-contact-input [[input-pin-number](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the alarm-contact-input list instance |
| Context | configure system alarm-contact-input number |
| Tree | alarm-contact-input |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-a |

[\[input-pin-number\]](#) *number*

| | |
|------------|--|
| Synopsis | Alarm contact input pin |
| Context | configure system alarm-contact-input number |
| Tree | alarm-contact-input |
| Range | 1 to 4 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms 7750 SR-a

admin-state *keyword*

Synopsis Administrative state of the alarm contact input

Context **configure** [system](#) [alarm-contact-input](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms 7750 SR-a

clear-message *string*

Synopsis Text message sent in the log event when an alarm clears

Context **configure** [system](#) [alarm-contact-input](#) *number* [clear-message](#) *string*

Tree [clear-message](#)

Description This command configures a text message to be included in the log event that is sent when the system clears an alarm.

The system generates the default "Alarm Input Cleared" message if no message is configured. The **clear-message** string is included in the log event when the pin changes to the normal state.

String Length 1 to 80

Default Alarm Input Cleared

Introduced 16.0.R1

Platforms 7750 SR-a

description *string*

Synopsis Text description

Context **configure** [system](#) [alarm-contact-input](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 160

Introduced 16.0.R1

Platforms 7750 SR-a

normal-state *keyword*

| | |
|------------|--|
| Synopsis | Normal state associated with the alarm contact input |
| Context | configure system alarm-contact-input <i>number</i> normal-state <i>keyword</i> |
| Tree | normal-state |
| Default | open |
| Options | open, closed |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-a |

trigger-message *string*

| | |
|---------------|---|
| Synopsis | Text message sent in the log event when input changes |
| Context | configure system alarm-contact-input <i>number</i> trigger-message <i>string</i> |
| Tree | trigger-message |
| Description | This command configures a text message to be included in the log event that is sent when the system generates an alarm.

The system generates the default message "Alarm Input Triggered" if no message is configured. This command's message string is included in the log event when the pin changes from the normal state. |
| String Length | 1 to 80 |
| Default | Alarm Input Triggered |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-a |

alarms

| | |
|------------|---|
| Synopsis | Enter the alarms context |
| Context | configure system alarms |
| Tree | alarms |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the system alarm |
|----------|--|

| | |
|------------|---|
| Context | configure system alarms admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

max-cleared *number*

| | |
|------------|--|
| Synopsis | Maximum number of cleared alarms |
| Context | configure system alarms max-cleared <i>number</i> |
| Tree | max-cleared |
| Range | 0 to 500 |
| Default | 500 |
| Introduced | 16.0.R4 |
| Platforms | All |

allow-boot-license-violations *boolean*

| | |
|------------|--|
| Synopsis | Allow boot license violations in boot-up configuration |
| Context | configure system allow-boot-license-violations <i>boolean</i> |
| Tree | allow-boot-license-violations |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

bluetooth

| | |
|------------|------------------------------------|
| Synopsis | Enter the bluetooth context |
| Context | configure system bluetooth |
| Tree | bluetooth |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1, 7750 SR-s, 7950 XRS-20e |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the Bluetooth module |
| Context | configure system bluetooth admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.2.R1 |
| Platforms | 7750 SR-1, 7750 SR-s, 7950 XRS-20e |

advertising-timeout *number*

| | |
|------------|---|
| Synopsis | Bluetooth advertising timeout |
| Context | configure system bluetooth advertising-timeout <i>number</i> |
| Tree | advertising-timeout |
| Range | 30 to 3600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1, 7750 SR-s, 7950 XRS-20e |

device [[mac-address](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the device list instance |
| Context | configure system bluetooth device <i>string</i> |
| Tree | device |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1, 7750 SR-s, 7950 XRS-20e |

[[mac-address](#)] *string*

| | |
|----------|--|
| Synopsis | Bluetooth client device MAC address |
| Context | configure system bluetooth device <i>string</i> |
| Tree | device |
| Notes | This element is part of a list key. |

Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

description *string*

Synopsis Text description
Context **configure** [system bluetooth device](#) *string* [description](#) *string*
Tree [description](#)
String Length 1 to 80
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

module [[cpm-slot](#)] *string*

Synopsis Enter the **module** list instance
Context **configure** [system bluetooth module](#) *string*
Tree [module](#)
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

[cpm-slot] *string*

Synopsis CPM slot on which the module resides
Context **configure** [system bluetooth module](#) *string*
Tree [module](#)
String Length 1
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

provisioned-identifier *string*

Synopsis Bluetooth module ID
Context **configure** [system bluetooth module](#) *string* [provisioned-identifier](#) *string*
Tree [provisioned-identifier](#)

String Length 1 to 32
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

pairing-button *boolean*

Synopsis Enable the pairing button
Context **configure** [system](#) [bluetooth](#) [pairing-button](#) *boolean*
Tree [pairing-button](#)
Default false
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

passkey *string*

Synopsis Bluetooth passkey
Context **configure** [system](#) [bluetooth](#) [passkey](#) *string*
Tree [passkey](#)
String Length 6
Default 123456
Introduced 16.0.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

power-mode *keyword*

Synopsis Bluetooth module power mode
Context **configure** [system](#) [bluetooth](#) [power-mode](#) *keyword*
Tree [power-mode](#)
Default automatic
Options manual, automatic
Introduced 20.2.R1
Platforms 7750 SR-1, 7750 SR-s, 7950 XRS-20e

boot-bad-exec *string*

| | |
|---------------|--|
| Synopsis | CLI script file to execute following a failed boot-up |
| Context | configure system boot-bad-exec <i>string</i> |
| Tree | boot-bad-exec |
| Description | This command configures the name of the CLI script file to be run following the failure of a boot-up configuration.
Note: This command has no effect in model-driven mode. |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | All |

boot-good-exec *string*

| | |
|---------------|--|
| Synopsis | CLI script file to execute following successful boot-up |
| Context | configure system boot-good-exec <i>string</i> |
| Tree | boot-good-exec |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | All |

central-frequency-clock

| | |
|------------|---|
| Synopsis | Enter the central-frequency-clock context |
| Context | configure system central-frequency-clock |
| Tree | central-frequency-clock |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

bits

| | |
|------------|--|
| Synopsis | Enter the bits context |
| Context | configure system central-frequency-clock bits |
| Tree | bits |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

input

| | |
|------------|--|
| Synopsis | Enter the input context |
| Context | configure system central-frequency-clock bits input |
| Tree | input |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the BITS input timing reference |
| Context | configure system central-frequency-clock bits input admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interface-type *keyword*

| | |
|------------|--|
| Synopsis | Interface type of the BITS timing reference |
| Context | configure system central-frequency-clock bits interface-type <i>keyword</i> |
| Tree | interface-type |
| Default | ds1-esf |
| Options | ds1-esf, ds1-sf, e1-pcm30crc, e1-pcm31crc, g703-2048khz |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

output

| | |
|------------|---|
| Synopsis | Enter the output context |
| Context | configure system central-frequency-clock bits output |
| Tree | output |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of BITS output timing reference |
| Context | configure system central-frequency-clock bits output admin-state <i>keyword</i> |
| Tree | admin-state |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

line-length *keyword*

| | |
|------------|--|
| Synopsis | Line length for the BITS output timing reference |
| Context | configure system central-frequency-clock bits output line-length <i>keyword</i> |
| Tree | line-length |
| Options | length-not-applicable, 110, 220, 330, 440, 550, 660 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ql-minimum *keyword*

| | |
|------------|---|
| Synopsis | Minimum signal quality level for BITSout port |
| Context | configure system central-frequency-clock bits output ql-minimum <i>keyword</i> |
| Tree | ql-minimum |
| Default | unused |
| Options | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

source *keyword*

| | |
|----------|---|
| Synopsis | Source of the BITS output timing reference |
| Context | configure system central-frequency-clock bits output source <i>keyword</i> |
| Tree | source |
| Default | line-ref |
| Options | line-ref, internal-clock |

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

squelch *boolean*

Synopsis Squelch the signal of the BITS output timing reference
 Context **configure** [system](#) [central-frequency-clock](#) [bits](#) [output](#) [squelch](#) *boolean*
 Tree [squelch](#)
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis Override for the quality level of the timing reference
 Context **configure** [system](#) [central-frequency-clock](#) [bits](#) [ql-override](#) *keyword*
 Tree [ql-override](#)
 Default unused
 Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ssm-bit *number*

Synopsis Sa bit to convey SSM information
 Context **configure** [system](#) [central-frequency-clock](#) [bits](#) [ssm-bit](#) *number*
 Tree [ssm-bit](#)
 Range 4 to 8
 Default 8
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

gnss

Synopsis Enter the **gnss** context

| | |
|------------|--|
| Context | configure system central-frequency-clock gnss |
| Tree | gnss |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the gnss timing reference |
| Context | configure system central-frequency-clock gnss admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

ql-override *keyword*

| | |
|------------|--|
| Synopsis | Quality level override for a timing reference |
| Context | configure system central-frequency-clock gnss ql-override <i>keyword</i> |
| Tree | ql-override |
| Default | unused |
| Options | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

ptp

| | |
|------------|--|
| Synopsis | Enter the ptp context |
| Context | configure system central-frequency-clock ptp |
| Tree | ptp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the PTP timing reference |
| Context | configure system central-frequency-clock ptp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ql-override *keyword*

| | |
|------------|---|
| Synopsis | Quality level of a timing reference that overrides any value provided by the reference's SSM process |
| Context | configure system central-frequency-clock ptp ql-override <i>keyword</i> |
| Tree | ql-override |
| Default | unused |
| Options | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ql-minimum *keyword*

| | |
|------------|--|
| Synopsis | Minimum signal quality level for system timing module |
| Context | configure system central-frequency-clock ql-minimum <i>keyword</i> |
| Tree | ql-minimum |
| Default | unused |
| Options | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ql-selection *boolean*

| | |
|----------|--|
| Synopsis | Consider quality level in system and BITS output timing |
| Context | configure system central-frequency-clock ql-selection <i>boolean</i> |

| | |
|------------|--|
| Tree | ql-selection |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ref-order

| | |
|-------------|---|
| Synopsis | Enter the ref-order context |
| Context | configure system central-frequency-clock ref-order |
| Tree | ref-order |
| Description | <p>Commands in this context specify the priority order of the synchronous equipment timing subsystem.</p> <p>If a reference source is disabled, this command defines the next reference source for the clock. If all reference sources are disabled, clocking is derived from a local oscillator.</p> <p>If a timing reference is linked to a source port that is operationally down, the port is no longer a qualified, valid reference.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fifth keyword

| | |
|------------|--|
| Synopsis | Fifth preferred timing reference source |
| Context | configure system central-frequency-clock ref-order <i>fifth keyword</i> |
| Tree | fifth |
| Options | ref1, ref2, bits, ptp, none, synce, gnss |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

first keyword

| | |
|------------|--|
| Synopsis | First preferred timing reference source |
| Context | configure system central-frequency-clock ref-order <i>first keyword</i> |
| Tree | first |
| Options | ref1, ref2, bits, ptp, none, synce, gnss |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fourth keyword

| | |
|------------|--|
| Synopsis | Fourth preferred timing reference source |
| Context | configure system central-frequency-clock ref-order fourth keyword |
| Tree | fourth |
| Options | ref1, ref2, bits, ptp, none, synce, gnss |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

second keyword

| | |
|------------|--|
| Synopsis | Second preferred timing reference source |
| Context | configure system central-frequency-clock ref-order second keyword |
| Tree | second |
| Options | ref1, ref2, bits, ptp, none, synce, gnss |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

sixth keyword

| | |
|------------|--|
| Synopsis | Sixth preferred timing reference source |
| Context | configure system central-frequency-clock ref-order sixth keyword |
| Tree | sixth |
| Options | ref1, ref2, bits, ptp, none, synce, gnss |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

third keyword

| | |
|------------|---|
| Synopsis | Third preferred timing reference source |
| Context | configure system central-frequency-clock ref-order third keyword |
| Tree | third |
| Options | ref1, ref2, bits, ptp, none, synce, gnss |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ref1

Synopsis Enter the **ref1** context
 Context **configure system central-frequency-clock ref1**
 Tree [ref1](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the first timing reference
 Context **configure system central-frequency-clock ref1 admin-state *keyword***
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ql-override *keyword*

Synopsis Quality level override of a timing reference
 Context **configure system central-frequency-clock ref1 ql-override *keyword***
 Tree [ql-override](#)
 Default unused
 Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

source-port *string*

Synopsis Source port for the first timing reference
 Context **configure system central-frequency-clock ref1 source-port *string***
 Tree [source-port](#)

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ref2

| | |
|------------|--|
| Synopsis | Enter the ref2 context |
| Context | configure system central-frequency-clock ref2 |
| Tree | ref2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the second timing reference |
| Context | configure system central-frequency-clock ref2 admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ql-override *keyword*

| | |
|------------|---|
| Synopsis | Quality level override of a timing reference |
| Context | configure system central-frequency-clock ref2 ql-override <i>keyword</i> |
| Tree | ql-override |
| Default | unused |
| Options | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

source-port *string*

| | |
|----------|--|
| Synopsis | Source port for the second timing reference |
| Context | configure system central-frequency-clock ref2 source-port <i>string</i> |

| | |
|------------|--|
| Tree | source-port |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

revert *boolean*

| | |
|------------|--|
| Synopsis | Revert to higher-priority reference source |
| Context | configure system central-frequency-clock revert <i>boolean</i> |
| Tree | revert |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

synce

| | |
|------------|--|
| Synopsis | Enter the synce context |
| Context | configure system central-frequency-clock synce |
| Tree | synce |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the SyncE timing reference |
| Context | configure system central-frequency-clock synce admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ql-override *keyword*

| | |
|----------|--|
| Synopsis | Override the quality level of a timing reference |
| Context | configure system central-frequency-clock synce ql-override <i>keyword</i> |

| | |
|------------|---|
| Tree | ql-override |
| Default | unused |
| Options | unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2 |
| Introduced | 19.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

wait-to-restore *number*

| | |
|------------|---|
| Synopsis | Time to re-validate a previously failed input reference |
| Context | configure system central-frequency-clock wait-to-restore <i>number</i> |
| Tree | wait-to-restore |
| Range | 1 to 12 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cli-code *string*

| | |
|---------------|--|
| Synopsis | CLLI code value for the system |
| Context | configure system cli-code <i>string</i> |
| Tree | cli-code |
| String Length | 11 |
| Introduced | 16.0.R1 |
| Platforms | All |

congestion-management *boolean*

| | |
|------------|--|
| Synopsis | Enable Virtual Service Router congestion management |
| Context | configure system congestion-management <i>boolean</i> |
| Tree | congestion-management |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | VSR |

contact *string*

| | |
|---------------|---|
| Synopsis | Contact information for the managed node |
| Context | configure system contact <i>string</i> |
| Tree | contact |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

coordinates *string*

| | |
|---------------|---|
| Synopsis | GPS coordinates for the system location |
| Context | configure system coordinates <i>string</i> |
| Tree | coordinates |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

cpm-http-redirect

| | |
|------------|---|
| Synopsis | Enter the cpm-http-redirect context |
| Context | configure system cpm-http-redirect |
| Tree | cpm-http-redirect |
| Introduced | 16.0.R4 |
| Platforms | All |

optimized-mode *boolean*

| | |
|------------|---|
| Synopsis | Enable optimized mode for CPM HTTP redirect messages |
| Context | configure system cpm-http-redirect optimized-mode <i>boolean</i> |
| Tree | optimized-mode |
| Default | true |
| Introduced | 16.0.R4 |
| Platforms | All |

cron

| | |
|------------|-------------------------------|
| Synopsis | Enter the cron context |
| Context | configure system cron |
| Tree | cron |
| Introduced | 16.0.R1 |
| Platforms | All |

schedule [**schedule-name**] *string owner string*

| | |
|----------------|---|
| Synopsis | Enter the schedule list instance |
| Context | configure system cron schedule string owner string |
| Tree | schedule |
| Max. Instances | 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

[schedule-name] *string*

| | |
|---------------|---|
| Synopsis | Schedule name |
| Context | configure system cron schedule string owner string |
| Tree | schedule |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

owner string

| | |
|---------------|---|
| Synopsis | Schedule owner |
| Context | configure system cron schedule string owner string |
| Tree | schedule |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

admin-state *keyword*

Synopsis Administrative state of the CRON schedule

Context **configure** [system cron schedule](#) *string* [owner](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 16.0.R1

Platforms All

count *number*

Synopsis Number of times to repeat a periodic schedule run

Context **configure** [system cron schedule](#) *string* [owner](#) *string* **count** *number*

Tree [count](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

day-of-month *number*

Synopsis Days in a month when a schedule runs

Context **configure** [system cron schedule](#) *string* [owner](#) *string* **day-of-month** *number*

Tree [day-of-month](#)

Range -31 to -1 | 1 to 31

Max. 62

Instances

Introduced 16.0.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [system cron schedule](#) *string* [owner](#) *string* **description** *string*

| | |
|---------------|-----------------------------|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

end-time

| | |
|------------|---|
| Synopsis | Enter the end-time context |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> end-time |
| Tree | end-time |
| Introduced | 16.0.R1 |
| Platforms | All |

date-and-time *string*

| | |
|------------|---|
| Synopsis | Date and time to stop triggering the schedule |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> end-time date-and-time <i>string</i> |
| Tree | date-and-time |
| Notes | The following elements are part of a choice: date-and-time or (day and time). |
| Introduced | 16.0.R1 |
| Platforms | All |

day *keyword*

| | |
|------------|--|
| Synopsis | Day to stop triggering the schedule |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> end-time day <i>keyword</i> |
| Tree | day |
| Options | sunday, monday, tuesday, wednesday, thursday, friday, saturday |
| Notes | The following elements are part of a choice: date-and-time or (day and time). |
| Introduced | 16.0.R1 |
| Platforms | All |

time *string*

| | |
|----------|--------------------------------------|
| Synopsis | Time to stop triggering the schedule |
|----------|--------------------------------------|

| | |
|---------------|--|
| Context | configure system cron schedule <i>string owner string end-time time string</i> |
| Tree | time |
| String Length | 5 |
| Notes | The following elements are part of a choice: date-and-time or (day and time). |
| Introduced | 16.0.R1 |
| Platforms | All |

hour number

| | |
|------------|--|
| Synopsis | Hours within a day when the schedule runs |
| Context | configure system cron schedule <i>string owner string hour number</i> |
| Tree | hour |
| Range | 0 to 23 |
| Max. | 24 |
| Instances | |
| Introduced | 16.0.R1 |
| Platforms | All |

interval number

| | |
|------------|--|
| Synopsis | Time between each periodic schedule run |
| Context | configure system cron schedule <i>string owner string interval number</i> |
| Tree | interval |
| Range | 30 to 42949672 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

minute number

| | |
|----------|--|
| Synopsis | Minutes in an hour when the schedule runs |
| Context | configure system cron schedule <i>string owner string minute number</i> |
| Tree | minute |
| Range | 0 to 59 |

| | |
|----------------|---------|
| Max. Instances | 60 |
| Introduced | 16.0.R1 |
| Platforms | All |

month (*keyword | number*)

| | |
|----------------|---|
| Synopsis | Months when the schedule runs |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> month (<i>keyword number</i>) |
| Tree | month |
| Range | 1 to 12 |
| Options | january, february, march, april, may, june, july, august, september, october, november, december |
| Max. Instances | 12 |
| Introduced | 16.0.R1 |
| Platforms | All |

script-policy

| | |
|------------|---|
| Synopsis | Enter the script-policy context |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> script-policy |
| Tree | script-policy |
| Introduced | 16.0.R1 |
| Platforms | All |

name *string*

| | |
|---------------|---|
| Synopsis | CLI script policy name |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> script-policy name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

owner string

| | |
|---------------|---|
| Synopsis | Script policy owner |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> script-policy owner <i>string</i> |
| Tree | owner |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

type keyword

| | |
|------------|---|
| Synopsis | Schedule type |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> type <i>keyword</i> |
| Tree | type |
| Default | periodic |
| Options | periodic, calendar, oneshot |
| Introduced | 16.0.R1 |
| Platforms | All |

weekday (keyword | number)

| | |
|----------------|---|
| Synopsis | Weekdays when the schedule runs |
| Context | configure system cron schedule <i>string</i> owner <i>string</i> weekday (<i>keyword number</i>) |
| Tree | weekday |
| Range | 1 to 7 |
| Options | sunday, monday, tuesday, wednesday, thursday, friday, saturday |
| Max. Instances | 7 |
| Introduced | 16.0.R1 |
| Platforms | All |

dhcp6

| | |
|----------|---|
| Synopsis | Enter the dhcp6 context |
| Context | configure system dhcp6 |
| Tree | dhcp6 |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

adv-noaddrs-global *keyword*

| | |
|----------------|---|
| Synopsis | Applications to send NoAddrsAvail in Advertise messages |
| Context | configure system dhcp6 adv-noaddrs-global <i>keyword</i> |
| Tree | adv-noaddrs-global |
| Options | esm-relay, server |
| Max. Instances | 2 |
| Introduced | 16.0.R4 |
| Platforms | All |

dns

| | |
|------------|---|
| Synopsis | Enter the dns context |
| Context | configure system dns |
| Tree | dns |
| Introduced | 16.0.R1 |
| Platforms | All |

address-pref *keyword*

| | |
|------------|---|
| Synopsis | Preference in DNS address resolving order |
| Context | configure system dns address-pref <i>keyword</i> |
| Tree | address-pref |
| Options | ipv4-only, ipv6-first |
| Introduced | 16.0.R1 |
| Platforms | All |

dnssec

| | |
|----------|--|
| Synopsis | Enter the dnssec context |
| Context | configure system dns dnssec |
| Tree | dnssec |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

ad-validation *keyword*

| | |
|------------|---|
| Synopsis | Validation of AD-bit presence in DNS server responses |
| Context | configure system dns dnssec ad-validation <i>keyword</i> |
| Tree | ad-validation |
| Options | fall-through, drop |
| Introduced | 16.0.R1 |
| Platforms | All |

efm-oam

| | |
|------------|---|
| Synopsis | Enter the efm-oam context |
| Context | configure system efm-oam |
| Tree | efm-oam |
| Introduced | 16.0.R1 |
| Platforms | All |

dying-gasp-tx-on-reset *boolean*

| | |
|------------|---|
| Synopsis | Generate Information OAM PDU on soft reset notification |
| Context | configure system efm-oam dying-gasp-tx-on-reset <i>boolean</i> |
| Tree | dying-gasp-tx-on-reset |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

grace-tx *boolean*

| | |
|----------|---|
| Synopsis | Send Grace TLVs for soft reset graceful recovery events |
| Context | configure system efm-oam grace-tx <i>boolean</i> |
| Tree | grace-tx |

| | |
|-------------|---|
| Description | <p>When configured to true, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to true, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to false, the Nokia Vendor Specific Grace TLV is not sent.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

eth-cfm

| | |
|------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure system eth-cfm |
| Tree | eth-cfm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grace *boolean*

| | |
|------------|--|
| Synopsis | Allow system level capability of grace messaging |
| Context | configure system eth-cfm grace <i>boolean</i> |
| Tree | grace |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-auto-id

| | |
|----------|--|
| Synopsis | Enter the md-auto-id context |
| Context | configure system eth-cfm md-auto-id |

| | |
|------------|--|
| Tree | md-auto-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ma-index-range

| | |
|------------|---|
| Synopsis | Enable the ma-index-range context |
| Context | configure system eth-cfm md-auto-id ma-index-range |
| Tree | ma-index-range |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Upper bound of the range |
| Context | configure system eth-cfm md-auto-id ma-index-range end number |
| Tree | end |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | Lower bound of the range |
| Context | configure system eth-cfm md-auto-id ma-index-range start number |
| Tree | start |
| Range | 1 to 4294967295 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

md-index-range

| | |
|------------|---|
| Synopsis | Enable the md-index-range context |
| Context | configure system eth-cfm md-auto-id md-index-range |
| Tree | md-index-range |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Upper bound of the range |
| Context | configure system eth-cfm md-auto-id md-index-range <i>end number</i> |
| Tree | end |
| Range | 1 to 4294967295 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|----------|---|
| Synopsis | Lower bound of the range |
| Context | configure system eth-cfm md-auto-id md-index-range <i>start number</i> |
| Tree | start |
| Range | 1 to 4294967295 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

redundancy

| | |
|------------|--|
| Synopsis | Enter the redundancy context |
| Context | configure system eth-cfm redundancy |
| Tree | redundancy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mc-lag

| | |
|------------|--|
| Synopsis | Enter the mc-lag context |
| Context | configure system eth-cfm redundancy mc-lag |
| Tree | mc-lag |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

propagate-hold-time (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Delay timer value for the fault propagation |
| Context | configure system eth-cfm redundancy mc-lag propagate-hold-time (<i>number</i> <i>keyword</i>) |
| Tree | propagate-hold-time |
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Options | none |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

standby-mep *boolean*

| | |
|----------|--|
| Synopsis | Allow standby MC-LAG MEPs to act administratively down |
|----------|--|

| | |
|------------|--|
| Context | configure system eth-cfm redundancy mc-lag standby-mep <i>boolean</i> |
| Tree | standby-mep |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

sender-id

| | |
|------------|--|
| Synopsis | Enter the sender-id context |
| Context | configure system eth-cfm sender-id |
| Tree | sender-id |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

local-name *string*

| | |
|---------------|--|
| Synopsis | Local name used in CFM PDUs |
| Context | configure system eth-cfm sender-id local-name <i>string</i> |
| Tree | local-name |
| String Length | 1 to 45 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

type *keyword*

| | |
|------------|---|
| Synopsis | ETH-CFM sender ID to be used in CFM PDUs |
| Context | configure system eth-cfm sender-id type <i>keyword</i> |
| Tree | type |
| Default | system |
| Options | system, local |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

slm

| | |
|------------|--|
| Synopsis | Enter the slm context |
| Context | configure system eth-cfm slm |
| Tree | slm |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

inactivity-timer *number*

| | |
|------------|--|
| Synopsis | SLR inactivity timer to maintain the stale test data |
| Context | configure system eth-cfm slm inactivity-timer <i>number</i> |
| Tree | inactivity-timer |
| Range | 10 to 100 |
| Default | 100 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

grpc

| | |
|------------|-------------------------------|
| Synopsis | Enter the grpc context |
| Context | configure system grpc |
| Tree | grpc |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the gRPC server |
| Context | configure system grpc admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-unsecure-connection

| | |
|-------------|--|
| Synopsis | Allow connection without secured transport protocol |
| Context | configure system grpc allow-unsecure-connection |
| Tree | allow-unsecure-connection |
| Description | When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information. |
| Notes | The following elements are part of a choice: allow-unsecure-connection or tls-server-profile . |
| Introduced | 16.0.R1 |
| Platforms | All |

gnmi

| | |
|------------|---|
| Synopsis | Enter the gnmi context |
| Context | configure system grpc gnmi |
| Tree | gnmi |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the gNMI service |
| Context | configure system grpc gnmi admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-config-save *boolean*

| | |
|----------|---|
| Synopsis | Automatically save configuration as part of commit |
| Context | configure system grpc gnmi auto-config-save <i>boolean</i> |
| Tree | auto-config-save |

| | |
|-------------|---|
| Description | When configured to true , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

proto-version *keyword*

| | |
|-------------|--|
| Synopsis | gnmi.proto version |
| Context | configure system grpc gnmi proto-version <i>keyword</i> |
| Tree | proto-version |
| Description | This command sets the gnmi.proto version that the GRPC server should use for all gNMI RPCs. Only use options other than latest for backward compatibility with legacy collectors. |
| Default | latest |
| Options | latest, v070 |
| Introduced | 23.3.R1 |
| Platforms | All |

gnoi

| | |
|------------|-----------------------------------|
| Synopsis | Enter the gnoi context |
| Context | configure system grpc gnoi |
| Tree | gnoi |
| Introduced | 19.10.R1 |
| Platforms | All |

cert-mgmt

| | |
|------------|---|
| Synopsis | Enter the cert-mgmt context |
| Context | configure system grpc gnoi cert-mgmt |
| Tree | cert-mgmt |
| Introduced | 19.10.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of gNOI CertificateManagement |
| Context | configure system grpc gnoi cert-mgmt admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 19.10.R1 |
| Platforms | All |

file

| | |
|------------|---|
| Synopsis | Enter the file context |
| Context | configure system grpc gnoi file |
| Tree | file |
| Introduced | 21.2.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the gNOI File service |
| Context | configure system grpc gnoi file admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.2.R1 |
| Platforms | All |

system

| | |
|------------|---|
| Synopsis | Enter the system context |
| Context | configure system grpc gnoi system |
| Tree | system |
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the gNOI System service |
| Context | configure system grpc gnoi system admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

max-msg-size *number*

| | |
|------------|---|
| Synopsis | Maximum size of received message |
| Context | configure system grpc max-msg-size <i>number</i> |
| Tree | max-msg-size |
| Range | 1 to 1024 |
| Default | 512 |
| Units | megabytes |
| Introduced | 16.0.R1 |
| Platforms | All |

md-cli

| | |
|------------|---|
| Synopsis | Enter the md-cli context |
| Context | configure system grpc md-cli |
| Tree | md-cli |
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the MD-CLI service |
| Context | configure system grpc md-cli admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |

| | |
|------------|-----------------|
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

rib-api

| | |
|------------|--|
| Synopsis | Enter the rib-api context |
| Context | configure system grpc rib-api |
| Tree | rib-api |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the RIB API service |
| Context | configure system grpc rib-api admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

purge-timeout *number*

| | |
|------------|---|
| Synopsis | Time until stale entries are purged |
| Context | configure system grpc rib-api purge-timeout <i>number</i> |
| Tree | purge-timeout |
| Range | 1 to 100000 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | All |

tcp-keepalive

| | |
|----------|--|
| Synopsis | Enter the tcp-keepalive context |
|----------|--|

| | |
|------------|--|
| Context | configure system grpc tcp-keepalive |
| Tree | tcp-keepalive |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the TCP keepalive algorithm |
| Context | configure system grpc tcp-keepalive admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

idle-time *number*

| | |
|-------------|--|
| Synopsis | Time until the first TCP keepalive probe is sent |
| Context | configure system grpc tcp-keepalive idle-time <i>number</i> |
| Tree | idle-time |
| Description | This command configures the amount of time the connection must be idle before TCP keepalives are sent. |
| Range | 1 to 100000 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | All |

interval *number*

| | |
|----------|---|
| Synopsis | Time between TCP keep-alive probes |
| Context | configure system grpc tcp-keepalive interval <i>number</i> |
| Tree | interval |
| Range | 1 to 100000 |
| Default | 15 |

| | |
|------------|---------|
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | All |

retries *number*

| | |
|-------------|---|
| Synopsis | Number of probe retries before closing the connection |
| Context | configure system grpc tcp-keepalive retries <i>number</i> |
| Tree | retries |
| Description | This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group. |
| Range | 3 to 100 |
| Default | 4 |
| Introduced | 16.0.R4 |
| Platforms | All |

tls-server-profile *reference*

| | |
|------------|--|
| Synopsis | Preferred TLS server profile |
| Context | configure system grpc tls-server-profile <i>reference</i> |
| Tree | tls-server-profile |
| Reference | configure system security tls server-tls-profile <i>string</i> |
| Notes | The following elements are part of a choice: allow-unsecure-connection or tls-server-profile . |
| Introduced | 16.0.R1 |
| Platforms | All |

grpc-tunnel

| | |
|------------|---|
| Synopsis | Enter the grpc-tunnel context |
| Context | configure system grpc-tunnel |
| Tree | grpc-tunnel |
| Introduced | 22.2.R1 |
| Platforms | All |

destination-group [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the destination-group list instance |
| Context | configure system grpc-tunnel destination-group <i>string</i> |
| Tree | destination-group |
| Description | Commands in this context configure parameters for destination groups. |
| Max. Instances | 4 |
| Introduced | 22.2.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | Destination group name |
| Context | configure system grpc-tunnel destination-group <i>string</i> |
| Tree | destination-group |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | All |

allow-unsecure-connection

| | |
|-------------|---|
| Synopsis | Allow unsecured operation of gRPC connections |
| Context | configure system grpc-tunnel destination-group <i>string</i> allow-unsecure-connection |
| Tree | allow-unsecure-connection |
| Description | This command allows a gRPC tunnel to run without a secured transport protocol. Data is transferred in unencrypted form. |
| Notes | The following elements are part of a choice: allow-unsecure-connection or tls-client-profile . |
| Introduced | 22.2.R1 |
| Platforms | All |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|--|
| Context | configure system grpc-tunnel destination-group <i>string</i> <i>description</i> <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 22.2.R1 |
| Platforms | All |

destination [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number*

| | |
|----------------|---|
| Synopsis | Enter the destination list instance |
| Context | configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i> |
| Tree | destination |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 22.2.R1 |
| Platforms | All |

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

| | |
|---------------|---|
| Synopsis | Address of the destination within the destination group |
| Context | configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i> |
| Tree | destination |
| String Length | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | All |

port number

| | |
|----------|---|
| Synopsis | TCP port number for the destination |
| Context | configure system grpc-tunnel destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i> |
| Tree | destination |

| | |
|------------|-------------------------------------|
| Range | 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | All |

local-source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Local IP address of packets sent from the source |
| Context | configure system grpc-tunnel destination-group <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number local-source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-source-address |
| Introduced | 22.2.R1 |
| Platforms | All |

originated-qos-marking *keyword*

| | |
|------------|---|
| Synopsis | QoS marking used for gRPC tunnel packets |
| Context | configure system grpc-tunnel destination-group <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number originated-qos-marking <i>keyword</i> |
| Tree | originated-qos-marking |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 22.2.R1 |
| Platforms | All |

router-instance *string*

| | |
|------------|--|
| Synopsis | Router instance for the destination group |
| Context | configure system grpc-tunnel destination-group <i>string destination</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 22.2.R1 |

Platforms All

tcp-keepalive

Synopsis Enter the **tcp-keepalive** context

Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [tcp-keepalive](#)

Tree [tcp-keepalive](#)

Introduced 22.2.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the TCP keepalive algorithm

Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [tcp-keepalive](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 22.2.R1

Platforms All

idle-time *number*

Synopsis Time until the first TCP keepalive probe is sent

Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [tcp-keepalive](#) [idle-time](#) *number*

Tree [idle-time](#)

Description This command configures the amount of time the connection must be idle before TCP keepalives are sent.

Range 1 to 100000

Default 600

Units seconds

Introduced 22.2.R1

Platforms All

interval *number*

| | |
|------------|--|
| Synopsis | Time between TCP keep-alive probes |
| Context | configure system grpc-tunnel destination-group <i>string</i> tcp-keepalive interval <i>number</i> |
| Tree | interval |
| Range | 1 to 100000 |
| Default | 15 |
| Units | seconds |
| Introduced | 22.2.R1 |
| Platforms | All |

retries *number*

| | |
|-------------|---|
| Synopsis | Number of probe retries before closing the connection |
| Context | configure system grpc-tunnel destination-group <i>string</i> tcp-keepalive retries <i>number</i> |
| Tree | retries |
| Description | This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group. |
| Range | 3 to 100 |
| Default | 4 |
| Introduced | 22.2.R1 |
| Platforms | All |

tls-client-profile *reference*

| | |
|------------|---|
| Synopsis | TLS client profile assigned to the destination group |
| Context | configure system grpc-tunnel destination-group <i>string</i> tls-client-profile <i>reference</i> |
| Tree | tls-client-profile |
| Reference | configure system security tls client-tls-profile <i>string</i> |
| Notes | The following elements are part of a choice: allow-unsecure-connection or tls-client-profile . |
| Introduced | 22.2.R1 |
| Platforms | All |

tunnel [*name*] *string*

| | |
|----------------|--|
| Synopsis | Enter the tunnel list instance |
| Context | configure system grpc-tunnel tunnel <i>string</i> |
| Tree | tunnel |
| Description | Commands in this context configure gRPC-tunnel-related parameters. |
| Max. Instances | 4 |
| Introduced | 22.2.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Tunnel name |
| Context | configure system grpc-tunnel tunnel <i>string</i> |
| Tree | tunnel |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the tunnel |
| Context | configure system grpc-tunnel tunnel <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.2.R1 |
| Platforms | All |

description *string*

| | |
|----------|--|
| Synopsis | Text description |
| Context | configure system grpc-tunnel tunnel <i>string</i> description <i>string</i> |
| Tree | description |

String Length 1 to 80

Introduced 22.2.R1

Platforms All

destination-group *reference*

Synopsis Destination group used in the tunnel

Context **configure** [system](#) [grpc-tunnel](#) [tunnel](#) *string* [destination-group](#) *reference*

Tree [destination-group](#)

Reference **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string*

Introduced 22.2.R1

Platforms All

handler [[name](#)] *string*

Synopsis Enter the **handler** list instance

Context **configure** [system](#) [grpc-tunnel](#) [tunnel](#) *string* [handler](#) *string*

Tree [handler](#)

Description Commands in this context configure handler parameters for this instance. Multiple handlers can be created for any tunnel.

Max. Instances 8

Introduced 22.2.R1

Platforms All

[name] *string*

Synopsis Handler name

Context **configure** [system](#) [grpc-tunnel](#) [tunnel](#) *string* [handler](#) *string*

Tree [handler](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.2.R1

Platforms All

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the handler |
| Context | configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.2.R1 |
| Platforms | All |

port *number*

| | |
|------------|---|
| Synopsis | TCP port number the handler listens to internally |
| Context | configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Introduced | 22.2.R1 |
| Platforms | All |

target-type

| | |
|------------|--|
| Synopsis | Enter the target-type context |
| Context | configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> target-type |
| Tree | target-type |
| Introduced | 22.2.R1 |
| Platforms | All |

custom-type *string*

| | |
|---------------|--|
| Synopsis | Custom string for target type |
| Context | configure system grpc-tunnel tunnel <i>string</i> handler <i>string</i> target-type custom-type <i>string</i> |
| Tree | custom-type |
| Description | This command configures a custom string for the target type. This string can correspond to specific values used by the gRPC tunnel protocol, such as GNMI_GNOI or SSH. If a custom string is defined, the gRPC tunnel client must specify the string to request a session for that handler. The string must be unique within a tunnel. |
| String Length | 1 to 64 |

| | |
|------------|---|
| Notes | The following elements are part of a choice: custom-type , grpc-server , or ssh-server . |
| Introduced | 22.2.R1 |
| Platforms | All |

grpc-server

| | |
|-------------|---|
| Synopsis | Target type set to GNMI_GNOI |
| Context | configure system grpc-tunnel tunnel <i>string handler string target-type</i> grpc-server |
| Tree | grpc-server |
| Description | When configured, this command assigns the gRPC server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of GNMI_GNOI. |
| Notes | The following elements are part of a choice: custom-type , grpc-server , or ssh-server . |
| Introduced | 22.2.R1 |
| Platforms | All |

ssh-server

| | |
|-------------|--|
| Synopsis | Target type is SSH |
| Context | configure system grpc-tunnel tunnel <i>string handler string target-type</i> ssh-server |
| Tree | ssh-server |
| Description | When configured, this command assigns the SSH server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of SSH. |
| Notes | The following elements are part of a choice: custom-type , grpc-server , or ssh-server . |
| Introduced | 22.2.R1 |
| Platforms | All |

target-name

| | |
|------------|--|
| Synopsis | Enter the target-name context |
| Context | configure system grpc-tunnel tunnel <i>string</i> target-name |
| Tree | target-name |
| Introduced | 22.2.R1 |
| Platforms | All |

custom-string *string*

| | |
|---------------|--|
| Synopsis | Custom target name |
| Context | configure system grpc-tunnel tunnel <i>string</i> target-name custom-string <i>string</i> |
| Tree | custom-string |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: custom-string , node-name , or user-agent . |
| Introduced | 22.2.R1 |
| Platforms | All |

node-name

| | |
|-------------|--|
| Synopsis | Set the node name as target name |
| Context | configure system grpc-tunnel tunnel <i>string</i> target-name node-name |
| Tree | node-name |
| Description | When configured, this command uses the node name as the target name. The node name is configured by the configure system name command. |
| Notes | The following elements are part of a choice: custom-string , node-name , or user-agent . |
| Introduced | 22.2.R1 |
| Platforms | All |

user-agent

| | |
|-------------|---|
| Synopsis | Set the user agent as the target name |
| Context | configure system grpc-tunnel tunnel <i>string</i> target-name user-agent |
| Tree | user-agent |
| Description | When configured, this command uses the user agent as the target name. The agent is a string consisting of <i>node-name:vendor:model:software-version</i> . |
| Notes | The following elements are part of a choice: custom-string , node-name , or user-agent . |
| Introduced | 22.2.R1 |
| Platforms | All |

icmp-vse *boolean*

| | |
|------------|---|
| Synopsis | Enable vendor-specific extensions to ICMP |
| Context | configure system icmp-vse <i>boolean</i> |
| Tree | icmp-vse |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ip

| | |
|------------|--|
| Synopsis | Enter the ip context |
| Context | configure system ip |
| Tree | ip |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-qinq-network-interface *boolean*

| | |
|------------|--|
| Synopsis | Allow QinQ encapsulation for network interfaces |
| Context | configure system ip allow-qinq-network-interface <i>boolean</i> |
| Tree | allow-qinq-network-interface |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

enforce-unique-if-index *boolean*

| | |
|------------|---|
| Synopsis | Force creation of globally unique IP interface indexes |
| Context | configure system ip enforce-unique-if-index <i>boolean</i> |
| Tree | enforce-unique-if-index |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

forward-6in4 *boolean*

| | |
|------------|--|
| Synopsis | Allow forwarding of IPv6 over IPv4 sent to the system IP address |
| Context | configure system ip forward-6in4 <i>boolean</i> |
| Tree | forward-6in4 |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

forward-ip-over-gre *boolean*

| | |
|------------|---|
| Synopsis | Allow forwarding of IP over GRE sent to the system IP address |
| Context | configure system ip forward-ip-over-gre <i>boolean</i> |
| Tree | forward-ip-over-gre |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

ipv6-eh *keyword*

| | |
|------------|--|
| Synopsis | Limit the number of IPv6 extension headers processed ingress/egress. |
| Context | configure system ip ipv6-eh <i>keyword</i> |
| Tree | ipv6-eh |
| Default | max |
| Options | max, limited |
| Introduced | 20.5.R1 |
| Platforms | All |

mpls

| | |
|------------|--|
| Synopsis | Enter the mpls context |
| Context | configure system ip mpls |
| Tree | mpls |
| Introduced | 19.10.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

label-stack-statistics-count *number*

| | |
|------------|--|
| Synopsis | Collect traffic statistics on labels of the MPLS stack |
| Context | configure system ip mpls label-stack-statistics-count <i>number</i> |
| Tree | label-stack-statistics-count |
| Range | 1 to 2 |
| Default | 1 |
| Introduced | 19.10.R3 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

l2tp

| | |
|------------|---|
| Synopsis | Enter the l2tp context |
| Context | configure system l2tp |
| Tree | l2tp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

non-multi-chassis-tunnel-id-range

| | |
|------------|--|
| Synopsis | Enter the non-multi-chassis-tunnel-id-range context |
| Context | configure system l2tp non-multi-chassis-tunnel-id-range |
| Tree | non-multi-chassis-tunnel-id-range |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

end *number*

| | |
|------------|--|
| Synopsis | Upper bound of the range |
| Context | configure system l2tp non-multi-chassis-tunnel-id-range end <i>number</i> |
| Tree | end |
| Range | 0 to 16383 |
| Default | 16383 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

start *number*

| | |
|------------|--|
| Synopsis | Lower bound of the range |
| Context | configure system l2tp non-multi-chassis-tunnel-id-range start <i>number</i> |
| Tree | start |
| Range | 0 to 16383 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

lACP

| | |
|------------|--|
| Synopsis | Enter the lACP context |
| Context | configure system lACP |
| Tree | lACP |
| Introduced | 16.0.R1 |
| Platforms | All |

system-priority *number*

| | |
|------------|--|
| Synopsis | LACP system priority on aggregated Ethernet interfaces |
| Context | configure system lACP system-priority <i>number</i> |
| Tree | system-priority |
| Range | 1 to 65535 |
| Default | 32768 |
| Introduced | 16.0.R1 |
| Platforms | All |

lldp

| | |
|------------|--|
| Synopsis | Enter the lldp context |
| Context | configure system lldp |
| Tree | lldp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of LLDP |
| Context | configure system lldp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

message-fast-tx *number*

| | |
|-------------|--|
| Synopsis | Interval at which LLDP frames are transmitted |
| Context | configure system lldp message-fast-tx <i>number</i> |
| Tree | message-fast-tx |
| Description | This command configures the interval at which LLDP frames are transmitted on behalf of the LLDP during a fast transmission period. |
| Range | 1 to 3600 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

message-fast-tx-init *number*

| | |
|------------|---|
| Synopsis | PDUs to transmit during the fast transmission period |
| Context | configure system lldp message-fast-tx-init <i>number</i> |
| Tree | message-fast-tx-init |
| Range | 1 to 8 |
| Default | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

notification-interval *number*

| | |
|------------|--|
| Synopsis | Minimum interval between change notifications |
| Context | configure system lldp notification-interval <i>number</i> |
| Tree | notification-interval |
| Range | 5 to 3600 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

reinit-delay *number*

| | |
|------------|---|
| Synopsis | Time required before re-initializing LLDP on a port |
| Context | configure system lldp reinit-delay <i>number</i> |
| Tree | reinit-delay |
| Range | 1 to 10 |
| Default | 2 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

tx-credit-max *number*

| | |
|------------|--|
| Synopsis | Maximum consecutive LLDPDUs that can be transmitted |
| Context | configure system lldp tx-credit-max <i>number</i> |
| Tree | tx-credit-max |
| Range | 1 to 100 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

tx-hold-multiplier *number*

| | |
|----------|---|
| Synopsis | Transmit interval multiplier |
| Context | configure system lldp tx-hold-multiplier <i>number</i> |

| | |
|------------|------------------------------------|
| Tree | tx-hold-multiplier |
| Range | 2 to 10 |
| Default | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

tx-interval *number*

| | |
|------------|--|
| Synopsis | LLDP transmit interval |
| Context | configure system lldp tx-interval <i>number</i> |
| Tree | tx-interval |
| Range | 5 to 32768 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

load-balancing

| | |
|------------|--|
| Synopsis | Enter the load-balancing context |
| Context | configure system load-balancing |
| Tree | load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

l2tp-load-balancing *boolean*

| | |
|------------|---|
| Synopsis | Include L2TP header information for load balancing |
| Context | configure system load-balancing l2tp-load-balancing <i>boolean</i> |
| Tree | l2tp-load-balancing |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

l4-load-balancing *boolean*

| | |
|------------|---|
| Synopsis | Use load balancing based on Layer 4 fields |
| Context | configure system load-balancing l4-load-balancing <i>boolean</i> |
| Tree | l4-load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

lsr-load-balancing *keyword*

| | |
|------------|--|
| Synopsis | Algorithm for system-wide LSR load balancing |
| Context | configure system load-balancing lsr-load-balancing <i>keyword</i> |
| Tree | lsr-load-balancing |
| Options | lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid, lbl-ip-or-teid |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-enh-load-balancing *boolean*

| | |
|------------|---|
| Synopsis | Enable enhanced egress multicast load balancing |
| Context | configure system load-balancing mc-enh-load-balancing <i>boolean</i> |
| Tree | mc-enh-load-balancing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

service-id-lag-hashing *boolean*

| | |
|------------|--|
| Synopsis | Enable enhanced VLL LAG service ID hashing |
| Context | configure system load-balancing service-id-lag-hashing <i>boolean</i> |
| Tree | service-id-lag-hashing |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

system-ip-load-balancing *boolean*

| | |
|------------|--|
| Synopsis | Use system IP address for ECMP and LAG load balancing |
| Context | configure system load-balancing system-ip-load-balancing <i>boolean</i> |
| Tree | system-ip-load-balancing |
| Introduced | 16.0.R1 |
| Platforms | All |

location *string*

| | |
|---------------|--|
| Synopsis | Site location of the system |
| Context | configure system location <i>string</i> |
| Tree | location |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

login-control

| | |
|------------|---|
| Synopsis | Enter the login-control context |
| Context | configure system login-control |
| Tree | login-control |
| Introduced | 16.0.R1 |
| Platforms | All |

exponential-backoff *boolean*

| | |
|------------|--|
| Synopsis | Enable exponential-backoff of the login prompt |
| Context | configure system login-control exponential-backoff <i>boolean</i> |
| Tree | exponential-backoff |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ftp

| | |
|------------|---|
| Synopsis | Enter the ftp context |
| Context | configure system login-control ftp |
| Tree | ftp |
| Introduced | 16.0.R1 |
| Platforms | All |

inbound-max-sessions *number*

| | |
|------------|--|
| Synopsis | Maximum number of concurrent inbound FTP sessions |
| Context | configure system login-control ftp inbound-max-sessions <i>number</i> |
| Tree | inbound-max-sessions |
| Range | 0 to 5 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

idle-timeout (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Idle timeout for FTP, console, or Telnet sessions |
| Context | configure system login-control idle-timeout (<i>keyword</i> <i>number</i>) |
| Tree | idle-timeout |
| Range | 1 to 1440 |
| Default | 30 |
| Units | minutes |
| Options | none |
| Introduced | 16.0.R1 |
| Platforms | All |

login-banner *boolean*

| | |
|----------|---|
| Synopsis | Display login banner |
| Context | configure system login-control login-banner <i>boolean</i> |
| Tree | login-banner |
| Default | false |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

login-scripts

| | |
|------------|---|
| Synopsis | Enter the login-scripts context |
| Context | configure system login-control login-scripts |
| Tree | login-scripts |
| Introduced | 16.0.R1 |
| Platforms | All |

global-script *string*

| | |
|---------------|---|
| Synopsis | URL of the global CLI login script |
| Context | configure system login-control login-scripts global-script <i>string</i> |
| Tree | global-script |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | All |

per-user-script

| | |
|------------|---|
| Synopsis | Enter the per-user-script context |
| Context | configure system login-control login-scripts per-user-script |
| Tree | per-user-script |
| Introduced | 16.0.R1 |
| Platforms | All |

file-name *string*

| | |
|---------------|---|
| Synopsis | File name of the per-user login script |
| Context | configure system login-control login-scripts per-user-script file-name <i>string</i> |
| Tree | file-name |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |

Platforms All

user-directory *string*

Synopsis Directory name of user-defined login script
Context **configure** [system login-control login-scripts per-user-script user-directory](#) *string*
Tree [user-directory](#)
String Length 1 to 180
Introduced 16.0.R1
Platforms All

motd

Synopsis Enter the **motd** context
Context **configure** [system login-control motd](#)
Tree [motd](#)
Introduced 16.0.R1
Platforms All

text *string*

Synopsis Message of the day displayed after console login
Context **configure** [system login-control motd text](#) *string*
Tree [text](#)
String Length 1 to 900
Notes The following elements are part of a choice: **text** or **url**.
Introduced 16.0.R1
Platforms All

url *string*

Synopsis URL of the location of message of the day
Context **configure** [system login-control motd url](#) *string*
Tree [url](#)
String Length 1 to 180

| | |
|------------|--|
| Notes | The following elements are part of a choice: text or url . |
| Introduced | 16.0.R1 |
| Platforms | All |

pre-login-message

| | |
|------------|---|
| Synopsis | Enter the pre-login-message context |
| Context | configure system login-control pre-login-message |
| Tree | pre-login-message |
| Introduced | 16.0.R1 |
| Platforms | All |

message *string*

| | |
|---------------|---|
| Synopsis | Message displayed prior to the login prompt |
| Context | configure system login-control pre-login-message message <i>string</i> |
| Tree | message |
| String Length | 1 to 900 |
| Introduced | 16.0.R1 |
| Platforms | All |

name *boolean*

| | |
|------------|---|
| Synopsis | Display the system name before the pre-login message |
| Context | configure system login-control pre-login-message name <i>boolean</i> |
| Tree | name |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ssh

| | |
|----------|---|
| Synopsis | Enter the ssh context |
| Context | configure system login-control ssh |
| Tree | ssh |

Introduced 16.0.R1
Platforms All

graceful-shutdown *boolean*

Synopsis Allow graceful shutdown of SSH sessions
Context **configure** [system login-control ssh graceful-shutdown](#) *boolean*
Tree [graceful-shutdown](#)
Default true
Introduced 16.0.R1
Platforms All

inbound-max-sessions *number*

Synopsis Maximum number of concurrent inbound sessions
Context **configure** [system login-control ssh inbound-max-sessions](#) *number*
Tree [inbound-max-sessions](#)
Range 0 to 50
Default 5
Introduced 16.0.R1
Platforms All

outbound-max-sessions *number*

Synopsis Maximum number of concurrent outbound sessions
Context **configure** [system login-control ssh outbound-max-sessions](#) *number*
Tree [outbound-max-sessions](#)
Range 0 to 15
Default 5
Introduced 16.0.R1
Platforms All

ttl-security *number*

Synopsis Minimum TTL value for incoming packets

| | |
|------------|--|
| Context | configure system login-control ssh ttl-security <i>number</i> |
| Tree | ttl-security |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet

| | |
|------------|--|
| Synopsis | Enter the telnet context |
| Context | configure system login-control telnet |
| Tree | telnet |
| Introduced | 16.0.R1 |
| Platforms | All |

graceful-shutdown *boolean*

| | |
|------------|---|
| Synopsis | Allow graceful shutdown of Telnet sessions |
| Context | configure system login-control telnet graceful-shutdown <i>boolean</i> |
| Tree | graceful-shutdown |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

inbound-max-sessions *number*

| | |
|------------|---|
| Synopsis | Maximum number of concurrent inbound sessions |
| Context | configure system login-control telnet inbound-max-sessions <i>number</i> |
| Tree | inbound-max-sessions |
| Range | 0 to 50 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

outbound-max-sessions *number*

| | |
|------------|--|
| Synopsis | Maximum number of concurrent outbound sessions |
| Context | configure system login-control telnet outbound-max-sessions <i>number</i> |
| Tree | outbound-max-sessions |
| Range | 0 to 15 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

ttl-security *number*

| | |
|------------|---|
| Synopsis | Minimum TTL value for incoming packets |
| Context | configure system login-control telnet ttl-security <i>number</i> |
| Tree | ttl-security |
| Range | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

management-interface

| | |
|------------|--|
| Synopsis | Enter the management-interface context |
| Context | configure system management-interface |
| Tree | management-interface |
| Introduced | 16.0.R1 |
| Platforms | All |

cli

| | |
|-------------|---|
| Synopsis | Enter the cli context |
| Context | configure system management-interface cli |
| Tree | cli |
| Description | Commands in this context configure the CLI management interfaces. |
| Introduced | 16.0.R1 |
| Platforms | All |

classic-cli

| | |
|-------------|--|
| Synopsis | Enter the classic-cli context |
| Context | configure system management-interface cli classic-cli |
| Tree | classic-cli |
| Description | Commands in this context configure the classic CLI management interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-immediate *boolean*

| | |
|-------------|--|
| Synopsis | Allow writable access in classic CLI configure branch |
| Context | configure system management-interface cli classic-cli allow-immediate boolean |
| Tree | allow-immediate |
| Description | <p>When configured to true, this command enables write access in the classic CLI configuration branch without having to use the classic CLI candidate edit functionality.</p> <p>When configured to false, this command blocks write access and configuration changes in the classic CLI configuration branch, and the classic CLI configuration branch is read-only. This enforces using the classic CLI candidate edit functionality, including candidate commit, to modify the router configuration, instead of allowing immediate line-by-line configuration changes.</p> |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

rollback

| | |
|-------------|--|
| Synopsis | Enter the rollback context |
| Context | configure system management-interface cli classic-cli rollback |
| Tree | rollback |
| Description | Commands in this context control classic CLI configuration rollback functionality, such as the maximum number of rollback checkpoints the system maintains. Configuration rollback allows the operator to revert to previous router configuration states while minimizing impacts to services. |
| Introduced | 16.0.R1 |
| Platforms | All |

local-checkpoints *number*

| | |
|------------|---|
| Synopsis | Maximum number of rollback files on local storage |
| Context | configure system management-interface cli classic-cli rollback local-checkpoints <i>number</i> |
| Tree | local-checkpoints |
| Range | 1 to 50 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

location *string*

| | |
|---------------|---|
| Synopsis | Path and filename prefix for rollback checkpoint files |
| Context | configure system management-interface cli classic-cli rollback location <i>string</i> |
| Tree | location |
| Description | This command configures the local (for example, compact flash) or remote location and name of the classic CLI rollback checkpoint files. The filename must not contain a suffix. The suffixes for rollback checkpoint files are, for example, <code>.rb</code> , <code>.rb.1</code> , <code>.rb.2</code> , and so on. The suffixes are automatically appended to rollback checkpoint files. |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | All |

remote-checkpoints *number*

| | |
|------------|--|
| Synopsis | Maximum rollback files saved at a remote location |
| Context | configure system management-interface cli classic-cli rollback remote-checkpoints <i>number</i> |
| Tree | remote-checkpoints |
| Range | 1 to 200 |
| Default | 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

rescue

| | |
|------------|--|
| Synopsis | Enter the rescue context |
| Context | configure system management-interface cli classic-cli rollback rescue |
| Tree | rescue |
| Introduced | 16.0.R1 |
| Platforms | All |

location *string*

| | |
|---------------|---|
| Synopsis | Location of the rescue configuration file |
| Context | configure system management-interface cli classic-cli rollback rescue location <i>string</i> |
| Tree | location |
| Description | This command configures the local or remote location and filename of the classic CLI rescue configuration file. The suffix (.rc) is automatically appended to the filename when a rescue configuration file is saved. Trivial FTP (TFTP) is not supported for remote locations. |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | All |

cli-engine *keyword*

| | |
|----------------|--|
| Synopsis | System-wide CLI engine access |
| Context | configure system management-interface cli cli-engine <i>keyword</i> |
| Tree | cli-engine |
| Description | This command configures the system-wide CLI engine. The operator can configure one or both engines. For the configuration to take effect, exit the running CLI session and start a new session after committing the new value. |
| Default | md-cli |
| Options | classic-cli, md-cli |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

md-cli

| | |
|-------------|---|
| Synopsis | Enter the md-cli context |
| Context | configure system management-interface cli md-cli |
| Tree | md-cli |
| Description | Commands in this context configure the MD-CLI management interface. |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-config-save *boolean*

| | |
|-------------|---|
| Synopsis | Automatically save configuration as part of commit |
| Context | configure system management-interface cli md-cli auto-config-save <i>boolean</i> |
| Tree | auto-config-save |
| Description | When configured to true , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

environment

| | |
|------------|---|
| Synopsis | Enter the environment context |
| Context | configure system management-interface cli md-cli environment |
| Tree | environment |
| Introduced | 16.0.R1 |
| Platforms | All |

command-alias

| | |
|------------|---|
| Synopsis | Enter the command-alias context |
| Context | configure system management-interface cli md-cli environment command-alias |
| Tree | command-alias |
| Introduced | 21.7.R1 |
| Platforms | All |

alias [[alias-name](#)] *string*

| | |
|-------------|--|
| Synopsis | Enter the alias list instance |
| Context | configure system management-interface cli md-cli environment command-alias alias <i>string</i> |
| Tree | alias |
| Description | Commands in this context create aliases to existing MD-CLI commands or to Python applications.

Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time. |
| Introduced | 21.7.R1 |
| Platforms | All |

[alias-name] *string*

| | |
|---------------|---|
| Synopsis | Alias name |
| Context | configure system management-interface cli md-cli environment command-alias alias <i>string</i> |
| Tree | alias |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|---|
| Synopsis | Administrative state of the alias |
| Context | configure system management-interface cli md-cli environment command-alias alias <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | This command controls the administrative state of the MD-CLI alias.

MD-CLI aliases that are administratively disabled cannot be executed, are not displayed in command completion, and do not appear in ? help. |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.10.R1 |

Platforms All

cli-command *string*

Synopsis CLI command to run when executing the alias

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string cli-command string

Tree [cli-command](#)

String Length 1 to 255

Notes The following elements are part of a mandatory choice: **cli-command** or **python-script**.

Introduced 21.7.R1

Platforms All

description *string*

Synopsis Alias description

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string description string

Tree [description](#)

String Length 1 to 110

Introduced 21.7.R1

Platforms All

mount-point [[path](#)] (*keyword* | *string*)

Synopsis Add a list entry for **mount-point**

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#)
string mount-point (keyword | string)

Tree [mount-point](#)

Min. 1

Instances

Introduced 21.7.R1

Platforms All

[path] (*keyword* | *string*)

| | |
|---------------|---|
| Synopsis | Mount point where the alias is available |
| Context | configure system management-interface cli md-cli environment command-alias alias
<i>string</i> mount-point (<i>keyword</i> <i>string</i>) |
| Tree | mount-point |
| String Length | 1 to 255 |
| Options | global |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | All |

python-script *reference*

| | |
|------------|---|
| Synopsis | Python script to run when executing the alias |
| Context | configure system management-interface cli md-cli environment command-alias alias
<i>string</i> python-script <i>reference</i> |
| Tree | python-script |
| Reference | configure python python-script <i>string</i> |
| Notes | The following elements are part of a mandatory choice: cli-command or python-script . |
| Introduced | 21.7.R1 |
| Platforms | All |

command-completion

| | |
|------------|--|
| Synopsis | Enter the command-completion context |
| Context | configure system management-interface cli md-cli environment command-completion |
| Tree | command-completion |
| Introduced | 16.0.R1 |
| Platforms | All |

enter *boolean*

| | |
|----------|--|
| Synopsis | Complete the command when the Enter key is pressed |
| Context | configure system management-interface cli md-cli environment command-completion
enter <i>boolean</i> |

| | |
|------------|-----------------------|
| Tree | enter |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

space *boolean*

| | |
|------------|---|
| Synopsis | Complete the command when the Space key is pressed |
| Context | configure system management-interface cli md-cli environment command-completion
space <i>boolean</i> |
| Tree | space |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

tab *boolean*

| | |
|------------|---|
| Synopsis | Complete the command when the Tab key is pressed |
| Context | configure system management-interface cli md-cli environment command-completion
tab <i>boolean</i> |
| Tree | tab |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

console

| | |
|------------|--|
| Synopsis | Enter the console context |
| Context | configure system management-interface cli md-cli environment console |
| Tree | console |
| Introduced | 16.0.R1 |
| Platforms | All |

length *number*

| | |
|----------|--|
| Synopsis | Number of lines displayed on the console |
|----------|--|

| | |
|------------|--|
| Context | configure system management-interface cli md-cli environment console length <i>number</i> |
| Tree | length |
| Range | 24 to 512 |
| Default | 24 |
| Introduced | 16.0.R1 |
| Platforms | All |

width *number*

| | |
|------------|---|
| Synopsis | Number of columns displayed on the console |
| Context | configure system management-interface cli md-cli environment console width <i>number</i> |
| Tree | width |
| Range | 80 to 512 |
| Default | 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

info-output

| | |
|------------|---|
| Synopsis | Enter the info-output context |
| Context | configure system management-interface cli md-cli environment info-output |
| Tree | info-output |
| Introduced | 22.2.R1 |
| Platforms | All |

always-display

| | |
|-------------|--|
| Synopsis | Enter the always-display context |
| Context | configure system management-interface cli md-cli environment info-output always-display |
| Tree | always-display |
| Description | Commands in this context specify elements that are always displayed in the info output, regardless of whether the detail option is used. |
| Introduced | 22.2.R1 |
| Platforms | All |

admin-state *boolean*

| | |
|-------------|---|
| Synopsis | Always display admin-state elements |
| Context | configure system management-interface cli md-cli environment info-output always-display admin-state <i>boolean</i> |
| Tree | admin-state |
| Description | When configured to true , the values of the admin-state elements in info output (without the detail option) are always displayed, even if they are the default values. |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | All |

message-severity-level

| | |
|------------|--|
| Synopsis | Enter the message-severity-level context |
| Context | configure system management-interface cli md-cli environment message-severity-level |
| Tree | message-severity-level |
| Introduced | 16.0.R1 |
| Platforms | All |

cli *keyword*

| | |
|------------|---|
| Synopsis | Message severity threshold for CLI messages |
| Context | configure system management-interface cli md-cli environment message-severity-level cli <i>keyword</i> |
| Tree | cli |
| Default | info |
| Options | warning, info |
| Introduced | 16.0.R1 |
| Platforms | All |

more *boolean*

| | |
|----------|---|
| Synopsis | Activate the pager when output is longer than a screen |
| Context | configure system management-interface cli md-cli environment more <i>boolean</i> |
| Tree | more |

| | |
|------------|---------|
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

progress-indicator

| | |
|------------|--|
| Synopsis | Enter the progress-indicator context |
| Context | configure system management-interface cli md-cli environment progress-indicator |
| Tree | progress-indicator |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the progress indicator |
| Context | configure system management-interface cli md-cli environment progress-indicator
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

delay *number*

| | |
|------------|---|
| Synopsis | Delay before the progress indicator is displayed |
| Context | configure system management-interface cli md-cli environment progress-indicator
delay <i>number</i> |
| Tree | delay |
| Range | 0 to 10000 |
| Default | 1000 |
| Units | milliseconds |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword*

| | |
|------------|--|
| Synopsis | Progress indicator output style |
| Context | configure system management-interface cli md-cli environment progress-indicator type <i>keyword</i> |
| Tree | type |
| Default | dots |
| Options | dots |
| Introduced | 16.0.R1 |
| Platforms | All |

prompt

| | |
|------------|--|
| Synopsis | Enter the prompt context |
| Context | configure system management-interface cli md-cli environment prompt |
| Tree | prompt |
| Introduced | 16.0.R1 |
| Platforms | All |

context *boolean*

| | |
|------------|---|
| Synopsis | Show the current command context in the prompt |
| Context | configure system management-interface cli md-cli environment prompt context <i>boolean</i> |
| Tree | context |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

newline *boolean*

| | |
|------------|---|
| Synopsis | Add a new line before every prompt line |
| Context | configure system management-interface cli md-cli environment prompt newline <i>boolean</i> |
| Tree | newline |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

timestamp *boolean*

| | |
|------------|---|
| Synopsis | Show the timestamp before the first prompt line |
| Context | configure system management-interface cli md-cli environment prompt timestamp <i>boolean</i> |
| Tree | timestamp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

uncommitted-changes-indicator *boolean*

| | |
|------------|---|
| Synopsis | Show an asterisk (*) when uncommitted changes exist |
| Context | configure system management-interface cli md-cli environment prompt uncommitted-changes-indicator <i>boolean</i> |
| Tree | uncommitted-changes-indicator |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

python

| | |
|-------------|--|
| Synopsis | Enter the python context |
| Context | configure system management-interface cli md-cli environment python |
| Tree | python |
| Description | Commands in this context customize Python settings used with the Python 3 interpreter in MD-CLI applications such as pyexec, command aliases, EHS, and CRON. |
| Introduced | 21.10.R1 |
| Platforms | All |

memory-reservation *number*

| | |
|----------|---|
| Synopsis | Memory reserved per Python interpreter |
| Context | configure system management-interface cli md-cli environment python memory-reservation <i>number</i> |
| Tree | memory-reservation |

| | |
|------------|-----------|
| Range | 1 to 500 |
| Units | megabytes |
| Introduced | 21.10.R1 |
| Platforms | All |

minimum-available-memory *number*

| | |
|------------|---|
| Synopsis | Minimum memory requirement to run a Python interpreter |
| Context | configure system management-interface cli md-cli environment python minimum-available-memory <i>number</i> |
| Tree | minimum-available-memory |
| Range | 5 to 50 |
| Units | percent |
| Introduced | 21.10.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|--|
| Synopsis | Maximum run time before a Python application is stopped |
| Context | configure system management-interface cli md-cli environment python timeout <i>number</i> |
| Tree | timeout |
| Range | 30 to 86400 |
| Default | 3600 |
| Units | seconds |
| Introduced | 21.10.R1 |
| Platforms | All |

time-display *keyword*

| | |
|-------------|--|
| Synopsis | Time zone to display time |
| Context | configure system management-interface cli md-cli environment time-display <i>keyword</i> |
| Tree | time-display |
| Description | This command configures the time zone for a timestamp displayed in outputs, such as event logs and show commands for the current CLI session. |

In event logs, the selected time is used to control the timestamps in the CLI output of **show log log-id** and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).

Also see the **configure log log-id time-format** command.

| | |
|------------|------------|
| Default | local |
| Options | local, utc |
| Introduced | 16.0.R1 |
| Platforms | All |

time-format *keyword*

| | |
|-------------|---|
| Synopsis | Format to display the date and time |
| Context | configure system management-interface cli md-cli environment time-format <i>keyword</i> |
| Tree | time-format |
| Description | This command specifies the format of the time display in configuration, state, and certain show command output in the current CLI session. |
| Default | rfc-3339 |
| Options | iso-8601, rfc-1123, rfc-3339 |
| Introduced | 20.5.R1 |
| Platforms | All |

commit-history *number*

| | |
|-------------|--|
| Synopsis | Number of commit history IDs to store |
| Context | configure system management-interface commit-history <i>number</i> |
| Tree | commit-history |
| Description | This command sets the number of IDs to store in the commit history.
Setting the value to 0 disables the commit history. |
| Range | 0 to 200 |
| Default | 50 |
| Introduced | 21.10.R1 |
| Platforms | All |

configuration-mode *keyword*

| | |
|----------|---|
| Synopsis | Management interfaces allowed to edit the configuration |
|----------|---|

| | |
|-------------|---|
| Context | configure system management-interface configuration-mode <i>keyword</i> |
| Tree | configuration-mode |
| Description | This command controls which of the classic or model-driven management interfaces can modify the configuration of the router.

Any management interface can be used in any configuration mode (to gather state information or perform operations, for example), but only specific management interfaces (CLI, NETCONF, and so on) are allowed to edit the configuration of the router in different modes. For example, only classic CLI and SNMP can be used to edit the configuration when in classic mode. |
| Options | classic, model-driven, mixed |
| Introduced | 16.0.R1 |
| Platforms | All |

configuration-save

| | |
|-------------|--|
| Synopsis | Enter the configuration-save context |
| Context | configure system management-interface configuration-save |
| Tree | configuration-save |
| Description | Commands in this context configure the attributes for saved configuration files. |
| Introduced | 16.0.R1 |
| Platforms | All |

configuration-backups *number*

| | |
|-------------|--|
| Synopsis | Maximum number of configuration versions maintained |
| Context | configure system management-interface configuration-save configuration-backups <i>number</i> |
| Tree | configuration-backups |
| Description | This command configures the maximum number of saved configuration file versions the router maintains.

When the configuration is saved, configuration file names are appended with a numeric extension. Each subsequent configuration save creates a new configuration file version with an incremented numeric extension until the maximum count is reached, after which the next configuration save overwrites the oldest file version.

Each persistent index file is updated at the same time as the associated configuration file. The system synchronizes the active and standby CPM for all configurations and their associated persistent index files. |
| Range | 1 to 200 |

| | |
|------------|---------|
| Default | 50 |
| Introduced | 16.0.R1 |
| Platforms | All |

incremental-saves *boolean*

| | |
|-------------|--|
| Synopsis | Use incremental saved configuration files |
| Context | configure system management-interface configuration-save incremental-saves <i>boolean</i> |
| Tree | incremental-saves |
| Description | When configured to true , the system saves each commit to the configure configuration region in a separate incremental saved configuration file, which allows for faster commits, instead of saving a complete saved configuration file each time. |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | All |

netconf

| | |
|------------|--|
| Synopsis | Enter the netconf context |
| Context | configure system management-interface netconf |
| Tree | netconf |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of NETCONF |
| Context | configure system management-interface netconf admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-config-save *boolean*

| | |
|-------------|---|
| Synopsis | Automatically save configuration as part of commit |
| Context | configure system management-interface netconf auto-config-save <i>boolean</i> |
| Tree | auto-config-save |
| Description | When configured to true , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation. |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

capabilities

| | |
|-------------|--|
| Synopsis | Enter the capabilities context |
| Context | configure system management-interface netconf capabilities |
| Tree | capabilities |
| Description | Commands in this context configure explicit capabilities for the NETCONF server. |
| Introduced | 16.0.R1 |
| Platforms | All |

candidate *boolean*

| | |
|-------------|--|
| Synopsis | Allow the NETCONF server to access candidate datastore |
| Context | configure system management-interface netconf capabilities candidate <i>boolean</i> |
| Tree | candidate |
| Description | <p>When configured to true, this command allows the SR OS NETCONF server to access the candidate configuration datastore. Configuring this command to true also enables using commit and discard-changes.</p> <p>When configure system management-interface configuration-mode is set to classic, the candidate capability is disabled, even if this command is configured to true.</p> <p>When configured to false, this command disables the SR OS NETCONF server from accessing the candidate datastore. If the candidate is disabled, requests that reference the candidate datastore return an error, and when a NETCONF client establishes a new session, the candidate capability is not advertised in the SR OS NETCONF Hello message.</p> |
| Default | true |
| Introduced | 16.0.R1 |

Platforms All

port number

Synopsis Port on which NETCONF server listens for connections

Context **configure system management-interface netconf port number**

Tree [port](#)

Description This command specifies the port on which the SR OS NETCONF server listens for new connections. One port can be configured for NETCONF management.

The configured port applies to both non-VPRN and VPRN management. New NETCONF connections are able to use the configured port.

For NETCONF connections not using VPRN management, active NETCONF connections are not disconnected if the connection port changes. For NETCONF connections using VPRN management, active NETCONF connections are disconnected if the connection port changes.

Range 22 | 830

Default 830

Introduced 19.10.R1

Platforms All

operations

Synopsis Enter the **operations** context

Context **configure system management-interface operations**

Tree [operations](#)

Description Commands in this context configure parameters associated with operational commands in model-driven interfaces.

Introduced 21.5.R1

Platforms All

global-timeouts

Synopsis Enter the **global-timeouts** context

Context **configure system management-interface operations global-timeouts**

Tree [global-timeouts](#)

Description Commands in this context configure system timeout parameters for operational commands.

Timeout parameters provide default system-level control for various types of operational commands in model-driven interfaces. The timeout values are used when specific execution and retention timeouts are not requested for a specific operation.

Introduced 21.5.R1

Platforms All

asynchronous-execution (*number* | *keyword*)

Synopsis Timeout for asynchronous operation execution

Context **configure** [system management-interface operations global-timeouts asynchronous-execution](#) (*number* | *keyword*)

Tree [asynchronous-execution](#)

Description This command configures the period of time that operations launched as “asynchronous” are allowed to execute before being automatically stopped by the SR OS.

An asynchronous operation is not deleted from the system when it is stopped. See the **asynchronous-retention** command.

If a specific execution timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.

Note: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the **ping** operation also has its own timeout parameter).

Range 1 to 604800

Default 3600

Units seconds

Options never

Introduced 21.5.R1

Platforms All

asynchronous-retention (*number* | *keyword*)

Synopsis Timeout for asynchronous operation data retention

Context **configure** [system management-interface operations global-timeouts asynchronous-retention](#) (*number* | *keyword*)

Tree [asynchronous-retention](#)

Description This command configures the period of time that data related to operations launched as “asynchronous” is retained in the system. After the retention timeout expires, all information related to the operation is deleted, including any status information and result data.

If a specific retention timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.

| | |
|------------|-------------|
| Range | 1 to 604800 |
| Default | 86400 |
| Units | seconds |
| Options | never |
| Introduced | 21.5.R1 |
| Platforms | All |

synchronous-execution (*number* | *keyword*)

| | |
|-------------|--|
| Synopsis | Timeout for synchronous operation execution |
| Context | configure system management-interface operations global-timeouts synchronous-execution (<i>number</i> <i>keyword</i>) |
| Tree | synchronous-execution |
| Description | <p>This command configures the period of time that operations launched as “synchronous” (the default method for all operations) are allowed to execute before they are automatically stopped, and their associated data is deleted.</p> <p>If a specific execution timeout is not included in the request for a particular synchronous operation, this system-level timeout applies.</p> <p>Note: This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the ping operation also has its own timeout parameter).</p> <p>Caution: If this command is set with a specific time value, MD-CLI operations are subject to the timeout and are interrupted if they execute longer than the time value. This situation can arise because the timeout also applies to operations requested in the MD-CLI interface (for example, ping, file dir, and so on).</p> |
| Range | 1 to 604800 |
| Default | never |
| Units | seconds |
| Options | never |
| Introduced | 21.5.R1 |
| Platforms | All |

remote-management

| | |
|----------|--|
| Synopsis | Enter the remote-management context |
| Context | configure system management-interface remote-management |

| | |
|-------------|---|
| Tree | remote-management |
| Description | Commands in this context configure the SR OS node to use the remote management service. Configuring remote management enables the SR OS node to report itself to a remote manager service running on a remote server, so that it is included in the dynamic list of available nodes. The manager service streamlines the management of multiple SR OS nodes running different SR OS versions using the same client application providing a similar shell to the MD-CLI. |
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of remote management registration |
| Context | configure system management-interface remote-management admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

allow-unsecure-connection

| | |
|-------------|--|
| Synopsis | Allow connection without secured transport protocol |
| Context | configure system management-interface remote-management allow-unsecure-connection |
| Tree | allow-unsecure-connection |
| Description | When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information. |
| Notes | The following elements are part of a choice: allow-unsecure-connection or client-tls-profile . |
| Introduced | 20.5.R1 |
| Platforms | All |

client-tls-profile *reference*

| | |
|----------|---|
| Synopsis | TLS client profile name |
| Context | configure system management-interface remote-management client-tls-profile <i>reference</i> |

| | |
|-------------|--|
| Tree | client-tls-profile |
| Description | This command specifies the client TLS profile to all remote managers. |
| Reference | configure system security tls client-tls-profile <i>string</i> |
| Notes | The following elements are part of a choice: allow-unsecure-connection or client-tls-profile . |
| Introduced | 20.5.R1 |
| Platforms | All |

connection-timeout *number*

| | |
|------------|---|
| Synopsis | Time without a response before manager declared down |
| Context | configure system management-interface remote-management connection-timeout <i>number</i> |
| Tree | connection-timeout |
| Range | 1 to 3600 |
| Default | 60 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | All |

device-label *string*

| | |
|---------------|--|
| Synopsis | Device label supplied to the remote manager |
| Context | configure system management-interface remote-management device-label <i>string</i> |
| Tree | device-label |
| Description | This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal. |
| String Length | 1 to 64 |
| Introduced | 20.5.R1 |
| Platforms | All |

device-name *string*

| | |
|----------|--|
| Synopsis | Device name supplied to the remote manager |
| Context | configure system management-interface remote-management device-name <i>string</i> |

| | |
|---------------|--|
| Tree | device-name |
| Description | This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network.
When unconfigured, the default system name is used. |
| String Length | 1 to 64 |
| Introduced | 20.5.R1 |
| Platforms | All |

hello-interval *number*

| | |
|------------|---|
| Synopsis | Time between hello messages from SR OS node to manager |
| Context | configure system management-interface remote-management hello-interval <i>number</i> |
| Tree | hello-interval |
| Range | 10 to 216000 |
| Default | 600 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | All |

manager [[manager-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the manager list instance |
| Context | configure system management-interface remote-management manager <i>string</i> |
| Tree | manager |
| Description | Commands in this context configure options for a specific manager.
Commands configured in this context take precedence over command values specified directly in the configure management-interface remote-management context.
If a command is not configured in this context, the command setting is inherited from the higher level context. |
| Max. Instances | 2 |
| Introduced | 20.5.R1 |
| Platforms | All |

[manager-name] *string*

| | |
|---------------|--|
| Synopsis | Remote management manager name |
| Context | configure system management-interface remote-management manager <i>string</i> |
| Tree | manager |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of remote management registration |
| Context | configure system management-interface remote-management manager <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

allow-unsecure-connection

| | |
|-------------|--|
| Synopsis | Allow connection without secured transport protocol |
| Context | configure system management-interface remote-management manager <i>string</i> allow-unsecure-connection |
| Tree | allow-unsecure-connection |
| Description | When configured, this command allows an unsecured connection to the remote managers; the TCP connection is not encrypted. This includes username and password information. |
| Notes | The following elements are part of a choice: allow-unsecure-connection or client-tls-profile . |
| Introduced | 20.5.R1 |
| Platforms | All |

client-tls-profile *reference*

| | |
|-------------|--|
| Synopsis | TLS client profile name |
| Context | configure system management-interface remote-management manager <i>string</i> client-tls-profile <i>reference</i> |
| Tree | client-tls-profile |
| Description | This command assigns a TLS profile name to a remote manager. |
| Reference | configure system security tls client-tls-profile <i>string</i> |
| Notes | The following elements are part of a choice: allow-unsecure-connection or client-tls-profile . |
| Introduced | 20.5.R1 |
| Platforms | All |

connection-timeout *number*

| | |
|------------|---|
| Synopsis | Time without response before manager is declared down |
| Context | configure system management-interface remote-management manager <i>string</i> connection-timeout <i>number</i> |
| Tree | connection-timeout |
| Range | 1 to 3600 |
| Units | seconds |
| Introduced | 20.5.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system management-interface remote-management manager <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.5.R1 |
| Platforms | All |

device-label *string*

| | |
|----------|---|
| Synopsis | Device label supplied to the remote manager |
|----------|---|

| | |
|---------------|---|
| Context | configure system management-interface remote-management manager <i>string</i> device-label <i>string</i> |
| Tree | device-label |
| Description | This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal. |
| String Length | 1 to 64 |
| Introduced | 20.5.R1 |
| Platforms | All |

device-name *string*

| | |
|---------------|--|
| Synopsis | Device name supplied to the remote manager |
| Context | configure system management-interface remote-management manager <i>string</i> device-name <i>string</i> |
| Tree | device-name |
| Description | This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network.

When unconfigured, the default system name is used. |
| String Length | 1 to 64 |
| Introduced | 20.5.R1 |
| Platforms | All |

manager-address (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

| | |
|---------------|---|
| Synopsis | Destination IP address of the manager |
| Context | configure system management-interface remote-management manager <i>string</i> manager-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) |
| Tree | manager-address |
| String Length | 1 to 255 |
| Introduced | 20.5.R1 |
| Platforms | All |

manager-port *number*

| | |
|----------|--|
| Synopsis | Destination TCP port for gRPC connections to manager |
|----------|--|

| | |
|------------|---|
| Context | configure system management-interface remote-management manager <i>string</i> manager-port <i>number</i> |
| Tree | manager-port |
| Range | 1 to 65535 |
| Default | 57400 |
| Introduced | 20.5.R1 |
| Platforms | All |

router-instance *string*

| | |
|------------|--|
| Synopsis | Reference to a router or VPRN service name |
| Context | configure system management-interface remote-management manager <i>string</i> router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 20.5.R1 |
| Platforms | All |

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Source IP address for connection to the manager |
| Context | configure system management-interface remote-management manager <i>string</i> source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | source-address |
| Introduced | 20.5.R1 |
| Platforms | All |

source-port (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Source TCP destination port number |
| Context | configure system management-interface remote-management manager <i>string</i> source-port (<i>number</i> <i>keyword</i>) |
| Tree | source-port |
| Range | 1 to 65535 |
| Options | grpc-default |
| Introduced | 20.5.R1 |
| Platforms | All |

router-instance *string*

| | |
|------------|--|
| Synopsis | Router name or VPRN service name |
| Context | configure system management-interface remote-management router-instance <i>string</i> |
| Tree | router-instance |
| Default | management |
| Introduced | 20.5.R1 |
| Platforms | All |

source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Source IP address for connection to the manager |
| Context | configure system management-interface remote-management source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | source-address |
| Introduced | 20.5.R1 |
| Platforms | All |

source-port (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Source TCP port number to connection to the manager |
| Context | configure system management-interface remote-management source-port (<i>number</i> <i>keyword</i>) |
| Tree | source-port |
| Range | 1 to 65535 |
| Default | grpc-default |
| Options | grpc-default |
| Introduced | 20.5.R1 |
| Platforms | All |

schema-path *string*

| | |
|----------|--|
| Synopsis | Schema path URL |
| Context | configure system management-interface schema-path <i>string</i> |
| Tree | schema-path |

| | |
|---------------|---|
| Description | This command specifies the schema path where the SR OS YANG modules can be placed by the user before using a <get-schema> request. Nokia recommends that the URL string not exceed 135 characters for the <get-schema> request to work correctly with all schema files.

If this command is not configured, the software upgrade process manages the YANG schema files to ensure the schema files are synchronized with the software image on both the primary and standby CPM. |
| String Length | 1 to 180 |
| Introduced | 16.0.R4 |
| Platforms | All |

snmp

| | |
|------------|---|
| Synopsis | Enter the snmp context |
| Context | configure system management-interface snmp |
| Tree | snmp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|---|
| Synopsis | Administrative state of the SNMP agent |
| Context | configure system management-interface snmp admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | This command administratively enables or disables SNMP agent operations. Disabling SNMP does not prevent the agent from sending SNMP notifications to configured SNMP trap destinations.

In classic and mixed configuration mode, the agent is administratively disabled in the event of a reboot when the processing of the configuration file fails to complete or when an SNMP persistent index file fails while the bof system persistent-indices command is set to true . This prevents an SNMP-based management system from accessing and possibly synchronizing with a partially booted or incomplete network element. This auto-disable behavior is not applicable to model-driven configuration mode. |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

engine-id *string*

| | |
|---------------|--|
| Synopsis | SNMP engine ID that identifies the SNMPv3 node |
| Context | configure system management-interface snmp engine-id <i>string</i> |
| Tree | engine-id |
| Description | <p>This command sets the SNMP engine ID that uniquely identifies the SNMPv3 node.</p> <p>If unconfigured, the system uses an engine ID based on the information from the system backplane.</p> <p>If the SNMP engine ID is changed, the current configuration must be saved and a reboot must be executed. Otherwise, the previously configured SNMP communities and logger trap-target notify communities will not be valid for the new engine ID.</p> <p>Note: Changing the SNMP engine ID invalidates all SNMPv3 MD5 and SHA security digest keys, which may render the node unmanageable.</p> <p>When replacing a chassis, configure the new router to use the same engine ID as the previous router. This preserves SNMPv3 security keys and allows management stations to use their existing authentication keys for the new router.</p> <p>Ensure that the engine ID of each router is unique. A management domain can only maintain one instance of a specific engine ID.</p> |
| String Length | 10 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

general-port *number*

| | |
|-------------|--|
| Synopsis | Port number used to send general SNMP messages |
| Context | configure system management-interface snmp general-port <i>number</i> |
| Tree | general-port |
| Description | <p>This command configures the port number used to receive SNMP request messages and send replies.</p> <p>For the port used for SNMP notifications, configure the configure log snmp-trap-group trap-target port command.</p> |
| Range | 0 1 to 65535 |
| Default | 161 |
| Introduced | 16.0.R1 |
| Platforms | All |

max-bulk-duration *number*

| | |
|----------|--|
| Synopsis | Maximum process duration before responses are returned |
|----------|--|

| | |
|-------------|---|
| Context | configure system management-interface snmp max-bulk-duration <i>number</i> |
| Tree | max-bulk-duration |
| Description | This command sets the maximum duration to process an SNMP request before bulk responses are returned to avoid a timeout on the management system when a lot of information is returned in the response. |
| Range | 100 to 5000 |
| Units | milliseconds |
| Introduced | 23.3.R1 |
| Platforms | All |

packet-size *number*

| | |
|------------|---|
| Synopsis | Maximum SNMP packet size generated by the node |
| Context | configure system management-interface snmp packet-size <i>number</i> |
| Tree | packet-size |
| Range | 484 to 9216 |
| Default | 1500 |
| Introduced | 16.0.R1 |
| Platforms | All |

streaming

| | |
|------------|---|
| Synopsis | Enter the streaming context |
| Context | configure system management-interface snmp streaming |
| Tree | streaming |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|-------------|--|
| Synopsis | Administrative state of SNMP streaming |
| Context | configure system management-interface snmp streaming admin-state <i>keyword</i> |
| Tree | admin-state |
| Description | This command enables or disables the proprietary SNMP request and response bundling as well as the TCP-based transport mechanism for optimizing network management of the router nodes. In higher latency networks, synchronizing router MIBs from network management using streaming takes less time than synchronizing using |

| | |
|------------|--|
| | classic SNMP UDP requests. Streaming operates on TCP port 1491 and runs over IPv4 or IPv6. |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

yang-modules

| | |
|-------------|---|
| Synopsis | Enter the yang-modules context |
| Context | configure system management-interface yang-modules |
| Tree | yang-modules |
| Description | <p>Commands in this context determine the system support of the Nokia YANG models. The settings affect the data sent in a NETCONF <hello>, data populated in the RFC 6022 /netconf-state/schemas list, data returned in a <get-schema> request, and data populated in the RFC 8525 /yang-library.</p> <p>See "NETCONF monitoring" and "YANG library" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide</i> for more information.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

nmda

| | |
|-------------|--|
| Synopsis | Enter the nmda context |
| Context | configure system management-interface yang-modules nmda |
| Tree | nmda |
| Description | Commands in this context configure the attributes for the Network Management Datastores Architecture (NMDA). |
| Introduced | 21.7.R1 |
| Platforms | All |

nmda-support *boolean*

| | |
|----------|---|
| Synopsis | Advertise NMDA support over NETCONF |
| Context | configure system management-interface yang-modules nmda nmda-support boolean |
| Tree | nmda-support |

| | |
|-------------|--|
| Description | When configured to true , this command enables the advertisement of NMDA support over NETCONF through the use of YANG library 1.1.
When configured to false , this command disables NMDA advertisement over NETCONF and YANG library 1.0 is used. |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

nokia-combined-modules *boolean*

| | |
|-------------|--|
| Synopsis | Support access to combined Nokia YANG models |
| Context | configure system management-interface yang-modules nokia-combined-modules <i>boolean</i> |
| Tree | nokia-combined-modules |
| Description | When configured to true , the system supports the combined Nokia YANG files for both configuration and state data in the NETCONF server.
When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to true .
When configured to false , access to the combined Nokia YANG files is not supported.
This command and the nokia-submodules command cannot both be set to true at the same time. |
| Introduced | 16.0.R4 |
| Platforms | All |

nokia-submodules *boolean*

| | |
|-------------|--|
| Synopsis | Support submodule-based packaging of Nokia YANG models |
| Context | configure system management-interface yang-modules nokia-submodules <i>boolean</i> |
| Tree | nokia-submodules |
| Description | When configured to true , the system supports the alternative submodule-based packaging of the Nokia YANG files for both configuration and state data in the NETCONF server.
When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to true .
When configured to false , access to the submodule-based packaging of the Nokia YANG files is not supported. |

This command and the **nokia-combined-modules** command cannot both be set to **true** at the same time.

Introduced 21.2.R1
 Platforms All

openconfig-modules *boolean*

Synopsis Support access to OpenConfig YANG models
 Context **configure** [system](#) [management-interface](#) [yang-modules](#) [openconfig-modules](#) *boolean*
 Tree [openconfig-modules](#)
 Description When configured to **true**, this command allows access to OpenConfig YANG models in all model-driven interfaces.
 Default false
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

name *string*

Synopsis Administrative name assigned to the system
 Context **configure** [system](#) [name](#) *string*
 Tree [name](#)
 String Length 1 to 64
 Introduced 16.0.R1
 Platforms All

network-element-discovery

Synopsis Enter the **network-element-discovery** context
 Context **configure** [system](#) [network-element-discovery](#)
 Tree [network-element-discovery](#)
 Introduced 19.5.R1
 Platforms All

generate-traps *boolean*

Synopsis Generate NE discovery traps

| | |
|------------|---|
| Context | configure system network-element-discovery generate-traps <i>boolean</i> |
| Tree | generate-traps |
| Default | false |
| Introduced | 19.5.R1 |
| Platforms | All |

profile [*name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the profile list instance |
| Context | configure system network-element-discovery profile <i>string</i> |
| Tree | profile |
| Max. Instances | 1 |
| Introduced | 19.5.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | Profile name |
| Context | configure system network-element-discovery profile <i>string</i> |
| Tree | profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

neid *string*

| | |
|---------------|--|
| Synopsis | Network element ID of the advertised node |
| Context | configure system network-element-discovery profile <i>string neid</i> <i>string</i> |
| Tree | neid |
| String Length | 7 to 8 |
| Introduced | 19.5.R1 |
| Platforms | All |

neip

| | |
|------------|---|
| Synopsis | Enter the neip context |
| Context | configure system network-element-discovery profile <i>string</i> neip |
| Tree | neip |
| Introduced | 19.5.R1 |
| Platforms | All |

auto-generate

| | |
|------------|---|
| Synopsis | Enter the auto-generate context |
| Context | configure system network-element-discovery profile <i>string</i> neip auto-generate |
| Tree | auto-generate |
| Introduced | 21.2.R1 |
| Platforms | All |

ipv4

| | |
|------------|--|
| Synopsis | Enable the ipv4 context |
| Context | configure system network-element-discovery profile <i>string</i> neip auto-generate ipv4 |
| Tree | ipv4 |
| Introduced | 21.2.R1 |
| Platforms | All |

vendor-id-value *number*

| | |
|------------|---|
| Synopsis | Most significant byte if the NE IPv4 address |
| Context | configure system network-element-discovery profile <i>string</i> neip auto-generate ipv4
vendor-id-value <i>number</i> |
| Tree | vendor-id-value |
| Range | 1 to 255 |
| Default | 140 |
| Introduced | 21.2.R1 |
| Platforms | All |

ipv6

| | |
|------------|---|
| Synopsis | Enable the ipv6 context |
| Context | configure system network-element-discovery profile <i>string</i> neip auto-generate ipv6 |
| Tree | ipv6 |
| Introduced | 21.2.R1 |
| Platforms | All |

vendor-id-value *number*

| | |
|------------|--|
| Synopsis | Most significant byte of the NE IPv6 address |
| Context | configure system network-element-discovery profile <i>string</i> neip auto-generate ipv6
vendor-id-value <i>number</i> |
| Tree | vendor-id-value |
| Range | 1 to 255 |
| Default | 140 |
| Introduced | 21.2.R1 |
| Platforms | All |

ipv4 *string*

| | |
|------------|---|
| Synopsis | NEIP IPv4 address |
| Context | configure system network-element-discovery profile <i>string</i> neip ipv4 <i>string</i> |
| Tree | ipv4 |
| Introduced | 19.5.R1 |
| Platforms | All |

ipv6 *string*

| | |
|------------|---|
| Synopsis | NEIP IPv6 address |
| Context | configure system network-element-discovery profile <i>string</i> neip ipv6 <i>string</i> |
| Tree | ipv6 |
| Introduced | 19.5.R1 |
| Platforms | All |

platform-type *string*

| | |
|---------------|---|
| Synopsis | Platform name and chassis type to be advertised |
| Context | configure system network-element-discovery profile <i>string</i> platform-type <i>string</i> |
| Tree | platform-type |
| String Length | 1 to 255 |
| Introduced | 19.5.R1 |
| Platforms | All |

system-mac *string*

| | |
|------------|--|
| Synopsis | MAC address of the advertised node |
| Context | configure system network-element-discovery profile <i>string</i> system-mac <i>string</i> |
| Tree | system-mac |
| Introduced | 19.5.R1 |
| Platforms | All |

vendor-id *string*

| | |
|---------------|---|
| Synopsis | Vendor ID to be advertised |
| Context | configure system network-element-discovery profile <i>string</i> vendor-id <i>string</i> |
| Tree | vendor-id |
| String Length | 1 to 255 |
| Default | Nokia |
| Introduced | 19.5.R1 |
| Platforms | All |

ospf-dynamic-hostnames *boolean*

| | |
|-------------|--|
| Synopsis | Process received OSPF dynamic hostname information |
| Context | configure system ospf-dynamic-hostnames <i>boolean</i> |
| Tree | ospf-dynamic-hostnames |
| Description | When configured to true , OSPF dynamic hostnames are enabled. The router receiving the new dynamic hostname within the OSPF Router Information (RI) LSA is instructed to process the received dynamic hostname information.
When configured to false , dynamic hostname information is not processed. |

| | |
|------------|---------|
| Default | false |
| Introduced | 20.2.R1 |
| Platforms | All |

persistence

| | |
|-------------|---|
| Synopsis | Enter the persistence context |
| Context | configure system persistence |
| Tree | persistence |
| Description | <p>Commands in this context configure persistence on the system.</p> <p>The persistence feature enables the system to retain state information learned through DHCP snooping across reboots. This information includes data such as the IP address and MAC binding information, lease-length information, and ingress SAP information (required for VPLS snooping to identify the ingress interface).</p> <p>If persistence is enabled when there are no DHCP relay or snooping commands enabled, the system creates an empty file.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

ancp

| | |
|------------|--|
| Synopsis | Enter the ancp context |
| Context | configure system persistence ancp |
| Tree | ancp |
| Introduced | 16.0.R1 |
| Platforms | All |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system persistence ancp description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

location *keyword*

| | |
|------------|--|
| Synopsis | CPM flash card where the information is stored |
| Context | configure system persistence ancp location <i>keyword</i> |
| Tree | location |
| Options | cf1, cf2, cf3 |
| Introduced | 16.0.R1 |
| Platforms | All |

application-assurance

| | |
|-------------|---|
| Synopsis | Enter the application-assurance context |
| Context | configure system persistence application-assurance |
| Tree | application-assurance |
| Description | Commands in this context configure AA persistence on the system. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system persistence application-assurance description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

location *keyword*

| | |
|------------|---|
| Synopsis | CPM flash card where the information is stored |
| Context | configure system persistence application-assurance location <i>keyword</i> |
| Tree | location |
| Options | cf1, cf2, cf3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

dhcp-server

| | |
|------------|---|
| Synopsis | Enter the dhcp-server context |
| Context | configure system persistence dhcp-server |
| Tree | dhcp-server |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system persistence dhcp-server description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

location *keyword*

| | |
|------------|---|
| Synopsis | CPM flash card where the information is stored |
| Context | configure system persistence dhcp-server location <i>keyword</i> |
| Tree | location |
| Options | cf1, cf2, cf3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

nat-port-forwarding

| | |
|------------|---|
| Synopsis | Enter the nat-port-forwarding context |
| Context | configure system persistence nat-port-forwarding |
| Tree | nat-port-forwarding |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system persistence nat-port-forwarding description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

location *keyword*

| | |
|------------|---|
| Synopsis | CPM flash card where the information is stored |
| Context | configure system persistence nat-port-forwarding location <i>keyword</i> |
| Tree | location |
| Options | cf1, cf2, cf3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

options

| | |
|------------|---|
| Synopsis | Enter the options context |
| Context | configure system persistence options |
| Tree | options |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

dhcp-lease-time-threshold *number*

| | |
|------------|---|
| Synopsis | DHCP lease time limit to be eligible for persistence |
| Context | configure system persistence options dhcp-lease-time-threshold <i>number</i> |
| Tree | dhcp-lease-time-threshold |
| Range | 1 to 631152000 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

python-policy-cache

| | |
|------------|---|
| Synopsis | Enter the python-policy-cache context |
| Context | configure system persistence python-policy-cache |
| Tree | python-policy-cache |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system persistence python-policy-cache description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

location *keyword*

| | |
|------------|---|
| Synopsis | CPM flash card where the information is stored |
| Context | configure system persistence python-policy-cache location <i>keyword</i> |
| Tree | location |
| Options | cf1, cf2, cf3 |
| Introduced | 16.0.R1 |
| Platforms | All |

subscriber-mgmt

| | |
|------------|---|
| Synopsis | Enter the subscriber-mgmt context |
| Context | configure system persistence subscriber-mgmt |
| Tree | subscriber-mgmt |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system persistence subscriber-mgmt description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

location keyword

| | |
|------------|--|
| Synopsis | CPM flash card where the information is stored |
| Context | configure system persistence subscriber-mgmt location keyword |
| Tree | location |
| Options | cf1, cf2, cf3 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR |

power-management power-zone number

| | |
|------------|--|
| Synopsis | Enter the power-management list instance |
| Context | configure system power-management power-zone number |
| Tree | power-management |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

power-zone number

| | |
|------------|--|
| Synopsis | Power zone |
| Context | configure system power-management power-zone number |
| Tree | power-management |
| Range | 1 to 2 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

mode *keyword*

| | |
|------------|---|
| Synopsis | Power capacity mode algorithm |
| Context | configure system power-management power-zone <i>number</i> mode <i>keyword</i> |
| Tree | mode |
| Default | basic |
| Options | none, basic, advanced |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

power-safety-alert *number*

| | |
|------------|--|
| Synopsis | Power capacity to trigger a safety alert event |
| Context | configure system power-management power-zone <i>number</i> power-safety-alert <i>number</i> |
| Tree | power-safety-alert |
| Range | 0 to 120000 |
| Default | 0 |
| Units | watts |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

power-safety-level *number*

| | |
|------------|--|
| Synopsis | Minimum threshold to power off devices |
| Context | configure system power-management power-zone <i>number</i> power-safety-level <i>number</i> |
| Tree | power-safety-level |
| Range | 0 to 100 |
| Default | 100 |
| Units | percent |
| Introduced | 16.0.R1 |
| Platforms | 7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ptp

| | |
|----------|------------------------------|
| Synopsis | Enter the ptp context |
|----------|------------------------------|

| | |
|-------------|--|
| Context | configure system ptp |
| Tree | ptp |
| Description | Commands in this context configure Precision Time Control (PTP) parameters based on <i>IEEE 1588-2008, Precision Time Protocol</i> .
The context is only supported on control assemblies that support 1588. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of PTP |
| Context | configure system ptp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

alternate-profile [[name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the alternate-profile list instance |
| Context | configure system ptp alternate-profile <i>string</i> |
| Tree | alternate-profile |
| Description | Commands in this context create an alternate profile configuration for use in PTP messaging.
The alternate profile can be used at the edge of a network to provide PTP time or frequency distribution outward to external PTP clocks.
The alternate profile cannot be deleted if it is configured as the profile under a PTP port. |
| Max. Instances | 6 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[name] *string*

| | |
|----------|------------------------|
| Synopsis | Alternate profile name |
|----------|------------------------|

| | |
|---------------|--|
| Context | configure system ptp alternate-profile <i>string</i> |
| Tree | alternate-profile |
| Description | This command configures an alternate profile name.
The strings "Primary" and "primary" cannot be used for the alternate-profile name. |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the alternate PTP profile |
| Context | configure system ptp alternate-profile <i>string admin-state</i> <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

domain *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Alternate profile PTP domain number |
| Context | configure system ptp alternate-profile <i>string domain</i> <i>number</i> |
| Tree | domain |
| Description | This command configures the domain number of the alternate profile. This value can only be changed when the alternate profile is admin-state disable . |
| Range | 0 to 255 |
| Default | 24 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log-announce-interval *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | PTP announce message interval in log form |
| Context | configure system ptp alternate-profile <i>string</i> log-announce-interval <i>number</i> |
| Tree | log-announce-interval |
| Description | <p>This command configures the announce message interval used for multicast messages within the alternate profile.</p> <p>For multicast messages used on PTP Ethernet ports, this command configures the message interval used for announce messages transmitted by the local node.</p> <p>This value has no impact on the interval used for the BMCA, which is controlled by the value defined for the primary profile.</p> <p>This value can only be changed when the alternate profile is admin-state disable.</p> |
| Range | -3 to 4 |
| Default | -3 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

profile *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Standard based profile used within an alternate profile |
| Context | configure system ptp alternate-profile <i>string</i> profile <i>keyword</i> |
| Tree | profile |
| Description | <p>This command specifies the standard based profile that is used as the basis for the alternate profile.</p> <p>This setting controls the contents of PTP messages sent on ports and peers using this alternate profile.</p> <p>This value can only be changed when the alternate profile is admin-state disable.</p> |
| Default | g8275dot1-2014 |
| Options | g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016 |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

announce-receipt-timeout *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | Expired intervals count before timeout event declared |
| Context | configure system ptp announce-receipt-timeout <i>number</i> |
| Tree | announce-receipt-timeout |
| Description | This command configures the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event. |
| Range | 2 to 10 |
| Default | 3 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

clock-type *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Clock type |
| Context | configure system ptp clock-type <i>keyword</i> |
| Tree | clock-type |
| Options | slave-only, master-only, boundary |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

domain *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | PTP domain |
| Context | configure system ptp domain <i>number</i> |
| Tree | domain |
| Description | <p>This command configures the PTP domain. The default and valid range of the domain depend on the configured PTP profile.</p> <ul style="list-style-type: none"> • IEEE 1588-2008 - domain range of 0 to 255 (default 0) • G.8265.1 - domain range of 0 to 255 (default 4) • G.8275.1 - domain range of 24 to 43 (default 24) • G.8275.2 - domain range of 0 to 255 (default 44) |
| Range | 0 to 255 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

local-priority *number*

| | |
|-------------|---|
| Synopsis | PTP clock local priority |
| Context | configure system ptp local-priority <i>number</i> |
| Tree | local-priority |
| Description | <p>This command configures the local priority used to choose between PTP masters in the best master clock algorithm (BMCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the local clock (ptp context). See G.8275.1 or G.8275.2 for detailed information.</p> |
| Range | 1 to 255 |
| Default | 128 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log-announce-interval *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Announce message interval in log form |
| Context | configure system ptp log-announce-interval <i>number</i> |
| Tree | log-announce-interval |
| Description | <p>This command configures the Announce message interval used for both unicast and multicast messages.</p> <p>For unicast messages, the Announce message interval is requested during unicast negotiation to any peer. This controls the Announce message rate sent from remote peers to the local node. It does not affect the announce message rate that may be sent from the local node to remote peers. Remote peers may request an Announce message rate within the acceptable grant range.</p> <p>For multicast messages used on PTP Ethernet ports, this command specifies the message interval used for Announce messages transmitted by the local node.</p> <p>This value also defines the interval between executions of the BMCA within the node.</p> <p>To minimize BMCA driven reconfigurations, IEEE recommends that the announce interval should be consistent across the entire 1588 network.</p> |
| Range | -3 to 4 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

network-type *keyword*

| | |
|-------------|---|
| Synopsis | PTP network type |
| Context | configure system ptp network-type <i>keyword</i> |
| Tree | network-type |
| Description | <p>This command configures the codeset to be used for the encoding of QL values into PTP clockClass values and vice versa when the profile is configured for G.8265.1 or G.8275.2.</p> <p>This setting only applies to the range of values observed in the clockClass values transmitted out of the node in Announce messages. The router supports the reception of any valid value in Table 1/G.8265.1 and Table 2/G.8275.2.</p> |
| Default | sdh |
| Options | sonet, sdh |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port [[port-id](#)] *reference*

| | |
|-------------|--|
| Synopsis | Enter the port list instance |
| Context | configure system ptp port <i>reference</i> |
| Tree | port |
| Description | <p>Commands in this context configure PTP over Ethernet on the physical port. The PTP process transmits and receives PTP messages through the port using Ethernet encapsulation (as opposed to UDP/IPv4 encapsulation).</p> <p>Frames are transmitted with no VLAN tags, even if the port is configured for dot1q or qinq modes for encap-type. The received frames from the external PTP clock must also be untagged.</p> <p>Two reserved multicast addresses are allocated for PTP messages (see Annex F IEEE Std 1588-2008). Either address can be configured for the PTP messages sent through the port.</p> <p>A PTP port cannot be created if the PTP profile is configured for G.8265.1.</p> <p>If the port supports 1588 port-based timestamping, Synchronous Ethernet must be enabled on the MDA when PTP over Ethernet is enabled.</p> <p>De-provisioning of the card or MDA containing the specified port is not permitted while the port is configured within PTP.</p> <p>Changing the encapsulation or the port type of the Ethernet port is not permitted when PTP Ethernet Multicast operation is configured on the port.</p> <p>To allocate an Ethernet satellite client port as a PTP port, the Ethernet satellite must first be enabled for the transparent clock function. For more information, see the configure satellite ethernet-satellite ptp-tc command.</p> <p>The SyncE/1588 ports of the CPM and CCMs can be specified as PTP ports. These use the 'A/3' and 'B/3' designation and both must be specified as two PTP ports if both are used. The active CPM sends and receives messages on both ports if they are specified and enabled.</p> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[port-id] *reference*

| | |
|------------|---|
| Synopsis | Ethernet PTP port ID |
| Context | configure system ptp port <i>reference</i> |
| Tree | port |
| Reference | configure port <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

address string

Synopsis Destination MAC address of the transmitted PTP messages

Context **configure system ptp port reference address string**

Tree [address](#)

Description This command specifies the destination MAC address of the transmitted PTP messages. IEEE Std 1588-2008 Annex F defines two reserved addresses for 1588 messages, which include:

- **01-1B-19-00-00-00** — all except the peer delay mechanism messages
- **01-80-C2-00-00-0E** — peer delay mechanism messages

Both addresses are supported for reception, independent of the address configured by this command.

Default 01:1B:19:00:00:00

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state keyword

Synopsis Administrative state of the PTP port

Context **configure system ptp port reference admin-state keyword**

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

alternate-profile reference

Synopsis Alternate profile for the PTP port

Context **configure system ptp port reference alternate-profile reference**

Tree [alternate-profile](#)

Description This command creates the alternate profile that is used in communications with the port or peer. If no alternate profile is specified, the primary profile is used.

Reference **configure system ptp alternate-profile string**

| | |
|------------|--|
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

local-priority *number*

| | |
|-------------|--|
| Synopsis | PTP port local priority |
| Context | configure system ptp port <i>reference</i> local-priority <i>number</i> |
| Tree | local-priority |
| Description | <p>This command configures the local priority used to choose between PTP masters in the best master clock algorithm (BMCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (ptp port context). See G.8275.1 or G.8275.2 for detailed information.</p> |
| Range | 1 to 255 |
| Default | 128 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log-delay-interval *number*

| | |
|-------------|--|
| Synopsis | Minimum interval for Delay_Req messages in log form |
| Context | configure system ptp port <i>reference</i> log-delay-interval <i>number</i> |
| Tree | log-delay-interval |
| Description | <p>This command configures the minimum interval used for multicast Delay_Req messages for the port. For ports in a slave state, the interval is used, unless the parent port indicates a longer interval. For a port in master state, the interval is advertised to external slave ports as the minimum acceptable interval for Delay_Req messages from the slave ports.</p> <p>The router supports the 1588 standard requirement for a port in slave state to check the logMessageInterval field of received multicast Delay_Resp messages. If the value of the logMessageInterval field of the messages is greater than the value configured locally for the generation of Delay_Req messages, the slave must use the longer interval for the generation of Delay_Req messages.</p> <p>The interval value is specified as the logarithm to the base 2.</p> |
| Range | -6 to 0 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log-sync-interval *number*

| | |
|-------------|--|
| Synopsis | Interval for transmission of Sync messages in log form |
| Context | configure system ptp port <i>reference</i> log-sync-interval <i>number</i> |
| Tree | log-sync-interval |
| Description | This command configures the interval used for Sync messages transmitted by the local node when the port is in master state.

The interval value is specified as the logarithm to the base 2. |
| Range | -6 to 0 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

master-only *boolean*

| | |
|-------------|--|
| Synopsis | Restrict the local port to master state |
| Context | configure system ptp port <i>reference</i> master-only <i>boolean</i> |
| Tree | master-only |
| Description | When configured to true , the local port is restricted to master state only, ensuring that the system does not obtain synchronization from attached external devices.

This command is supported only when the PTP profile is set for G.8275.1 or G.8275.2. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority1 *number*

| | |
|-------------|--|
| Synopsis | Priority1 of the local clock |
| Context | configure system ptp priority1 <i>number</i> |
| Tree | priority1 |
| Description | This command configures the priority1 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008.

This value is used by the Best Master Clock Algorithm to determine which clock should provide timing for the network and is advertised in Announce messages. |
| Range | 0 to 255 |
| Default | 128 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

priority2 *number*

| | |
|-------------|---|
| Synopsis | Priority2 of the local clock |
| Context | configure system ptp priority2 <i>number</i> |
| Tree | priority2 |
| Description | This command configures the priority2 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008, G.8275.1, or G.8275.2.

This value is used by the Best Master Clock algorithm to determine which clock should provide timing for the network and is advertised in Announce messages. |
| Range | 0 to 255 |
| Default | 128 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

profile *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | PTP profile |
| Context | configure system ptp profile <i>keyword</i> |
| Tree | profile |
| Description | This command configures the profile to be used for the internal PTP clock. It defines the Best Master Clock Algorithm (BMCA) behavior.

Profile changes may affect the settings of other configuration elements, such as the clock type and default settings for the delay interval, announce interval, and the Sync interval.

The following clock types are supported for the indicated profiles: <ul style="list-style-type: none"> • G.8265.1: slave only, master only • IEEE 1588 2008: slave only, master only, boundary • G.8275.1: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver) • G.8275.2: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver) |

| | |
|------------|---|
| Options | g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ptsf

| | |
|-------------|--|
| Synopsis | Enter the ptsf context |
| Context | configure system ptp ptsf |
| Tree | ptsf |
| Description | Commands in this context configure the attributes of Packet Timing Signal Fail (PTSF). |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

monitor-ptsf-unusable

| | |
|-------------|--|
| Synopsis | Enter the monitor-ptsf-unusable context |
| Context | configure system ptp ptsf monitor-ptsf-unusable |
| Tree | monitor-ptsf-unusable |
| Description | <p>Commands in this context configure monitoring of neighbor clocks for the PTSF-unusable state (condition) when the profile is set to g8275dot1-2014.</p> <p>When administratively enabled, the local clock monitors the noise level of PTP event messages between external neighbor PTP ports and the local clock. If it detects a high variation in the network path between the external neighbor port and the local port, it considers the neighbor port unusable. Announce messages from the neighbor are discarded and excluded from the BMCA and the port cannot be selected as the parent clock. The unusable condition must be manually cleared.</p> <p>When administratively disabled, the monitor PTSF function of the PTP clock clears PTSF-unusable states from all neighbor PTP ports. If no PTP messages are received from a neighbor for 15 minutes, the neighbor information is purged and the PTSF-unusable state is cleared.</p> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of PTSF unusable monitoring |
| Context | configure system ptp ptsf monitor-ptsf-unusable admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|--|
| Default | disable |
| Options | enable, disable |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

router [[router-instance](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the router list instance |
| Context | configure system ptp router <i>string</i> |
| Tree | router |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[router-instance] *string*

| | |
|------------|--|
| Synopsis | Router name or VPRN service name |
| Context | configure system ptp router <i>string</i> |
| Tree | router |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of PTP on the router instance |
| Context | configure system ptp router <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

peer [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------|-------------------------------------|
| Synopsis | Enter the peer list instance |
|----------|-------------------------------------|

| | |
|-------------|---|
| Context | configure system ptp router <i>string peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | peer |
| Description | Commands in this context configure a remote PTP peer. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|-------------|---|
| Synopsis | IP address of the remote PTP peer |
| Context | configure system ptp router <i>string peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | peer |
| Description | This command specifies the IP address of the remote PTP peer.
In the current release, the system supports PTP using IPv4 only. |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the PTP peer |
| Context | configure system ptp router <i>string peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

local-priority *number*

| | |
|-------------|--|
| Synopsis | PTP peer local priority |
| Context | configure system ptp router <i>string peer</i> (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>)
local-priority <i>number</i> |
| Tree | local-priority |
| Description | This command configures the local priority for the peer, which is used to choose between PTP masters in the best master clock algorithm (BMCA). This setting applies |

when the PTP profile is configured for G.8265.1, G.8275.1, or G.8275.2 and is ignored for any other profile.

For G.8265.1, this command configures the priority used to choose between master clocks with the same quality (see G.8265.1 for more details).

For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (**ptp router peer** context). See G.8275.1 or G.8275.2 for detailed information.

| | |
|------------|--|
| Range | 1 to 255 |
| Default | 128 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log-sync-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|--|
| Synopsis | PTP peer interval for Sync messages in log form |
| Context | configure system ptp router <i>string peer (ipv4-address-no-zone ipv6-address-no-zone) log-sync-interval number</i> |
| Tree | log-sync-interval |
| Description | This command configures the message interval used for Sync and Delay_Resp messages that are requested during unicast negotiation to the peer. The setting controls messages sent from remote peers to the local node but the packet rate from the local node to remote peers is not affected. Remote peers may request a packet rate within the acceptable range.

The interval value is specified as the logarithm to the base 2. |
| Range | -6 to 0 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

peer-limit *number*

| | |
|-------------|---|
| Synopsis | Number of discovered peers allowed for routing instance |
| Context | configure system ptp router <i>string peer-limit number</i> |
| Tree | peer-limit |
| Description | This command specifies the maximum number of discovered peers permitted within the routing instance. This ensures that a routing instance does not consume all the possible |

discovered peers and prevents the routing instance from blocking discovered peers in other routing instances.

The sum of all peer limit values for all routing instances cannot exceed the maximum number of discovered peers supported by the system.

| | |
|------------|--|
| Range | 0 to 512 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tx-while-sync-uncertain *boolean*

| | |
|-------------|--|
| Synopsis | Send Announce messages while clock is unsynchronized |
| Context | configure system ptp tx-while-sync-uncertain <i>boolean</i> |
| Tree | tx-while-sync-uncertain |
| Description | <p>When configured to true, the local PTP clock transmits Announce messages to downstream clocks to indicate it has not yet stabilized on the recovered synchronization source (upstream clocks or GM clock). While the PTP clock is unsynchronized, the Sync Uncertain state is true.</p> <p>When configured to false, the local PTP clock does not send Announce messages to downstream clocks to indicate it is not synchronized to a valid timing source. If the Sync Uncertain state of the clock is true while this command is configured to false, unicast negotiation grant requests are not granted and current grants are canceled.</p> |
| Default | true |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

script-control

| | |
|------------|--|
| Synopsis | Enter the script-control context |
| Context | configure system script-control |
| Tree | script-control |
| Introduced | 16.0.R1 |
| Platforms | All |

script [[script-name](#)] *string* **owner** *string*

| | |
|----------|--|
| Synopsis | Enter the script list instance |
| Context | configure system script-control script <i>string</i> owner <i>string</i> |
| Tree | script |

| | |
|----------------|---------|
| Max. Instances | 1500 |
| Introduced | 16.0.R1 |
| Platforms | All |

[script-name] *string*

| | |
|---------------|---|
| Synopsis | Script name |
| Context | configure system script-control script <i>string</i> owner <i>string</i> |
| Tree | script |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *string*

| | |
|---------------|---|
| Synopsis | Script owner |
| Context | configure system script-control script <i>string</i> owner <i>string</i> |
| Tree | script |
| Description | This command configures the owner to be associated with the script. The owner is optional and "TIMOS CLI" is used if an owner is not specified.

The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The configure system security cli-script authorization x cli-user command determines the user context against which commands in the scripts are authorized. |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the script |
| Context | configure system script-control script <i>string</i> owner <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |

| | |
|------------|-----------------|
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system script-control script <i>string</i> owner <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

location *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Script location |
| Context | configure system script-control script <i>string</i> owner <i>string</i> location <i>string</i> |
| Tree | location |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

script-policy [[policy-name](#)] *string* [owner](#) *string*

| | |
|----------------|--|
| Synopsis | Enter the script-policy list instance |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> |
| Tree | script-policy |
| Max. Instances | 1500 |
| Introduced | 16.0.R1 |
| Platforms | All |

[policy-name] *string*

| | |
|---------------|---|
| Synopsis | Script policy name |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> |
| Tree | script-policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *string*

| | |
|---------------|---|
| Synopsis | Script policy owner |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> |
| Tree | script-policy |
| Description | <p>This command configures the owner to be associated with the script policy. The owner is optional and "TIMOS CLI" is used if an owner is not specified.</p> <p>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The configure system security cli-script authorization x cli-user command determines the user context against which commands in the scripts are authorized.</p> |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the script policy |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

expire-time (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum amount of time to keep a run history status |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> expire-time (<i>number</i> <i>keyword</i>) |
| Tree | expire-time |
| Range | 0 to 21474836 |
| Default | 3600 |
| Units | seconds |
| Options | forever |
| Introduced | 16.0.R1 |
| Platforms | All |

lifetime (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum amount of time the script may run |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> lifetime (<i>number</i> <i>keyword</i>) |
| Tree | lifetime |
| Range | 0 to 21474836 |
| Default | 3600 |
| Units | seconds |
| Options | forever |
| Notes | The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script). |
| Introduced | 16.0.R1 |
| Platforms | All |

lock-override *boolean*

| | |
|------------|--|
| Synopsis | Allow EHS/CRON script to break database explicit lock |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> lock-override <i>boolean</i> |
| Tree | lock-override |
| Default | false |
| Introduced | 19.10.R1 |

Platforms All

max-completed *number*

Synopsis Maximum number of script history status entries kept

Context **configure** [system](#) [script-control](#) [script-policy](#) *string* [owner](#) *string* **max-completed** *number*

Tree [max-completed](#)

Range 1 to 1500

Default 1

Introduced 16.0.R1

Platforms All

python-lifetime *number*

Synopsis Maximum time the Python application can run

Context **configure** [system](#) [script-control](#) [script-policy](#) *string* [owner](#) *string* **python-lifetime** *number*

Tree [python-lifetime](#)

Range 30 to 86400

Units seconds

Notes The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).

Introduced 21.10.R1

Platforms All

python-script

Synopsis Enter the **python-script** context

Context **configure** [system](#) [script-control](#) [script-policy](#) *string* [owner](#) *string* **python-script**

Tree [python-script](#)

Notes The following elements are part of a choice: (**lifetime** and **script**) or (**python-lifetime** and **python-script**).

Introduced 21.10.R1

Platforms All

name *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Python application name |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> python-script <i>name reference</i> |
| Tree | name |
| Reference | configure python python-script <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | All |

results *string*

| | |
|---------------|---|
| Synopsis | Location to receive CLI output of a script run |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> results <i>string</i> |
| Tree | results |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

script

| | |
|------------|--|
| Synopsis | Enter the script context |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> script |
| Tree | script |
| Notes | The following elements are part of a choice: (lifetime and script) or (python-lifetime and python-script). |
| Introduced | 16.0.R1 |
| Platforms | All |

name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Script name |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> script name <i>string</i> |
| Tree | name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

owner *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Script owner |
| Context | configure system script-control script-policy <i>string</i> owner <i>string</i> script owner <i>string</i> |
| Tree | owner |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

security

| | |
|-------------|---|
| Synopsis | Enter the security context |
| Context | configure system security |
| Tree | security |
| Description | <p>Commands in this context configure central security settings such as DDoS protection, users, authorization profiles, and certificates.</p> <p>Access to these commands should be restricted to highly trusted users and device administrators.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

aaa

| | |
|------------|--------------------------------------|
| Synopsis | Enter the aaa context |
| Context | configure system security aaa |
| Tree | aaa |
| Introduced | 16.0.R1 |
| Platforms | All |

cli-session-group [[cli-session-group-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the cli-session-group list instance |
| Context | configure system security aaa cli-session-group <i>string</i> |
| Tree | cli-session-group |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[cli-session-group-name\]](#) *string*

| | |
|---------------|--|
| Synopsis | CLI session group name |
| Context | configure system security aaa cli-session-group <i>string</i> |
| Tree | cli-session-group |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R2 |
| Platforms | All |

combined-max-sessions *number*

| | |
|------------|--|
| Synopsis | Maximum number of concurrent SSH and Telnet sessions |
| Context | configure system security aaa cli-session-group <i>string</i> combined-max-sessions <i>number</i> |
| Tree | combined-max-sessions |
| Range | 0 to 50 |
| Introduced | 16.0.R1 |

Platforms All

description *string*

Synopsis Text description

Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

ssh-max-sessions *number*

Synopsis Maximum number of concurrent SSH sessions

Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [ssh-max-sessions](#) *number*

Tree [ssh-max-sessions](#)

Range 0 to 50

Introduced 16.0.R1

Platforms All

telnet-max-sessions *number*

Synopsis Maximum number of concurrent Telnet sessions

Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [telnet-max-sessions](#) *number*

Tree [telnet-max-sessions](#)

Range 0 to 50

Introduced 16.0.R1

Platforms All

health-check (*number* | *keyword*)

Synopsis Polling interval of RADIUS, TACACS+, and LDAP servers

Context **configure** [system](#) [security](#) [aaa](#) [health-check](#) (*number* | *keyword*)

Tree [health-check](#)

Range 6 to 1500

| | |
|------------|---------|
| Default | 30 |
| Units | seconds |
| Options | none |
| Introduced | 16.0.R1 |
| Platforms | All |

local-profiles

| | |
|------------|---|
| Synopsis | Enter the local-profiles context |
| Context | configure system security aaa local-profiles |
| Tree | local-profiles |
| Introduced | 16.0.R1 |
| Platforms | All |

profile [[user-profile-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the profile list instance |
| Context | configure system security aaa local-profiles profile <i>string</i> |
| Tree | profile |
| Max. Instances | 128 |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[user-profile-name\]](#) *string*

| | |
|---------------|---|
| Synopsis | User profile name |
| Context | configure system security aaa local-profiles profile <i>string</i> |
| Tree | profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

cli-session-group *reference*

| | |
|------------|--|
| Synopsis | CLI session group to which the profile belongs |
| Context | configure system security aaa local-profiles profile <i>string</i> cli-session-group <i>reference</i> |
| Tree | cli-session-group |
| Reference | configure system security aaa cli-session-group <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

combined-max-sessions *number*

| | |
|------------|---|
| Synopsis | Maximum number of concurrent SSH and Telnet sessions |
| Context | configure system security aaa local-profiles profile <i>string</i> combined-max-sessions <i>number</i> |
| Tree | combined-max-sessions |
| Range | 0 to 50 |
| Introduced | 16.0.R1 |
| Platforms | All |

default-action *keyword*

| | |
|------------|---|
| Synopsis | Action for non-matching entry |
| Context | configure system security aaa local-profiles profile <i>string</i> default-action <i>keyword</i> |
| Tree | default-action |
| Default | none |
| Options | deny-all, permit-all, none, read-only-all |
| Introduced | 16.0.R1 |
| Platforms | All |

entry [[entry-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure system security aaa local-profiles profile <i>string</i> entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | All |

[entry-id] *number*

| | |
|------------|--|
| Synopsis | User profile entry ID |
| Context | configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> |
| Tree | entry |
| Range | 1 to 9999 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

action *keyword*

| | |
|------------|--|
| Synopsis | Action when a user command matches the entry |
| Context | configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> action <i>keyword</i> |
| Tree | action |
| Default | none |
| Options | deny, permit, none, read-only |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

match *string*

| | |
|----------|--|
| Synopsis | Command to match the entry |
| Context | configure system security aaa local-profiles profile <i>string</i> <i>entry</i> <i>number</i> match <i>string</i> |
| Tree | match |

| | |
|---------------|----------|
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

grpc

| | |
|------------|---|
| Synopsis | Enter the grpc context |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc |
| Tree | grpc |
| Introduced | 16.0.R1 |
| Platforms | All |

rpc-authorization

| | |
|-------------|--|
| Synopsis | Enter the rpc-authorization context |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization |
| Tree | rpc-authorization |
| Description | Commands in this context control the authorization of each RPC in gRPC interfaces. |
| Introduced | 16.0.R1 |
| Platforms | All |

gnmi-capabilities *keyword*

| | |
|------------|--|
| Synopsis | gNMI Capabilities RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-capabilities <i>keyword</i> |
| Tree | gnmi-capabilities |
| Default | permit |
| Options | permit, deny |
| Introduced | 16.0.R1 |
| Platforms | All |

gnmi-get *keyword*

| | |
|----------|----------------------------|
| Synopsis | gNMI Get RPC authorization |
|----------|----------------------------|

| | |
|------------|--|
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-get <i>keyword</i> |
| Tree | gnmi-get |
| Default | permit |
| Options | permit, deny |
| Introduced | 16.0.R1 |
| Platforms | All |

gnmi-set *keyword*

| | |
|------------|--|
| Synopsis | gNMI Set RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-set <i>keyword</i> |
| Tree | gnmi-set |
| Default | permit |
| Options | permit, deny |
| Introduced | 16.0.R1 |
| Platforms | All |

gnmi-subscribe *keyword*

| | |
|------------|--|
| Synopsis | gNMI Subscribe RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnmi-subscribe <i>keyword</i> |
| Tree | gnmi-subscribe |
| Default | permit |
| Options | permit, deny |
| Introduced | 16.0.R1 |
| Platforms | All |

gnoi-cert-mgmt-cangenerate *keyword*

| | |
|----------|--|
| Synopsis | gNOI CanGenerateCSR RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-cangenerate <i>keyword</i> |
| Tree | gnoi-cert-mgmt-cangenerate |

| | |
|------------|--------------|
| Default | deny |
| Options | permit, deny |
| Introduced | 19.10.R1 |
| Platforms | All |

gnoi-cert-mgmt-getcert *keyword*

| | |
|------------|--|
| Synopsis | gNOI GetCertificates RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-getcert <i>keyword</i> |
| Tree | gnoi-cert-mgmt-getcert |
| Default | deny |
| Options | permit, deny |
| Introduced | 19.10.R1 |
| Platforms | All |

gnoi-cert-mgmt-install *keyword*

| | |
|------------|--|
| Synopsis | gNOI Install RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-install <i>keyword</i> |
| Tree | gnoi-cert-mgmt-install |
| Default | deny |
| Options | permit, deny |
| Introduced | 19.10.R1 |
| Platforms | All |

gnoi-cert-mgmt-revoke *keyword*

| | |
|------------|---|
| Synopsis | gNOI RevokeCertificates RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-cert-mgmt-revoke <i>keyword</i> |
| Tree | gnoi-cert-mgmt-revoke |
| Default | deny |
| Options | permit, deny |
| Introduced | 20.2.R1 |

Platforms All

gnoi-cert-mgmt-rotate *keyword*

Synopsis gNOI Rotate RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-cert-mgmt-rotate](#) *keyword*

Tree [gnoi-cert-mgmt-rotate](#)

Default deny

Options permit, deny

Introduced 19.10.R1

Platforms All

gnoi-file-get *keyword*

Synopsis gNOI File Get RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-get](#) *keyword*

Tree [gnoi-file-get](#)

Default permit

Options permit, deny

Introduced 21.2.R1

Platforms All

gnoi-file-put *keyword*

Synopsis gNOI File Put RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-put](#) *keyword*

Tree [gnoi-file-put](#)

Default permit

Options permit, deny

Introduced 21.2.R1

Platforms All

gnoi-file-remove *keyword*

| | |
|------------|--|
| Synopsis | gNOI File Remove RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-file-remove <i>keyword</i> |
| Tree | gnoi-file-remove |
| Default | permit |
| Options | permit, deny |
| Introduced | 21.2.R1 |
| Platforms | All |

gnoi-file-stat *keyword*

| | |
|------------|--|
| Synopsis | gNOI File Stat RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-file-stat <i>keyword</i> |
| Tree | gnoi-file-stat |
| Default | permit |
| Options | permit, deny |
| Introduced | 21.2.R1 |
| Platforms | All |

gnoi-file-transfertoremove *keyword*

| | |
|------------|--|
| Synopsis | gNOI File TransferToRemote RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-file-transfertoremove <i>keyword</i> |
| Tree | gnoi-file-transfertoremove |
| Default | permit |
| Options | permit, deny |
| Introduced | 21.7.R1 |
| Platforms | All |

gnoi-system-cancelreboot *keyword*

| | |
|----------|--|
| Synopsis | gNOI System CancelReboot RPC authorization |
|----------|--|

| | |
|------------|--|
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-cancelreboot <i>keyword</i> |
| Tree | gnoi-system-cancelreboot |
| Default | deny |
| Options | permit, deny |
| Introduced | 20.5.R1 |
| Platforms | All |

gnoi-system-ping *keyword*

| | |
|------------|--|
| Synopsis | gNOI System Ping RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-ping <i>keyword</i> |
| Tree | gnoi-system-ping |
| Default | permit |
| Options | permit, deny |
| Introduced | 21.7.R1 |
| Platforms | All |

gnoi-system-reboot *keyword*

| | |
|------------|--|
| Synopsis | gNOI System Reboot RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-reboot <i>keyword</i> |
| Tree | gnoi-system-reboot |
| Default | deny |
| Options | permit, deny |
| Introduced | 20.5.R1 |
| Platforms | All |

gnoi-system-rebootstatus *keyword*

| | |
|----------|--|
| Synopsis | gNOI System RebootStatus RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-rebootstatus <i>keyword</i> |
| Tree | gnoi-system-rebootstatus |

| | |
|------------|--------------|
| Default | deny |
| Options | permit, deny |
| Introduced | 20.5.R1 |
| Platforms | All |

gnoi-system-setpackage *keyword*

| | |
|------------|--|
| Synopsis | gNOI System SetPackage RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-setpackage <i>keyword</i> |
| Tree | gnoi-system-setpackage |
| Default | deny |
| Options | permit, deny |
| Introduced | 20.5.R1 |
| Platforms | All |

gnoi-system-switchcontrolprocessor *keyword*

| | |
|------------|--|
| Synopsis | gNOI System SwitchControlProcessor RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-switchcontrolprocessor <i>keyword</i> |
| Tree | gnoi-system-switchcontrolprocessor |
| Default | deny |
| Options | permit, deny |
| Introduced | 20.5.R1 |
| Platforms | All |

gnoi-system-time *keyword*

| | |
|------------|--|
| Synopsis | gNOI System Time RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization gnoi-system-time <i>keyword</i> |
| Tree | gnoi-system-time |
| Default | permit |
| Options | permit, deny |
| Introduced | 21.7.R1 |

Platforms All

gnoi-system-traceroute *keyword*

Synopsis gNOI System Traceroute RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-system-traceroute](#) *keyword*

Tree [gnoi-system-traceroute](#)

Default permit

Options permit, deny

Introduced 21.7.R1

Platforms All

md-cli-session *keyword*

Synopsis gNOI MdCli Session RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [md-cli-session](#) *keyword*

Tree [md-cli-session](#)

Default permit

Options permit, deny

Introduced 20.5.R1

Platforms All

rib-api-getversion *keyword*

Synopsis RibApi GetVersion RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [rib-api-getversion](#) *keyword*

Tree [rib-api-getversion](#)

Default permit

Options permit, deny

Introduced 16.0.R4

Platforms All

rib-api-modify *keyword*

| | |
|------------|--|
| Synopsis | RibApi Modify RPC authorization |
| Context | configure system security aaa local-profiles profile <i>string</i> grpc rpc-authorization rib-api-modify <i>keyword</i> |
| Tree | rib-api-modify |
| Default | permit |
| Options | permit, deny |
| Introduced | 16.0.R4 |
| Platforms | All |

li *boolean*

| | |
|------------|---|
| Synopsis | Allow lawful intercept profile ID |
| Context | configure system security aaa local-profiles profile <i>string</i> li <i>boolean</i> |
| Tree | li |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

netconf

| | |
|------------|---|
| Synopsis | Enter the netconf context |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf |
| Tree | netconf |
| Introduced | 16.0.R1 |
| Platforms | All |

base-op-authorization

| | |
|-------------|--|
| Synopsis | Enter the base-op-authorization context |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization |
| Tree | base-op-authorization |
| Description | <p>Commands in this context configure the permission to use NETCONF operations at the base operation level for the specified profile.</p> <p>The NETCONF operations are authorized by default in the built-in system-generated administrative profile.</p> |

Introduced 16.0.R1
Platforms All

action *boolean*

Synopsis Allow NETCONF action operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [action](#) *boolean*
Tree [action](#)
Default false
Introduced 21.7.R1
Platforms All

cancel-commit *boolean*

Synopsis Allow NETCONF cancel-commit operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [cancel-commit](#) *boolean*
Tree [cancel-commit](#)
Default false
Introduced 21.7.R1
Platforms All

close-session *boolean*

Synopsis Allow NETCONF close-session operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [close-session](#) *boolean*
Tree [close-session](#)
Default false
Introduced 21.7.R1
Platforms All

commit *boolean*

Synopsis Allow NETCONF commit operation

| | |
|------------|--|
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization commit <i>boolean</i> |
| Tree | commit |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

copy-config *boolean*

| | |
|------------|---|
| Synopsis | Allow NETCONF copy-config operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization copy-config <i>boolean</i> |
| Tree | copy-config |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

create-subscription *boolean*

| | |
|-------------|--|
| Synopsis | Allow NETCONF create-subscription operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization create-subscription <i>boolean</i> |
| Tree | create-subscription |
| Description | <p>When configured to true, this command enables the NETCONF create-subscription operation in the default profile.</p> <p>The base-op-authorization create-subscription configuration is not pre-emptive, which means that it is checked only at the time of the initial subscription. Configuration changes to base-op-authorization do not cancel any in-progress subscriptions and operators who successfully subscribed continue to receive messages.</p> <p>When configured to false, this command disables the NETCONF create-subscription operation in the default profile.</p> <p>The operation is enabled by default in the built-in system-generated administrative profile.</p> |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

delete-config *boolean*

| | |
|------------|---|
| Synopsis | Allow NETCONF delete-config operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization
delete-config <i>boolean</i> |
| Tree | delete-config |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

discard-changes *boolean*

| | |
|------------|---|
| Synopsis | Allow NETCONF discard-changes operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization
discard-changes <i>boolean</i> |
| Tree | discard-changes |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

edit-config *boolean*

| | |
|------------|---|
| Synopsis | Allow NETCONF edit-config operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization
edit-config <i>boolean</i> |
| Tree | edit-config |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

get *boolean*

| | |
|----------|---|
| Synopsis | Allow NETCONF get operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization
get <i>boolean</i> |
| Tree | get |
| Default | false |

Introduced 21.7.R1
Platforms All

get-config *boolean*

Synopsis Allow NETCONF get-config operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[get-config](#) *boolean*
Tree [get-config](#)
Default false
Introduced 21.7.R1
Platforms All

get-data *boolean*

Synopsis Allow NETCONF get-data operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[get-data](#) *boolean*
Tree [get-data](#)
Default false
Introduced 21.7.R1
Platforms All

get-schema *boolean*

Synopsis Allow NETCONF get-schema operation
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)
[get-schema](#) *boolean*
Tree [get-schema](#)
Default false
Introduced 21.7.R1
Platforms All

kill-session *boolean*

Synopsis Allow NETCONF kill-session operation

| | |
|------------|--|
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization kill-session <i>boolean</i> |
| Tree | kill-session |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

lock *boolean*

| | |
|------------|--|
| Synopsis | Allow NETCONF lock and unlock operations |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization lock <i>boolean</i> |
| Tree | lock |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

validate *boolean*

| | |
|------------|--|
| Synopsis | Allow NETCONF validate operation |
| Context | configure system security aaa local-profiles profile <i>string</i> netconf base-op-authorization validate <i>boolean</i> |
| Tree | validate |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | All |

ssh-max-sessions *number*

| | |
|------------|---|
| Synopsis | Maximum number of concurrent SSH sessions |
| Context | configure system security aaa local-profiles profile <i>string</i> ssh-max-sessions <i>number</i> |
| Tree | ssh-max-sessions |
| Range | 0 to 50 |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet-max-sessions *number*

| | |
|------------|--|
| Synopsis | Maximum number of concurrent Telnet sessions |
| Context | configure system security aaa local-profiles profile <i>string telnet-max-sessions number</i> |
| Tree | telnet-max-sessions |
| Range | 0 to 50 |
| Introduced | 16.0.R1 |
| Platforms | All |

management-interface

| | |
|------------|---|
| Synopsis | Enter the management-interface context |
| Context | configure system security aaa management-interface |
| Tree | management-interface |
| Introduced | 20.10.R1 |
| Platforms | All |

md-cli

| | |
|------------|--|
| Synopsis | Enter the md-cli context |
| Context | configure system security aaa management-interface md-cli |
| Tree | md-cli |
| Introduced | 20.10.R1 |
| Platforms | All |

command-accounting-during-load *boolean*

| | |
|------------|--|
| Synopsis | Perform remote command accounting during a load or rollback operation |
| Context | configure system security aaa management-interface md-cli command-accounting-during-load <i>boolean</i> |
| Tree | command-accounting-during-load |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | All |

output-authorization

| | |
|-------------|---|
| Synopsis | Enter the output-authorization context |
| Context | configure system security aaa management-interface output-authorization |
| Tree | output-authorization |
| Description | <p>Commands in this context configure output authorization for model-driven interfaces and telemetry.</p> <p>When output authorization is performed, commands that display configuration or state output must authorize every element in the output. If a remote AAA server is configured, there may be delays in displaying output while the output is authorized. The remote AAA server may receive a large volume of authorization requests when substantial output displays are needed, such as for system configuration details.</p> <p>Input to edit the configuration is always authorized, and is not affected by commands in this context.</p> |
| Introduced | 20.10.R1 |
| Platforms | All |

md-interfaces *boolean*

| | |
|-------------|---|
| Synopsis | Authorize output in model-driven interfaces |
| Context | configure system security aaa management-interface output-authorization md-interfaces <i>boolean</i> |
| Tree | md-interfaces |
| Description | <p>When configured to true, output is authorized for the following:</p> <ul style="list-style-type: none"> • MD-CLI info and compare commands • command completion of list key values • NETCONF <get> and <get-config> RPCs, and gRPC/gNMI Get RPCs |
| Default | true |
| Introduced | 20.10.R1 |
| Platforms | All |

telemetry-data *boolean*

| | |
|----------|--|
| Synopsis | Authorize telemetry data in gNMI Subscribe RPC response |
| Context | configure system security aaa management-interface output-authorization telemetry-data <i>boolean</i> |
| Tree | telemetry-data |
| Default | false |

Introduced 20.10.R1
Platforms All

remote-servers

Synopsis Enter the **remote-servers** context
Context **configure** [system security aaa remote-servers](#)
Tree [remote-servers](#)
Introduced 16.0.R1
Platforms All

ldap

Synopsis Enter the **ldap** context
Context **configure** [system security aaa remote-servers ldap](#)
Tree [ldap](#)
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the LDAP operation protocol
Context **configure** [system security aaa remote-servers ldap admin-state keyword](#)
Tree [admin-state](#)
Default enable
Options enable, disable
Introduced 16.0.R1
Platforms All

public-key-authentication *boolean*

Synopsis Allow SSH public key authentication from LDAP server
Context **configure** [system security aaa remote-servers ldap public-key-authentication boolean](#)
Tree [public-key-authentication](#)
Default false

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

route-preference *keyword*

| | |
|-------------|---|
| Synopsis | Route preference to reach the AAA server |
| Context | configure system security aaa remote-servers ldap route-preference <i>keyword</i> |
| Tree | route-preference |
| Description | This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance. |
| Default | both |
| Options | both, inband, outband |
| Introduced | 21.5.R1 |
| Platforms | All |

server [[index](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the server list instance |
| Context | configure system security aaa remote-servers ldap server <i>number</i> |
| Tree | server |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

[index] *number*

| | |
|------------|--|
| Synopsis | LDAP server ID |
| Context | configure system security aaa remote-servers ldap server <i>number</i> |
| Tree | server |
| Range | 1 to 5 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|----------------|---|
| Synopsis | Enter the address list instance |
| Context | configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | LDAP server address |
| Context | configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

port number

| | |
|------------|--|
| Synopsis | Port number on which to contact the LDAP server |
| Context | configure system security aaa remote-servers ldap server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Default | 389 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the LDAP server |
| Context | configure system security aaa remote-servers ldap server <i>number</i> admin-state <i>keyword</i> |

| | |
|------------|-----------------------------|
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

bind-authentication

| | |
|------------|---|
| Synopsis | Enter the bind-authentication context |
| Context | configure system security aaa remote-servers ldap server <i>number</i> bind-authentication |
| Tree | bind-authentication |
| Introduced | 16.0.R1 |
| Platforms | All |

password *string*

| | |
|---------------|--|
| Synopsis | Password used for authentication with the LDAP server |
| Context | configure system security aaa remote-servers ldap server <i>number</i> bind-authentication password <i>string</i> |
| Tree | password |
| String Length | 1 to 199 |
| Introduced | 16.0.R1 |
| Platforms | All |

root-dn *string*

| | |
|---------------|---|
| Synopsis | Root domain used for authentication with LDAP server |
| Context | configure system security aaa remote-servers ldap server <i>number</i> bind-authentication root-dn <i>string</i> |
| Tree | root-dn |
| String Length | 1 to 512 |
| Introduced | 16.0.R1 |
| Platforms | All |

search

| | |
|------------|--|
| Synopsis | Enter the search context |
| Context | configure system security aaa remote-servers ldap server <i>number</i> search |
| Tree | search |
| Introduced | 16.0.R1 |
| Platforms | All |

base-dn *string*

| | |
|---------------|--|
| Synopsis | LDAP server search base domain name |
| Context | configure system security aaa remote-servers ldap server <i>number</i> search base-dn <i>string</i> |
| Tree | base-dn |
| String Length | 1 to 512 |
| Introduced | 16.0.R1 |
| Platforms | All |

server-name *string*

| | |
|---------------|---|
| Synopsis | LDAP server name |
| Context | configure system security aaa remote-servers ldap server <i>number</i> server-name <i>string</i> |
| Tree | server-name |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

tls-profile *reference*

| | |
|------------|--|
| Synopsis | TLS client profile used to encrypt the LDAP connection |
| Context | configure system security aaa remote-servers ldap server <i>number</i> tls-profile <i>reference</i> |
| Tree | tls-profile |
| Reference | configure system security tls client-tls-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

server-retry *number*

| | |
|------------|---|
| Synopsis | Number of attempts to retry contacting the LDAP server |
| Context | configure system security aaa remote-servers ldap server-retry <i>number</i> |
| Tree | server-retry |
| Range | 1 to 10 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

server-timeout *number*

| | |
|------------|---|
| Synopsis | Timeout for a response from the LDAP server |
| Context | configure system security aaa remote-servers ldap server-timeout <i>number</i> |
| Tree | server-timeout |
| Range | 1 to 90 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

use-default-template *boolean*

| | |
|------------|--|
| Synopsis | Apply the default template to LDAP |
| Context | configure system security aaa remote-servers ldap use-default-template <i>boolean</i> |
| Tree | use-default-template |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

radius

| | |
|----------|--|
| Synopsis | Enter the radius context |
| Context | configure system security aaa remote-servers radius |
| Tree | radius |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

access-algorithm *keyword*

| | |
|------------|--|
| Synopsis | Algorithm used to access the set of RADIUS servers |
| Context | configure system security aaa remote-servers radius access-algorithm <i>keyword</i> |
| Tree | access-algorithm |
| Default | direct |
| Options | direct, round-robin |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting *boolean*

| | |
|------------|--|
| Synopsis | Enable RADIUS command accounting |
| Context | configure system security aaa remote-servers radius accounting <i>boolean</i> |
| Tree | accounting |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-port *number*

| | |
|------------|--|
| Synopsis | Port number on RADIUS server for accounting requests |
| Context | configure system security aaa remote-servers radius accounting-port <i>number</i> |
| Tree | accounting-port |
| Range | 1 to 65535 |
| Default | 1813 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the authentication server |
|----------|---|

| | |
|------------|---|
| Context | configure system security aaa remote-servers radius admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authorization *boolean*

| | |
|------------|---|
| Synopsis | Enable RADIUS authorization |
| Context | configure system security aaa remote-servers radius authorization <i>boolean</i> |
| Tree | authorization |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

interactive-authentication *boolean*

| | |
|------------|--|
| Synopsis | Enable RADIUS interactive authentication |
| Context | configure system security aaa remote-servers radius interactive-authentication <i>boolean</i> |
| Tree | interactive-authentication |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

port *number*

| | |
|------------|---|
| Synopsis | UDP port number on which to contact RADIUS server |
| Context | configure system security aaa remote-servers radius port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Default | 1812 |
| Introduced | 16.0.R1 |
| Platforms | All |

route-preference *keyword*

| | |
|-------------|---|
| Synopsis | Route preference to reach the AAA server |
| Context | configure system security aaa remote-servers radius route-preference <i>keyword</i> |
| Tree | route-preference |
| Description | This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance. |
| Default | both |
| Options | both, inband, outband |
| Introduced | 21.5.R1 |
| Platforms | All |

server [[index](#)] *number*

| | |
|----------------|---|
| Synopsis | Enter the server list instance |
| Context | configure system security aaa remote-servers radius server <i>number</i> |
| Tree | server |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

[index] *number*

| | |
|------------|---|
| Synopsis | RADIUS server ID |
| Context | configure system security aaa remote-servers radius server <i>number</i> |
| Tree | server |
| Range | 1 to 5 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | IP address of the RADIUS server |
| Context | configure system security aaa remote-servers radius server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

authenticator *keyword*

| | |
|-------------|---|
| Synopsis | Authenticator hash algorithm for the RADIUS server |
| Context | configure system security aaa remote-servers radius server <i>number</i> authenticator <i>keyword</i> |
| Tree | authenticator |
| Description | This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets. |
| Default | md5 |
| Options | md5, sm3 |
| Introduced | 22.10.R1 |
| Platforms | All |

secret *string*

| | |
|---------------|---|
| Synopsis | Secret key to access the RADIUS server |
| Context | configure system security aaa remote-servers radius server <i>number</i> secret <i>string</i> |
| Tree | secret |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | All |

tls-client-profile *reference*

| | |
|----------|--|
| Synopsis | TLS client profile for the RADIUS server |
|----------|--|

| | |
|-------------|--|
| Context | configure system security aaa remote-servers radius server <i>number</i> tls-client-profile <i>reference</i> |
| Tree | tls-client-profile |
| Description | This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS. |
| Reference | configure system security tls client-tls-profile <i>string</i> |
| Introduced | 21.10.R1 |
| Platforms | All |

server-retry *number*

| | |
|------------|---|
| Synopsis | Number of attempts to retry contacting RADIUS server |
| Context | configure system security aaa remote-servers radius server-retry <i>number</i> |
| Tree | server-retry |
| Range | 1 to 10 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

server-timeout *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response from the RADIUS server |
| Context | configure system security aaa remote-servers radius server-timeout <i>number</i> |
| Tree | server-timeout |
| Range | 1 to 90 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

use-default-template *boolean*

| | |
|----------|--|
| Synopsis | Apply the RADIUS default user template to RADIUS user |
| Context | configure system security aaa remote-servers radius use-default-template <i>boolean</i> |
| Tree | use-default-template |

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tacplus

| | |
|------------|---|
| Synopsis | Enter the tacplus context |
| Context | configure system security aaa remote-servers tacplus |
| Tree | tacplus |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting

| | |
|------------|--|
| Synopsis | Enable the accounting context |
| Context | configure system security aaa remote-servers tacplus accounting |
| Tree | accounting |
| Introduced | 16.0.R1 |
| Platforms | All |

record-type *keyword*

| | |
|------------|---|
| Synopsis | Type of accounting record packet sent to TACACS+ server |
| Context | configure system security aaa remote-servers tacplus accounting record-type <i>keyword</i> |
| Tree | record-type |
| Default | stop-only |
| Options | start-stop, stop-only |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-control

| | |
|----------|---|
| Synopsis | Enter the admin-control context |
| Context | configure system security aaa remote-servers tacplus admin-control |
| Tree | admin-control |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

tacplus-map-to-priv-lvl *number*

| | |
|------------|---|
| Synopsis | Interactive authentication from node to TACACS+ server |
| Context | configure system security aaa remote-servers tacplus admin-control tacplus-map-to-priv-lvl <i>number</i> |
| Tree | tacplus-map-to-priv-lvl |
| Range | 0 to 15 |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the TACACS+ protocol |
| Context | configure system security aaa remote-servers tacplus admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authorization

| | |
|------------|---|
| Synopsis | Enable the authorization context |
| Context | configure system security aaa remote-servers tacplus authorization |
| Tree | authorization |
| Introduced | 16.0.R1 |
| Platforms | All |

request-format

| | |
|----------|--|
| Synopsis | Enter the request-format context |
| Context | configure system security aaa remote-servers tacplus authorization request-format |
| Tree | request-format |

| | |
|-------------|--|
| Description | Commands in this context configure access operations that are sent to the TACACS+ server during authorization. |
| Introduced | 21.10.R3 |
| Platforms | All |

access-operation-cmd *keyword*

| | |
|----------------|---|
| Synopsis | Access operations sent in authorization requests |
| Context | configure system security aaa remote-servers tacplus authorization request-format access-operation-cmd <i>keyword</i> |
| Tree | access-operation-cmd |
| Description | This command sends an operation argument in authorization requests.

In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces. |
| Options | delete |
| Max. Instances | 1 |
| Introduced | 21.10.R3 |
| Platforms | All |

use-priv-lvl *boolean*

| | |
|-------------|--|
| Synopsis | Allow privilege level mapping |
| Context | configure system security aaa remote-servers tacplus authorization use-priv-lvl <i>boolean</i> |
| Tree | use-priv-lvl |
| Description | When configured to true , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the priv-lvl-map) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except enable-admin). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except enable-admin).

When configured to false , each command is sent to the TACACS+ server for authorization (this is true regardless of whether the tacplus use-default-template setting is enabled). |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

interactive-authentication *boolean*

| | |
|------------|---|
| Synopsis | Allows TACACS+ interactive authentication |
| Context | configure system security aaa remote-servers tacplus interactive-authentication <i>boolean</i> |
| Tree | interactive-authentication |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

priv-lvl-map

| | |
|------------|--|
| Synopsis | Enter the priv-lvl-map context |
| Context | configure system security aaa remote-servers tacplus priv-lvl-map |
| Tree | priv-lvl-map |
| Introduced | 16.0.R1 |
| Platforms | All |

priv-lvl [[level](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the priv-lvl list instance |
| Context | configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> |
| Tree | priv-lvl |
| Introduced | 16.0.R1 |
| Platforms | All |

[level] *number*

| | |
|------------|---|
| Synopsis | Privilege level for the mapping |
| Context | configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> |
| Tree | priv-lvl |
| Range | 0 to 15 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

user-profile-name *reference*

| | |
|------------|--|
| Synopsis | User profile for the mapping |
| Context | configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl <i>number</i> user-profile-name <i>reference</i> |
| Tree | user-profile-name |
| Reference | configure system security aaa local-profiles profile <i>string</i> |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

route-preference *keyword*

| | |
|-------------|---|
| Synopsis | Route preference to reach the AAA server |
| Context | configure system security aaa remote-servers tacplus route-preference <i>keyword</i> |
| Tree | route-preference |
| Description | This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance. |
| Default | both |
| Options | both, inband, outband |
| Introduced | 21.5.R1 |
| Platforms | All |

server [[index](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the server list instance |
| Context | configure system security aaa remote-servers tacplus server <i>number</i> |
| Tree | server |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

[index] number

| | |
|------------|--|
| Synopsis | TACACS+ server ID |
| Context | configure system security aaa remote-servers tacplus server <i>number</i> |
| Tree | server |
| Range | 1 to 5 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | IP address of the TACACS+ server |
| Context | configure system security aaa remote-servers tacplus server <i>number</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

port number

| | |
|------------|---|
| Synopsis | TCP port ID on which to contact TACACS+ server |
| Context | configure system security aaa remote-servers tacplus server <i>number</i> port <i>number</i> |
| Tree | port |
| Range | 0 1 to 65535 |
| Default | 49 |
| Introduced | 16.0.R1 |
| Platforms | All |

secret string

| | |
|---------------|---|
| Synopsis | Secret key to access the TACACS+ server |
| Context | configure system security aaa remote-servers tacplus server <i>number</i> secret <i>string</i> |
| Tree | secret |
| String Length | 1 to 199 |

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

server-timeout *number*

| | |
|------------|---|
| Synopsis | Time to wait for a response from the TACACS+ server |
| Context | configure system security aaa remote-servers tacplus server-timeout <i>number</i> |
| Tree | server-timeout |
| Range | 1 to 90 |
| Default | 3 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

use-default-template *boolean*

| | |
|------------|--|
| Synopsis | Apply TACACS+ default user-template to TACACS+ user |
| Context | configure system security aaa remote-servers tacplus use-default-template <i>boolean</i> |
| Tree | use-default-template |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

vprn-server

| | |
|------------|--|
| Synopsis | Enter the vprn-server context |
| Context | configure system security aaa remote-servers vprn-server |
| Tree | vprn-server |
| Introduced | 22.2.R1 |
| Platforms | All |

inband *reference*

| | |
|----------|---|
| Synopsis | VPRN service used for AAA by in-band sessions |
|----------|---|

| | |
|-------------|---|
| Context | configure system security aaa remote-servers vprn-server inband <i>reference</i> |
| Tree | inband |
| Description | This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in the Base routing instance. |
| Reference | configure service vprn <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | All |

outband *reference*

| | |
|-------------|--|
| Synopsis | VPRN service used for AAA by out-of-band sessions |
| Context | configure system security aaa remote-servers vprn-server outband <i>reference</i> |
| Tree | outband |
| Description | This command configures TACACS+ and RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions on the console or out-of-band (OOB) Ethernet ports. |
| Reference | configure service vprn <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | All |

vprn *reference*

| | |
|-------------|---|
| Synopsis | VPRN used for AAA in VPRNs without a AAA server |
| Context | configure system security aaa remote-servers vprn-server vprn <i>reference</i> |
| Tree | vprn |
| Description | This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in VPRNs without a AAA server configured. |
| Reference | configure service vprn <i>string</i> |
| Introduced | 22.2.R1 |
| Platforms | All |

user-template [[user-template-name](#)] *keyword*

| | |
|----------|---|
| Synopsis | Enter the user-template list instance |
| Context | configure system security aaa user-template <i>keyword</i> |
| Tree | user-template |

Introduced 16.0.R1
Platforms All

[user-template-name] *keyword*

Synopsis Default user template applied to the system user
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword*
Tree [user-template](#)
Options ldap-default, radius-default, tacplus-default
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

access

Synopsis Enter the **access** context
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access**
Tree [access](#)
Introduced 16.0.R1
Platforms All

console *boolean*

Synopsis Allow console access (serial port or Telnet)
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access** **console** *boolean*
Tree [console](#)
Default true
Introduced 16.0.R1
Platforms All

ftp *boolean*

Synopsis Allow FTP access
Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access** **ftp** *boolean*
Tree [ftp](#)

| | |
|------------|---------|
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

grpc *boolean*

| | |
|------------|--|
| Synopsis | Allow gRPC access |
| Context | configure system security aaa user-template <i>keyword</i> access grpc <i>boolean</i> |
| Tree | grpc |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

li *boolean*

| | |
|------------|--|
| Synopsis | Allow access to lawful intercept |
| Context | configure system security aaa user-template <i>keyword</i> access li <i>boolean</i> |
| Tree | li |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

netconf *boolean*

| | |
|------------|---|
| Synopsis | Allow NETCONF session access |
| Context | configure system security aaa user-template <i>keyword</i> access netconf <i>boolean</i> |
| Tree | netconf |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

console

| | |
|----------|---|
| Synopsis | Enter the console context |
| Context | configure system security aaa user-template <i>keyword</i> console |

| | |
|------------|-------------------------|
| Tree | console |
| Introduced | 16.0.R1 |
| Platforms | All |

login-exec *string*

| | |
|---------------|--|
| Synopsis | File to execute for a successful user login via console |
| Context | configure system security aaa user-template <i>keyword</i> console login-exec <i>string</i> |
| Tree | login-exec |
| String Length | 1 to 200 |
| Introduced | 16.0.R1 |
| Platforms | All |

home-directory (*sat-url* | *cflash-without-slot-url*)

| | |
|---------------|--|
| Synopsis | User local home directory based on the template |
| Context | configure system security aaa user-template <i>keyword</i> home-directory (<i>sat-url</i> <i>cflash-without-slot-url</i>) |
| Tree | home-directory |
| String Length | 1 to 200 |
| Introduced | 16.0.R1 |
| Platforms | All |

profile *string*

| | |
|---------------|---|
| Synopsis | User profile based on the template |
| Context | configure system security aaa user-template <i>keyword</i> profile <i>string</i> |
| Tree | profile |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

restricted-to-home *boolean*

| | |
|----------|---|
| Synopsis | Restrict file access to the home directory of the user |
| Context | configure system security aaa user-template <i>keyword</i> restricted-to-home <i>boolean</i> |

| | |
|------------|------------------------------------|
| Tree | restricted-to-home |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

save-when-restricted *boolean*

| | |
|-------------|--|
| Synopsis | Save configurations when the user is restricted to home |
| Context | configure system security aaa user-template <i>keyword</i> save-when-restricted <i>boolean</i> |
| Tree | save-when-restricted |
| Description | When configured to true , the system permits all configuration save operations (such as admin save) via any management interface (such as CLI and NETCONF) even if restricted-to-home is set to true . The home directory does not need to be configured. |
| Default | false |
| Introduced | 22.10.R1 |
| Platforms | All |

cli-script

| | |
|------------|---|
| Synopsis | Enter the cli-script context |
| Context | configure system security cli-script |
| Tree | cli-script |
| Introduced | 16.0.R1 |
| Platforms | All |

authorization

| | |
|------------|---|
| Synopsis | Enter the authorization context |
| Context | configure system security cli-script authorization |
| Tree | authorization |
| Introduced | 16.0.R1 |
| Platforms | All |

cron

| | |
|----------|-------------------------------|
| Synopsis | Enter the cron context |
|----------|-------------------------------|

| | |
|-------------|--|
| Context | configure system security cli-script authorization cron |
| Tree | cron |
| Description | Commands in this context configure authorization for the cron job scheduler. |
| Introduced | 16.0.R1 |
| Platforms | All |

cli-user reference

| | |
|------------|---|
| Synopsis | User profile name for CLI command script authorization |
| Context | configure system security cli-script authorization cron cli-user reference |
| Tree | cli-user |
| Reference | configure system security user-params local-user user string |
| Introduced | 16.0.R1 |
| Platforms | All |

event-handler

| | |
|-------------|---|
| Synopsis | Enter the event-handler context |
| Context | configure system security cli-script authorization event-handler |
| Tree | event-handler |
| Description | Commands in this context configure authorization for the Event Handling System (EHS). EHS allows user-controlled programmatic exception handling by allowing a CLI script to be executed upon the detection of a log event. |
| Introduced | 16.0.R1 |
| Platforms | All |

cli-user reference

| | |
|------------|--|
| Synopsis | User profile name for CLI command script authorization |
| Context | configure system security cli-script authorization event-handler cli-user reference |
| Tree | cli-user |
| Reference | configure system security user-params local-user user string |
| Introduced | 16.0.R1 |
| Platforms | All |

cpm-filter

| | |
|------------|---|
| Synopsis | Enter the cpm-filter context |
| Context | configure system security cpm-filter |
| Tree | cpm-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

default-action *keyword*

| | |
|------------|---|
| Synopsis | Action for packets that do not match any filter entries |
| Context | configure system security cpm-filter default-action <i>keyword</i> |
| Tree | default-action |
| Default | accept |
| Options | drop, accept |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ip-filter

| | |
|------------|---|
| Synopsis | Enter the ip-filter context |
| Context | configure system security cpm-filter ip-filter |
| Tree | ip-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the CPM filter |
| Context | configure system security cpm-filter ip-filter admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

entry [[entry-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[entry-id] *number*

| | |
|------------|---|
| Synopsis | Filter entry ID |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> |
| Tree | entry |
| Range | 1 to 131072 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

action

| | |
|------------|--|
| Synopsis | Enter the action context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

accept

| | |
|------------|---|
| Synopsis | Forward matching packets |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> action accept |
| Tree | accept |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

default

| | |
|------------|--|
| Synopsis | Use default action for matching packets |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> action default |
| Tree | default |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

drop

| | |
|------------|---|
| Synopsis | Drop matching packets |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> action drop |
| Tree | drop |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

queue reference

| | |
|------------|--|
| Synopsis | Forward matching packets to the CPM hardware queue |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> action queue reference |
| Tree | queue |
| Reference | configure system security cpm-queue queue <i>number</i> |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description string

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

log reference

Synopsis Log ID where matching packets are entered

Context **configure system security cpm-filter ip-filter entry number log reference**

Tree [log](#)

Reference **configure filter log number**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis Enter the **match** context

Context **configure system security cpm-filter ip-filter entry number match**

Tree [match](#)

Description Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.

If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp keyword

Synopsis DSCP used as the match criterion on the packet

Context **configure system security cpm-filter ip-filter entry number match dscp keyword**

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-ip

| | |
|------------|---|
| Synopsis | Enter the dst-ip context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match dst-ip |
| Tree | dst-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

| | |
|------------|---|
| Synopsis | IPv4 address used as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match dst-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>) |
| Tree | address |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ip-prefix-list *reference*

| | |
|------------|---|
| Synopsis | IP4 address prefix list used as match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match dst-ip ip-prefix-list <i>reference</i> |
| Tree | ip-prefix-list |
| Reference | configure filter match-list ip-prefix-list <i>string</i> |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask *string*

| | |
|------------|--|
| Synopsis | IPv4 address mask used as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match dst-ip mask <i>string</i> |
| Tree | mask |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-port

Synopsis Enter the **dst-port** context

Context **configure system security cpm-filter ip-filter entry number match dst-port**

Tree **dst-port**

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis Port number as the match criterion

Context **configure system security cpm-filter ip-filter entry number match dst-port eq number**

Tree **eq**

Range 0 to 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Port mask as the match criterion

Context **configure system security cpm-filter ip-filter entry number match dst-port mask number**

Tree **mask**

Range 1 to 65535

Default 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list reference

Synopsis Port list as the match criterion

| | |
|------------|--|
| Context | configure system security cpm-filter ip-filter entry <i>number match dst-port port-list reference</i> |
| Tree | port-list |
| Reference | configure filter match-list port-list <i>string</i> |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter ip-filter entry <i>number match dst-port range</i> |
| Tree | range |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end number

| | |
|------------|---|
| Synopsis | Upper bound of the port number to match |
| Context | configure system security cpm-filter ip-filter entry <i>number match dst-port range end number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number

| | |
|----------|---|
| Synopsis | Lower bound of the port number to match |
| Context | configure system security cpm-filter ip-filter entry <i>number match dst-port range start number</i> |
| Tree | start |
| Range | 0 to 65535 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fragment *keyword*

| | |
|-------------|--|
| Synopsis | Match criterion based on presence of fragmented packets |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match fragment <i>keyword</i> |
| Tree | fragment |
| Description | <p>This command specifies the match criterion based on the existence or absence of fragmented IP packets.</p> <p>Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.</p> <p>Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.</p> |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

icmp

| | |
|------------|--|
| Synopsis | Enter the icmp context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

code *number*

| | |
|------------|---|
| Synopsis | ICMP code to match |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match icmp code <i>number</i> |
| Tree | code |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type number

Synopsis ICMP type to match
 Context **configure system security cpm-filter ip-filter entry number match icmp type number**
 Tree [type](#)
 Range 0 to 255
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ip-option

Synopsis Enable the **ip-option** context
 Context **configure system security cpm-filter ip-filter entry number match ip-option**
 Tree [ip-option](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Mask that is ANDed with ip-option value in the packet header
 Context **configure system security cpm-filter ip-filter entry number match ip-option mask number**
 Tree [mask](#)
 Range 1 to 255
 Default 255
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

type number

Synopsis Specific IP option to match
 Context **configure system security cpm-filter ip-filter entry number match ip-option type number**
 Tree [type](#)
 Range 0 to 255

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiple-option *boolean*

| | |
|------------|--|
| Synopsis | Match on packets containing multiple option fields |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match multiple-option <i>boolean</i> |
| Tree | multiple-option |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

option-present *boolean*

| | |
|------------|---|
| Synopsis | Match on packets with option field present |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match option-present <i>boolean</i> |
| Tree | option-present |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port

| | |
|------------|--|
| Synopsis | Enter the port context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port |
| Tree | port |
| Notes | The following elements are part of a choice: port or (dst-port and src-port). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eq *number*

| | |
|----------|---|
| Synopsis | Port number as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port eq <i>number</i> |
| Tree | eq |

| | |
|------------|--|
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask number

| | |
|------------|---|
| Synopsis | Port mask as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port mask <i>number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port-list reference

| | |
|------------|---|
| Synopsis | Port list as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port port-list <i>reference</i> |
| Tree | port-list |
| Reference | configure filter match-list port-list <i>string</i> |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port range |
| Tree | range |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the port number to match |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the port number to match |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

protocol (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | IP protocol as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>) |
| Tree | protocol |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

router-instance *string*

| | |
|---------------|---|
| Synopsis | Router instance as the match criteria |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

src-ip

| | |
|------------|--|
| Synopsis | Enter the src-ip context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match src-ip |
| Tree | src-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

| | |
|------------|--|
| Synopsis | IPv4 address used as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match src-ip address (<i>ipv4-prefix-with-host-bits</i> <i>ipv4-address</i>) |
| Tree | address |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ip-prefix-list *reference*

| | |
|------------|--|
| Synopsis | IP4 address prefix list used as match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match src-ip ip-prefix-list <i>reference</i> |
| Tree | ip-prefix-list |
| Reference | configure filter match-list ip-prefix-list <i>string</i> |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask string

Synopsis IPv4 address mask used as the match criterion
 Context **configure system security cpm-filter ip-filter entry number match src-ip mask string**
 Tree **mask**
 Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-port

Synopsis Enter the **src-port** context
 Context **configure system security cpm-filter ip-filter entry number match src-port**
 Tree **src-port**
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis Port number as the match criterion
 Context **configure system security cpm-filter ip-filter entry number match src-port eq number**
 Tree **eq**
 Range 0 to 65535
 Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Port mask as the match criterion
 Context **configure system security cpm-filter ip-filter entry number match src-port mask number**
 Tree **mask**

| | |
|------------|--|
| Range | 1 to 65535 |
| Default | 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port-list *reference*

| | |
|------------|---|
| Synopsis | Port list as the match criterion |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match src-port port-list <i>reference</i> |
| Tree | port-list |
| Reference | configure filter match-list port-list <i>string</i> |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match src-port range |
| Tree | range |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end *number*

| | |
|------------|--|
| Synopsis | Upper bound of the port number to match |
| Context | configure system security cpm-filter ip-filter entry <i>number</i> match src-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

start number

Synopsis Lower bound of the port number to match

Context **configure system security cpm-filter ip-filter entry number match src-port range start number**

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

tcp-flags

Synopsis Enter the **tcp-flags** context

Context **configure system security cpm-filter ip-filter entry number match tcp-flags**

Tree [tcp-flags](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ack boolean

Synopsis ACK bit in TCP header control bits as match criterion

Context **configure system security cpm-filter ip-filter entry number match tcp-flags ack boolean**

Tree [ack](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

syn boolean

Synopsis SYN bit in TCP header control bits as match criterion

Context **configure system security cpm-filter ip-filter entry number match tcp-flags syn boolean**

Tree [syn](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-filter

Synopsis Enter the **ipv6-filter** context
 Context **configure** [system security cpm-filter ipv6-filter](#)
 Tree [ipv6-filter](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

admin-state *keyword*

Synopsis Administrative state of the CPM filter
 Context **configure** [system security cpm-filter ipv6-filter admin-state keyword](#)
 Tree [admin-state](#)
 Default disable
 Options enable, disable
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance
 Context **configure** [system security cpm-filter ipv6-filter entry number](#)
 Tree [entry](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

[[entry-id](#)] *number*

Synopsis Filter entry ID
 Context **configure** [system security cpm-filter ipv6-filter entry number](#)
 Tree [entry](#)
 Range 1 to 131072
 Notes This element is part of a list key.

Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

action

Synopsis Enter the **action** context
 Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* **action**
 Tree [action](#)
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

accept

Synopsis Forward matching packets
 Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [action](#) **accept**
 Tree [accept](#)
 Notes The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

default

Synopsis Use default action for matching packets
 Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [action](#) **default**
 Tree [default](#)
 Notes The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.
 Introduced 16.0.R1
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

drop

Synopsis Drop matching packets
 Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [action](#) **drop**
 Tree [drop](#)
 Notes The following elements are part of a choice: **accept**, **default**, **drop**, or **queue**.

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

queue *reference*

| | |
|------------|---|
| Synopsis | Forward matching packets to the CPM hardware queue |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> action queue <i>reference</i> |
| Tree | queue |
| Reference | configure system security cpm-queue queue <i>number</i> |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log *reference*

| | |
|------------|--|
| Synopsis | Log ID where matching packets are entered |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> log <i>reference</i> |
| Tree | log |
| Reference | configure filter log <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

match

| | |
|----------|---|
| Synopsis | Enter the match context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match |

| | |
|-------------|---|
| Tree | match |
| Description | <p>Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.</p> <p>If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.</p> |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dscp keyword

| | |
|------------|---|
| Synopsis | DSCP used as the match criterion on the packet |
| Context | configure system security cpm-filter ipv6-filter entry number match dscp keyword |
| Tree | dscp |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dst-ip

| | |
|------------|---|
| Synopsis | Enter the dst-ip context |
| Context | configure system security cpm-filter ipv6-filter entry number match dst-ip |
| Tree | dst-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

| | |
|------------|---|
| Synopsis | IPv6 address used as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry number match dst-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>) |
| Tree | address |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

ipv6-prefix-list *reference*

Synopsis IPv6 address prefix list used as match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [dst-ip](#) [ipv6-prefix-list](#) *reference*

Tree [ipv6-prefix-list](#)

Reference **configure** [filter](#) [match-list](#) [ipv6-prefix-list](#) *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask *string*

Synopsis IPv6 address mask used as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [dst-ip](#) [mask](#) *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dst-port

Synopsis Enter the **dst-port** context

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [dst-port](#)

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq *number*

Synopsis Port number as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ipv6-filter](#) [entry](#) *number* [match](#) [dst-port](#) [eq](#) *number*

| | |
|------------|--|
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask number

| | |
|------------|---|
| Synopsis | Port mask as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port mask <i>number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port-list reference

| | |
|------------|---|
| Synopsis | Port list as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port port-list <i>reference</i> |
| Tree | port-list |
| Reference | configure filter match-list port-list <i>string</i> |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|----------|--|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port range |
| Tree | range |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end number

| | |
|------------|--|
| Synopsis | Upper bound of the port number to match |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the port number to match |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match dst-port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

extension-header

| | |
|------------|--|
| Synopsis | Enter the extension-header context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match extension-header |
| Tree | extension-header |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

hop-by-hop boolean

| | |
|----------|---|
| Synopsis | Match on existence of Hop-By-Hop Options Header |
|----------|---|

| | |
|-------------|---|
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match extension-header hop-by-hop <i>boolean</i> |
| Tree | hop-by-hop |
| Description | When configured to true , a match occurs when the Hop-by-Hop Options Extension Header is present.
When configured to false , a match occurs when the Hop-by-Hop Options Extension Header is not present. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

flow-label *number*

| | |
|------------|---|
| Synopsis | Flow label in the IPv6 header as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match flow-label <i>number</i> |
| Tree | flow-label |
| Range | 0 to 1048575 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

fragment *keyword*

| | |
|-------------|---|
| Synopsis | Match criterion based on presence of fragmented packets |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match fragment <i>keyword</i> |
| Tree | fragment |
| Description | This command specifies the match criterion based on the existence or absence of fragmented IP packets.
Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.
Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match. |
| Options | false, true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

icmp

| | |
|------------|--|
| Synopsis | Enter the icmp context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match icmp |
| Tree | icmp |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

code number

| | |
|------------|---|
| Synopsis | ICMP code as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match icmp code <i>number</i> |
| Tree | code |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

type number

| | |
|------------|---|
| Synopsis | ICMP type as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match icmp type <i>number</i> |
| Tree | type |
| Range | 0 to 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

next-header (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | IP protocol to match |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>) |
| Tree | next-header |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port

Synopsis Enter the **port** context

Context **configure system security cpm-filter ipv6-filter entry number match port**

Tree [port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis Port number as the match criterion

Context **configure system security cpm-filter ipv6-filter entry number match port eq number**

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

mask number

Synopsis Port mask as the match criterion

Context **configure system security cpm-filter ipv6-filter entry number match port mask number**

Tree [mask](#)

Range 1 to 65535

Default 65535

Notes The following elements are part of a choice: (**eq** and **mask**), **port-list**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

port-list reference

Synopsis Port list as the match criterion

| | |
|------------|--|
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match port port-list reference |
| Tree | port-list |
| Reference | configure filter match-list port-list <i>string</i> |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match port range |
| Tree | range |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end *number*

| | |
|------------|--|
| Synopsis | Upper bound of the port number to match |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start *number*

| | |
|----------|--|
| Synopsis | Lower bound of the port number to match |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |

| | |
|------------|--|
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

router-instance *string*

| | |
|---------------|---|
| Synopsis | Router instance as the match criteria |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

src-ip

| | |
|------------|--|
| Synopsis | Enter the src-ip context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-ip |
| Tree | src-ip |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

| | |
|------------|--|
| Synopsis | IPv6 address used as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-ip address (<i>ipv6-prefix-with-host-bits</i> <i>ipv6-address</i>) |
| Tree | address |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv6-prefix-list *reference*

| | |
|----------|--|
| Synopsis | IPv6 address prefix list used as match criterion |
|----------|--|

| | |
|------------|---|
| Context | configure system security cpm-filter ipv6-filter entry <i>number match src-ip ipv6-prefix-list reference</i> |
| Tree | ipv6-prefix-list |
| Reference | configure filter match-list ipv6-prefix-list <i>string</i> |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask *string*

| | |
|------------|--|
| Synopsis | IPv6 address mask used as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number match src-ip mask string</i> |
| Tree | mask |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

src-port

| | |
|------------|--|
| Synopsis | Enter the src-port context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number match src-port</i> |
| Tree | src-port |
| Notes | The following elements are part of a choice: port or (dst-port and src-port). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

eq *number*

| | |
|------------|--|
| Synopsis | Port number as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number match src-port eq number</i> |
| Tree | eq |
| Range | 0 to 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask number

| | |
|------------|---|
| Synopsis | Port mask as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port mask <i>number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port-list reference

| | |
|------------|---|
| Synopsis | Port list as the match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port port-list <i>reference</i> |
| Tree | port-list |
| Reference | configure filter match-list port-list <i>string</i> |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|------------|--|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port range |
| Tree | range |
| Notes | The following elements are part of a choice: (eq and mask), port-list , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end number

| | |
|----------|---|
| Synopsis | Upper bound of the port number to match |
|----------|---|

| | |
|------------|--|
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port range end <i>number</i> |
| Tree | end |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the port number to match |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match src-port range start <i>number</i> |
| Tree | start |
| Range | 0 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tcp-flags

| | |
|------------|---|
| Synopsis | Enter the tcp-flags context |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match tcp-flags |
| Tree | tcp-flags |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ack boolean

| | |
|------------|--|
| Synopsis | ACK bit in TCP header control bits as match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match tcp-flags ack <i>boolean</i> |
| Tree | ack |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

syn *boolean*

| | |
|------------|--|
| Synopsis | SYN bit in TCP header control bits as match criterion |
| Context | configure system security cpm-filter ipv6-filter entry <i>number</i> match tcp-flags syn <i>boolean</i> |
| Tree | syn |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mac-filter

| | |
|------------|--|
| Synopsis | Enter the mac-filter context |
| Context | configure system security cpm-filter mac-filter |
| Tree | mac-filter |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the CPM filter |
| Context | configure system security cpm-filter mac-filter admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

entry [[entry-id](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[entry-id] number

| | |
|------------|--|
| Synopsis | Filter entry ID |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> |
| Tree | entry |
| Range | 1 to 131072 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

action

| | |
|------------|---|
| Synopsis | Enter the action context |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> action |
| Tree | action |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

accept

| | |
|------------|--|
| Synopsis | Forward matching packets |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> action accept |
| Tree | accept |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

default

| | |
|------------|---|
| Synopsis | Use default action for matching packets |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> action default |
| Tree | default |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

drop

| | |
|------------|--|
| Synopsis | Drop matching packets |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> action drop |
| Tree | drop |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

queue reference

| | |
|------------|---|
| Synopsis | Forward matching packets to the CPM hardware queue |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> action queue reference |
| Tree | queue |
| Reference | configure system security cpm-queue queue <i>number</i> |
| Notes | The following elements are part of a choice: accept , default , drop , or queue . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description string

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

log reference

| | |
|------------|--|
| Synopsis | Log ID where matching packets are entered |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> log reference |
| Tree | log |
| Reference | configure filter log <i>number</i> |
| Introduced | 16.0.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

match

Synopsis Enter the **match** context

Context **configure system security cpm-filter mac-filter entry number match**

Tree **match**

Description Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.

If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

cfm-opcode

Synopsis Enter the **cfm-opcode** context

Context **configure system security cpm-filter mac-filter entry number match cfm-opcode**

Tree **cfm-opcode**

Description Commands in this context specify match criteria based on the CFM opcode.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

eq number

Synopsis Equal to comparison operator for the CFM opcode

Context **configure system security cpm-filter mac-filter entry number match cfm-opcode eq number**

Tree **eq**

Range 0 to 255

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

gt *number*

| | |
|------------|--|
| Synopsis | Greater than comparison operator for the CFM opcode |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match cfm-opcode gt <i>number</i> |
| Tree | gt |
| Range | 0 to 254 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

lt *number*

| | |
|------------|--|
| Synopsis | Less than comparison operator for the CFM opcode |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match cfm-opcode lt <i>number</i> |
| Tree | lt |
| Range | 1 to 255 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

range

| | |
|------------|---|
| Synopsis | Enable the range context |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match cfm-opcode range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

end *number*

| | |
|----------|---|
| Synopsis | Upper bound of the Opcode range to match |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match cfm-opcode range end <i>number</i> |

| | |
|------------|--|
| Tree | end |
| Range | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

start number

| | |
|------------|---|
| Synopsis | Lower bound of the OpCode range to match |
| Context | configure system security cpm-filter mac-filter entry number match cfm-opcode range start number |
| Tree | start |
| Range | 0 to 254 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dst-mac

| | |
|------------|---|
| Synopsis | Enable the dst-mac context |
| Context | configure system security cpm-filter mac-filter entry number match dst-mac |
| Tree | dst-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

address string

| | |
|------------|--|
| Synopsis | MAC address used as the match criterion |
| Context | configure system security cpm-filter mac-filter entry number match dst-mac address string |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask string

| | |
|------------|---|
| Synopsis | MAC address mask as the match criterion |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match dst-mac mask <i>string</i> |
| Tree | mask |
| Default | ff:ff:ff:ff:ff:ff |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

etype string

| | |
|---------------|---|
| Synopsis | Ethernet type as the match criterion |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match etype <i>string</i> |
| Tree | etype |
| Description | This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.

The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames. |
| String Length | 5 to 6 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

frame-type keyword

| | |
|------------|--|
| Synopsis | MAC frame type as the match criterion |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match frame-type <i>keyword</i> |
| Tree | frame-type |
| Options | 802dot2-llc, ethernet-ii |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

llc-dsap

| | |
|----------|---|
| Synopsis | Enable the llc-dsap context |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match llc-dsap |
| Tree | llc-dsap |

| | |
|-------------|---|
| Description | Commands in this context specify match criteria based on the Destination Service Access Point (DSAP). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dsap number

| | |
|------------|--|
| Synopsis | 8-bit DSAP as the match criterion |
| Context | configure system security cpm-filter mac-filter entry number match llc-dsap dsap number |
| Tree | dsap |
| Range | 0 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask number

| | |
|------------|--|
| Synopsis | Mask for DSAP value as the match criterion |
| Context | configure system security cpm-filter mac-filter entry number match llc-dsap mask number |
| Tree | mask |
| Range | 1 to 255 |
| Default | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

llc-ssap

| | |
|-------------|--|
| Synopsis | Enable the llc-ssap context |
| Context | configure system security cpm-filter mac-filter entry number match llc-ssap |
| Tree | llc-ssap |
| Description | Commands in this context specify match criteria based on the Source Service Access Point (SSAP). |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask number

| | |
|------------|---|
| Synopsis | Mask for SSAP value as the match criterion |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match llc-ssap mask number |
| Tree | mask |
| Range | 1 to 255 |
| Default | 255 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ssap number

| | |
|------------|---|
| Synopsis | 8-bit SSAP as the match criterion |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match llc-ssap ssap number |
| Tree | ssap |
| Range | 0 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

service reference

| | |
|------------|--|
| Synopsis | Service ID used as the match condition |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match service reference |
| Tree | service |
| Reference | configure service vpls string |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

src-mac

| | |
|----------|--|
| Synopsis | Enable the src-mac context |
| Context | configure system security cpm-filter mac-filter entry <i>number</i> match src-mac |

| | |
|------------|--|
| Tree | src-mac |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

address string

| | |
|------------|--|
| Synopsis | MAC address used as the match criterion |
| Context | configure system security cpm-filter mac-filter entry number match src-mac address string |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mask string

| | |
|------------|---|
| Synopsis | MAC address mask as the match criterion |
| Context | configure system security cpm-filter mac-filter entry number match src-mac mask string |
| Tree | mask |
| Default | ff:ff:ff:ff:ff:ff |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cpm-queue

| | |
|------------|--|
| Synopsis | Enter the cpm-queue context |
| Context | configure system security cpm-queue |
| Tree | cpm-queue |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

queue [queue-id] number

| | |
|----------|---|
| Synopsis | Enter the queue list instance |
| Context | configure system security cpm-queue queue number |

| | |
|------------|--|
| Tree | queue |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[queue-id] number

| | |
|------------|--|
| Synopsis | CPM queue ID |
| Context | configure system security cpm-queue queue <i>number</i> |
| Tree | queue |
| Range | 33 to 2000 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cbs number

| | |
|-------------|--|
| Synopsis | Buffer size that can be drawn from queue buffer pool |
| Context | configure system security cpm-queue queue <i>number</i> cbs <i>number</i> |
| Tree | cbs |
| Description | This command specifies the amount of buffer that can be drawn from the reserved buffer portion of the buffer pool of the queue. |
| Range | 0 to 131072 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mbs number

| | |
|------------|--|
| Synopsis | Maximum queue depth to which the queue can grow |
| Context | configure system security cpm-queue queue <i>number</i> mbs <i>number</i> |
| Tree | mbs |
| Range | 0 to 131072 |
| Units | kilobps |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

rate

| | |
|------------|--|
| Synopsis | Enter the rate context |
| Context | configure system security cpm-queue queue number rate |
| Tree | rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Amount of bandwidth committed to the queue |
| Context | configure system security cpm-queue queue number rate cir (<i>number</i> <i>keyword</i>) |
| Tree | cir |
| Range | 0 to 100000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Peak Information Rate for the queue |
| Context | configure system security cpm-queue queue number rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 100000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

cpu-protection

| | |
|----------|---|
| Synopsis | Enter the cpu-protection context |
|----------|---|

| | |
|-------------|---|
| Context | configure system security cpu-protection |
| Tree | cpu-protection |
| Description | Commands in this context configure CPU protection policies. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ip-src-monitoring

| | |
|------------|---|
| Synopsis | Enter the ip-src-monitoring context |
| Context | configure system security cpu-protection ip-src-monitoring |
| Tree | ip-src-monitoring |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

included-protocols

| | |
|-------------|--|
| Synopsis | Enter the included-protocols context |
| Context | configure system security cpu-protection ip-src-monitoring included-protocols |
| Tree | included-protocols |
| Description | Commands in this context specify the protocols included in IP source monitoring. The protocol packets will be subject to the per-source-rate of CPU protection policies.

This configuration applies system wide and applies to CPU protection globally. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

dhcp *boolean*

| | |
|------------|--|
| Synopsis | Include extracted DHCP packets for IP source monitoring |
| Context | configure system security cpu-protection ip-src-monitoring included-protocols dhcp <i>boolean</i> |
| Tree | dhcp |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

gtp boolean

| | |
|------------|---|
| Synopsis | Include extracted GTP packets for IP source monitoring |
| Context | configure system security cpu-protection ip-src-monitoring included-protocols gtp <i>boolean</i> |
| Tree | gtp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

icmp boolean

| | |
|------------|--|
| Synopsis | Include extracted ICMP packets for IP source monitoring |
| Context | configure system security cpu-protection ip-src-monitoring included-protocols icmp <i>boolean</i> |
| Tree | icmp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

igmp boolean

| | |
|------------|--|
| Synopsis | Include extracted IGMP packets for IP source monitoring |
| Context | configure system security cpu-protection ip-src-monitoring included-protocols igmp <i>boolean</i> |
| Tree | igmp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

link-specific-rate (*number* | *keyword*)

| | |
|-------------|---|
| Synopsis | Packet arrival rate limit for link level protocols |
| Context | configure system security cpu-protection link-specific-rate (<i>number</i> <i>keyword</i>) |
| Tree | link-specific-rate |
| Description | This command configures a link-specific rate for CPU protection. The limit is applied to all ports within the system. The CPU receives no more than the configured packet rate for all link level protocols, such as LACP, from any one port. |

The measurement is cleared each second and is based on the ingress port.

| | |
|------------|---|
| Range | 1 to 65535 |
| Units | packets per second |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

policy [*policy-id*] *number*

| | |
|------------|--|
| Synopsis | Enter the policy list instance |
| Context | configure system security cpu-protection policy <i>number</i> |
| Tree | policy |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

[policy-id] *number*

| | |
|------------|--|
| Synopsis | Policy ID |
| Context | configure system security cpu-protection policy <i>number</i> |
| Tree | policy |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

alarm *boolean*

| | |
|-------------|---|
| Synopsis | Generate an event when the rate is exceeded |
| Context | configure system security cpu-protection policy <i>number</i> alarm <i>boolean</i> |
| Tree | alarm |
| Description | When configured to true , an event is generated when the rate is exceeded. The event includes information about the offending source. Only one event is generated per monitor period.

When configured to false , notifications are disabled. |
| Default | true |

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security cpu-protection policy <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

eth-cfm

| | |
|-------------|--|
| Synopsis | Enter the eth-cfm context |
| Context | configure system security cpu-protection policy <i>number</i> eth-cfm |
| Tree | eth-cfm |
| Description | Commands in this context configure CPU policy entries that determine match criteria and overall arrival rate of the Ethernet Connectivity and Fault Management (ETH-CFM) packets at the CPU. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

entry [*id*] *number*

| | |
|----------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure system security cpu-protection policy <i>number</i> eth-cfm entry <i>number</i> |
| Tree | entry |
| Max. Instances | 10 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

[id] *number*

| | |
|----------|----------|
| Synopsis | Entry ID |
|----------|----------|

| | |
|------------|--|
| Context | configure system security cpu-protection policy number eth-cfm entry number |
| Tree | entry |
| Range | 1 to 100 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

level start number end number

| | |
|-------------|--|
| Synopsis | Add a list entry for level |
| Context | configure system security cpu-protection policy number eth-cfm entry number level start number end number |
| Tree | level |
| Description | Commands in this context specify the range of domain levels for the match criterion. |
| Min. | 1 |
| Instances | |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

start number

| | |
|------------|--|
| Synopsis | Lower bound of the level range |
| Context | configure system security cpu-protection policy number eth-cfm entry number level start number end number |
| Tree | level |
| Range | 0 to 7 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

end number

| | |
|----------|--|
| Synopsis | Upper bound of the level range |
| Context | configure system security cpu-protection policy number eth-cfm entry number level start number end number |
| Tree | level |

| | |
|------------|---|
| Range | 0 to 7 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

opcode *start number end number*

| | |
|----------------|--|
| Synopsis | Add a list entry for opcode |
| Context | configure system security cpu-protection policy number eth-cfm entry number opcode start number end number |
| Tree | opcode |
| Description | Commands in this context specify the range of operational codes (that identify the application) for the match criterion. |
| Min. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

start number

| | |
|------------|---|
| Synopsis | Lower bound of the OpCode range |
| Context | configure system security cpu-protection policy number eth-cfm entry number opcode start number end number |
| Tree | opcode |
| Range | 0 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

end number

| | |
|----------|---|
| Synopsis | Upper bound of the OpCode range |
| Context | configure system security cpu-protection policy number eth-cfm entry number opcode start number end number |
| Tree | opcode |
| Range | 0 to 255 |

| | |
|------------|---|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Packet arrival rate limit |
| Context | configure system security cpu-protection policy <i>number</i> eth-cfm entry <i>number</i> pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 0 to 65534 |
| Default | max |
| Units | packets per second |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

out-profile-rate

| | |
|------------|--|
| Synopsis | Enter the out-profile-rate context |
| Context | configure system security cpu-protection policy <i>number</i> out-profile-rate |
| Tree | out-profile-rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

log-events *boolean*

| | |
|------------|--|
| Synopsis | Generate a log event when the packet rate is exceeded |
| Context | configure system security cpu-protection policy <i>number</i> out-profile-rate log-events <i>boolean</i> |
| Tree | log-events |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Packet arrival rate limit |
| Context | configure system security cpu-protection policy <i>number</i> out-profile-rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 65534 |
| Units | packets per second |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

overall-rate (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Packet arrival rate limit for all packets |
| Context | configure system security cpu-protection policy <i>number</i> overall-rate (<i>number</i> <i>keyword</i>) |
| Tree | overall-rate |
| Range | 1 to 65534 |
| Units | packets per second |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

per-source-parameters

| | |
|------------|--|
| Synopsis | Enter the per-source-parameters context |
| Context | configure system security cpu-protection policy <i>number</i> per-source-parameters |
| Tree | per-source-parameters |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

ip-src-monitoring

| | |
|----------|--|
| Synopsis | Enter the ip-src-monitoring context |
| Context | configure system security cpu-protection policy <i>number</i> per-source-parameters ip-src-monitoring |

| | |
|------------|---|
| Tree | ip-src-monitoring |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

limit-dhcp-ci-addr-zero *boolean*

| | |
|------------|---|
| Synopsis | Apply rate limiting to packets with client IP address 0 |
| Context | configure system security cpu-protection policy <i>number</i> per-source-parameters ip-src-monitoring limit-dhcp-ci-addr-zero <i>boolean</i> |
| Tree | limit-dhcp-ci-addr-zero |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

per-source-rate (*number* | *keyword*)

| | |
|-------------|--|
| Synopsis | Per-source packet arrival rate limit |
| Context | configure system security cpu-protection policy <i>number</i> per-source-rate (<i>number</i> <i>keyword</i>) |
| Tree | per-source-rate |
| Description | <p>This command configures the per-source packet arrival rate limit.</p> <p>A source is defined as a unique combination of SAP and MAC source address or SAP and source IP address. The CPU receives no more than the specified packet rate from each source. The measurement is cleared every second.</p> <p>This configuration is applicable only if the policy is assigned to an interface (such as SAPs, subscriber interfaces, and spoke SDPs), and MAC monitoring or IP source monitoring is specified in the CPU protection configuration of the interface.</p> |
| Range | 1 to 65534 |
| Default | max |
| Units | packets per second |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

port-overall-rate

| | |
|----------|--|
| Synopsis | Enter the port-overall-rate context |
|----------|--|

| | |
|------------|---|
| Context | configure system security cpu-protection port-overall-rate |
| Tree | port-overall-rate |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

action-low-priority *boolean*

| | |
|-------------|--|
| Synopsis | Mark packets that exceed the rate as low-priority |
| Context | configure system security cpu-protection port-overall-rate action-low-priority boolean |
| Tree | action-low-priority |
| Description | When configured to true , packets that exceed the per-port packet arrival rate limit are marked as low priority for preferential discard later (if there is congestion in the control plane) rather than discarded immediately. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

pir (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Per-port packet arrival rate limit |
| Context | configure system security cpu-protection port-overall-rate pir (<i>number</i> <i>keyword</i>) |
| Tree | pir |
| Range | 1 to 65535 |
| Units | packets per second |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

protocol-protection

| | |
|-------------|--|
| Synopsis | Enable the protocol-protection context |
| Context | configure system security cpu-protection protocol-protection |
| Tree | protocol-protection |
| Description | When enabled, the network processor on the CPM discards all packets received for protocols that are not configured on the interface. This action helps to mitigate DoS attacks by filtering invalid control traffic before it ingresses the CPU. For example, if |

IS-IS is not configured on an interface, protocol protection discards any IS-IS packets received on the interface.

Commands in this context further define the action when the context is enabled.

| | |
|------------|---|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

allow-sham-links *boolean*

| | |
|-------------|--|
| Synopsis | Allow OSPF sham link traffic |
| Context | configure system security cpu-protection protocol-protection allow-sham-links <i>boolean</i> |
| Tree | allow-sham-links |
| Description | When configured to true , tunneled OSPF packets received over the backbone network must be explicitly allowed when OSPF sham links form an adjacency over the MPLS-VPRN backbone network. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

block-pim-tunneled *boolean*

| | |
|-------------|--|
| Synopsis | Block extraction and processing of PIM packets |
| Context | configure system security cpu-protection protocol-protection block-pim-tunneled <i>boolean</i> |
| Tree | block-pim-tunneled |
| Description | When configured to true , PIM packets arriving at the SR OS node inside a tunnel (for example, MPLS or GRE) on a network interface are blocked and not processed. PIM in an mVPN on the egress DR will not switch traffic from the (*,G) to the (S,G) tree. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS |

dist-cpu-protection

| | |
|-------------|--|
| Synopsis | Enter the dist-cpu-protection context |
| Context | configure system security dist-cpu-protection |
| Tree | dist-cpu-protection |
| Description | Commands in this context configure distributed CPU protection (DCP) attributes. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

policy [*policy-name*] *string*

| | |
|----------------|---|
| Synopsis | Enter the policy list instance |
| Context | configure system security dist-cpu-protection policy <i>string</i> |
| Tree | policy |
| Description | Commands in this context configure the attributes of DCP policies. These policies can be applied to objects such as SAPs, network interfaces or ports |
| Max. Instances | 130 |
| Introduced | 16.0.R1 |
| Platforms | All |

[policy-name] *string*

| | |
|---------------|---|
| Synopsis | Policy name |
| Context | configure system security dist-cpu-protection policy <i>string</i> |
| Tree | policy |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system security dist-cpu-protection policy <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

local-monitoring-policer [*policer-name*] *string*

| | |
|----------------|--|
| Synopsis | Enter the local-monitoring-policer list instance |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> |
| Tree | local-monitoring-policer |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[policer-name] *string*

| | |
|---------------|--|
| Synopsis | Local monitoring policer name |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> |
| Tree | local-monitoring-policer |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

exceed-action *keyword*

| | |
|----------|---|
| Synopsis | Action taken when policer rates are exceeded |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> exceed-action <i>keyword</i> |
| Tree | exceed-action |

| | |
|-------------|--|
| Description | This command specifies the action taken on the extracted control packets when the configured policer rates are exceeded. |
| Default | none |
| Options | discard, low-priority, none |
| Introduced | 16.0.R1 |
| Platforms | All |

log-events *keyword*

| | |
|-------------|---|
| Synopsis | Control of log events creation for status and activity |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> log-events <i>keyword</i> |
| Tree | log-events |
| Description | This command controls the creation of log events related to the status and activity of the local monitoring policer. |
| Default | true |
| Options | false, true, verbose |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|-------------|--|
| Synopsis | Enter the rate context |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate |
| Tree | rate |
| Description | Commands in this context specify the rate and burst tolerance for the policer.

The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate. |
| Introduced | 16.0.R1 |
| Platforms | All |

kbits

| | |
|----------|--------------------------------|
| Synopsis | Enter the kbits context |
|----------|--------------------------------|

| | |
|------------|--|
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate kbps |
| Tree | kbps |
| Notes | The following elements are part of a choice: kbps or packets . |
| Introduced | 16.0.R1 |
| Platforms | All |

limit (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Rate limit |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate kbps limit (<i>keyword</i> <i>number</i>) |
| Tree | limit |
| Range | 1 to 20000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs *number*

| | |
|------------|--|
| Synopsis | Tolerance for the rate |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate kbps mbs <i>number</i> |
| Tree | mbs |
| Range | 0 to 4194304 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

packets

| | |
|----------|---|
| Synopsis | Enter the packets context |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate packets |

| | |
|------------|--|
| Tree | packets |
| Notes | The following elements are part of a choice: kbps or packets . |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-delay *number*

| | |
|-------------|--|
| Synopsis | Additional packets allowed in an initial burst |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate packets initial-delay <i>number</i> |
| Tree | initial-delay |
| Description | This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol. |
| Range | 0 to 255 |
| Default | 0 |
| Units | packets |
| Introduced | 16.0.R1 |
| Platforms | All |

limit (*keyword* | *number*)

| | |
|------------|--|
| Synopsis | Packets per interval limit |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate packets limit (<i>keyword</i> <i>number</i>) |
| Tree | limit |
| Range | 0 to 8000 |
| Default | max |
| Units | packets per interval |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

within *number*

| | |
|------------|--|
| Synopsis | Measurement interval for packets rate |
| Context | configure system security dist-cpu-protection policy <i>string</i> local-monitoring-policer <i>string</i> rate packets within <i>number</i> |
| Tree | within |
| Range | 1 to 32767 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

protocol [*protocol-name*] *keyword*

| | |
|------------|--|
| Synopsis | Enter the protocol list instance |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> |
| Tree | protocol |
| Introduced | 16.0.R1 |
| Platforms | All |

[*protocol-name*] *keyword*

| | |
|------------|--|
| Synopsis | Protocol name |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> |
| Tree | protocol |
| Options | arp, dhcp, http-redirect, icmp, igmp, mld, ndis, pppoe-pppoa, all-unspecified, mpls-ttl, bfd-cpm, bgp, eth-cfm, isis, ldp, ospf, pim, rsvp, icmp-ping-check, lacp, vrrp, multi-chassis, multi-chassis-sync, bfd, ftp, icmp-v4, icmp-v6, l3-to-my-ipv4, l3-to-my-ipv6, lsp-ping, mc-lag, mcast-snooping, radius, rip, sbfd-reflector, snmp, ssh, stp, tacacs, telnet, tftp, twamp |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-parameters

| | |
|----------|---|
| Synopsis | Enter the dynamic-parameters context |
|----------|---|

| | |
|------------|--|
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters |
| Tree | dynamic-parameters |
| Introduced | 16.0.R1 |
| Platforms | All |

detection-time *number*

| | |
|------------|---|
| Synopsis | Minimum time the dynamic policer remains allocated |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters detection-time <i>number</i> |
| Tree | detection-time |
| Range | 1 to 128000 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

exceed-action

| | |
|-------------|--|
| Synopsis | Enter the exceed-action context |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters exceed-action |
| Tree | exceed-action |
| Description | Commands in this context specify the settings for the scenario when the configured policer rates are exceeded. |
| Introduced | 16.0.R1 |
| Platforms | All |

action *keyword*

| | |
|----------|--|
| Synopsis | Action taken on control packets when rates are exceeded |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters exceed-action action <i>keyword</i> |
| Tree | action |
| Default | none |

| | |
|------------|-----------------------------|
| Options | discard, low-priority, none |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down (*keyword* | *number*)

| | |
|-------------|---|
| Synopsis | Hold down behavior |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters exceed-action hold-down (<i>keyword</i> <i>number</i>) |
| Tree | hold-down |
| Description | <p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the tools perform security dist-cpu-protection release-hold-down command.</p> |
| Range | 1 to 10080 |
| Default | none |
| Units | seconds |
| Options | indefinite, none |
| Introduced | 16.0.R1 |
| Platforms | All |

log-events *keyword*

| | |
|-------------|--|
| Synopsis | Control of log events creation for status and activity |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters log-events <i>keyword</i> |
| Tree | log-events |
| Description | This command controls the creation of log events related to the status and activity of the local monitoring policer. |
| Default | true |
| Options | false, true, verbose |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|-------------|--|
| Synopsis | Enter the rate context |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate |
| Tree | rate |
| Description | Commands in this context specify the rate and burst tolerance for the policer.
The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate. |
| Introduced | 16.0.R1 |
| Platforms | All |

kbps

| | |
|------------|--|
| Synopsis | Enter the kbps context |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate kbps |
| Tree | kbps |
| Notes | The following elements are part of a choice: kbps or packets . |
| Introduced | 16.0.R1 |
| Platforms | All |

limit (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Rate limit |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate kbps limit (<i>keyword</i> <i>number</i>) |
| Tree | limit |
| Range | 1 to 20000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs *number*

| | |
|------------|---|
| Synopsis | Tolerance for the rate |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate kbps mbs <i>number</i> |
| Tree | mbs |
| Range | 0 to 4194304 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

packets

| | |
|------------|---|
| Synopsis | Enter the packets context |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate packets |
| Tree | packets |
| Notes | The following elements are part of a choice: kbps or packets . |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-delay *number*

| | |
|-------------|--|
| Synopsis | Additional packets allowed in an initial burst |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate packets initial-delay <i>number</i> |
| Tree | initial-delay |
| Description | This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol. |
| Range | 0 to 255 |
| Default | 0 |
| Units | packets |
| Introduced | 16.0.R1 |
| Platforms | All |

limit (*keyword* | *number*)

| | |
|------------|--|
| Synopsis | Packets per interval limit |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate packets limit (<i>keyword</i> <i>number</i>) |
| Tree | limit |
| Range | 0 to 8000 |
| Default | max |
| Units | packets per interval |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

within *number*

| | |
|------------|--|
| Synopsis | Measurement interval for packets rate |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> dynamic-parameters rate packets within <i>number</i> |
| Tree | within |
| Range | 1 to 32767 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

enforcement

| | |
|------------|---|
| Synopsis | Enter the enforcement context |
| Context | configure system security dist-cpu-protection policy <i>string</i> protocol <i>keyword</i> enforcement |
| Tree | enforcement |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic

| | |
|----------|----------------------------------|
| Synopsis | Enter the dynamic context |
|----------|----------------------------------|

| | |
|------------|--|
| Context | configure system security dist-cpu-protection policy <i>string protocol keyword enforcement dynamic</i> |
| Tree | dynamic |
| Notes | The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static . |
| Introduced | 16.0.R1 |
| Platforms | All |

mon-policer-name *reference*

| | |
|-------------|--|
| Synopsis | Dynamic enforcement policer for the protocol |
| Context | configure system security dist-cpu-protection policy <i>string protocol keyword enforcement dynamic mon-policer-name reference</i> |
| Tree | mon-policer-name |
| Description | This command specifies the dynamic enforcement policer that is instantiated when the associated local monitoring policer is determined to be in a nonconforming state (at the end of a minimum monitoring time of 60 seconds to reduce thrashing). |
| Reference | configure system security dist-cpu-protection policy <i>string local-monitoring-policer string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

dynamic-local-mon-bypass

| | |
|-------------|--|
| Synopsis | Do not include packets in the local monitoring function |
| Context | configure system security dist-cpu-protection policy <i>string protocol keyword enforcement dynamic-local-mon-bypass</i> |
| Tree | dynamic-local-mon-bypass |
| Description | When configured, packets from the protocol are not included in the local monitoring function and the dynamic enforcement policer is not instantiated for the protocol. |
| Notes | The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static . |
| Introduced | 16.0.R1 |
| Platforms | All |

static

| | |
|----------|---------------------------------|
| Synopsis | Enter the static context |
|----------|---------------------------------|

| | |
|------------|--|
| Context | configure system security dist-cpu-protection policy <i>string protocol keyword enforcement static</i> |
| Tree | static |
| Notes | The following elements are part of a choice: dynamic , dynamic-local-mon-bypass , shared , or static . |
| Introduced | 16.0.R1 |
| Platforms | All |

policer-name *reference*

| | |
|------------|--|
| Synopsis | Static policer enforced by the protocol |
| Context | configure system security dist-cpu-protection policy <i>string protocol keyword enforcement static policer-name reference</i> |
| Tree | policer-name |
| Reference | configure system security dist-cpu-protection policy <i>string static-policer string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

static-policer [**policer-name**] *string*

| | |
|----------------|---|
| Synopsis | Enter the static-policer list instance |
| Context | configure system security dist-cpu-protection policy <i>string static-policer string</i> |
| Tree | static-policer |
| Description | <p>Commands in this context configure a static enforcement policer that can be referenced by one or more protocols in the policy. When a policer is referenced by a protocol, the policer is instantiated for each object (for example, a SAP or network interface) that is created and references the policer.</p> <p>If no policer resources are available on the associated card or FP, the object is not created.</p> |
| Max. Instances | 18 |
| Introduced | 16.0.R1 |
| Platforms | All |

[policer-name] *string*

| | |
|----------|---------------------|
| Synopsis | Static policer name |
|----------|---------------------|

| | |
|---------------|---|
| Context | configure system security dist-cpu-protection policy <i>string static-policer string</i> |
| Tree | static-policer |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security dist-cpu-protection policy <i>string static-policer string description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

detection-time *number*

| | |
|------------|---|
| Synopsis | Minimum time the dynamic policer remains allocated |
| Context | configure system security dist-cpu-protection policy <i>string static-policer string detection-time number</i> |
| Tree | detection-time |
| Range | 1 to 128000 |
| Default | 30 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

exceed-action

| | |
|----------|---|
| Synopsis | Enter the exceed-action context |
| Context | configure system security dist-cpu-protection policy <i>string static-policer string exceed-action</i> |
| Tree | exceed-action |

| | |
|-------------|--|
| Description | Commands in this context specify the settings for the scenario when the configured policer rates are exceeded. |
| Introduced | 16.0.R1 |
| Platforms | All |

action *keyword*

| | |
|------------|---|
| Synopsis | Action taken on control packets when rates are exceeded |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> exceed-action action <i>keyword</i> |
| Tree | action |
| Default | none |
| Options | discard, low-priority, none |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-down (*keyword* | *number*)

| | |
|-------------|---|
| Synopsis | Hold down behavior |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> exceed-action hold-down (<i>keyword</i> <i>number</i>) |
| Tree | hold-down |
| Description | <p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the tools perform security dist-cpu-protection release-hold-down command.</p> |
| Range | 1 to 10080 |
| Default | none |
| Units | seconds |
| Options | indefinite, none |
| Introduced | 16.0.R1 |
| Platforms | All |

log-events *keyword*

| | |
|-------------|--|
| Synopsis | Control of log events creation for status and activity |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> log-events <i>keyword</i> |
| Tree | log-events |
| Description | This command controls the creation of log events related to the status and activity of the local monitoring policer. |
| Default | true |
| Options | false, true, verbose |
| Introduced | 16.0.R1 |
| Platforms | All |

rate

| | |
|-------------|--|
| Synopsis | Enter the rate context |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate |
| Tree | rate |
| Description | Commands in this context specify the rate and burst tolerance for the policer.

The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate. |
| Introduced | 16.0.R1 |
| Platforms | All |

kbps

| | |
|------------|--|
| Synopsis | Enter the kbps context |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate kbps |
| Tree | kbps |
| Notes | The following elements are part of a choice: kbps or packets . |
| Introduced | 16.0.R1 |
| Platforms | All |

limit (*keyword* | *number*)

| | |
|----------|------------|
| Synopsis | Rate limit |
|----------|------------|

| | |
|------------|---|
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate kbps limit (<i>keyword</i> <i>number</i>) |
| Tree | limit |
| Range | 1 to 20000000 |
| Default | max |
| Units | kilobps |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

mbs *number*

| | |
|------------|--|
| Synopsis | Tolerance for the rate |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate kbps mbs <i>number</i> |
| Tree | mbs |
| Range | 0 to 4194304 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

packets

| | |
|------------|--|
| Synopsis | Enter the packets context |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets |
| Tree | packets |
| Notes | The following elements are part of a choice: kbps or packets . |
| Introduced | 16.0.R1 |
| Platforms | All |

initial-delay *number*

| | |
|----------|---|
| Synopsis | Additional packets allowed in an initial burst |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets initial-delay <i>number</i> |

| | |
|-------------|--|
| Tree | initial-delay |
| Description | This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol. |
| Range | 0 to 255 |
| Default | 0 |
| Units | packets |
| Introduced | 16.0.R1 |
| Platforms | All |

limit (*keyword* | *number*)

| | |
|------------|---|
| Synopsis | Packets per interval limit |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets limit (<i>keyword</i> <i>number</i>) |
| Tree | limit |
| Range | 0 to 8000 |
| Default | max |
| Units | packets per interval |
| Options | max |
| Introduced | 16.0.R1 |
| Platforms | All |

within *number*

| | |
|------------|---|
| Synopsis | Measurement interval for packets rate |
| Context | configure system security dist-cpu-protection policy <i>string</i> static-policer <i>string</i> rate packets within <i>number</i> |
| Tree | within |
| Range | 1 to 32767 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Policy type |
| Context | configure system security dist-cpu-protection policy <i>string</i> type <i>keyword</i> |
| Tree | type |
| Options | access-network, port |
| Introduced | 21.5.R1 |
| Platforms | All |

dot1x

| | |
|------------|--|
| Synopsis | Enter the dot1x context |
| Context | configure system security dot1x |
| Tree | dot1x |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of 802.1x network access control |
| Context | configure system security dot1x admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

radius-policy [[policy-name](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the radius-policy list instance |
| Context | configure system security dot1x radius-policy <i>string</i> |
| Tree | radius-policy |
| Introduced | 16.0.R1 |

Platforms All

[policy-name] *string*

Synopsis RADIUS server policy name for 802.1X authentication
Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *string*
Tree [radius-policy](#)
String Length 1 to 32
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

admin-state *keyword*

Synopsis Administrative state of the server for authentication
Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *string* **admin-state** *keyword*
Tree [admin-state](#)
Default disable
Options enable, disable
Introduced 16.0.R1
Platforms All

retry *number*

Synopsis Number of RADIUS requests toward the same RADIUS server
Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *string* **retry** *number*
Tree [retry](#)
Range 1 to 10
Default 3
Introduced 16.0.R1
Platforms All

server [[server-index](#)] *number*

Synopsis Enter the **server** list instance

| | |
|----------------|--|
| Context | configure system security dot1x radius-policy <i>string server number</i> |
| Tree | server |
| Max. Instances | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

[server-index] *number*

| | |
|------------|--|
| Synopsis | RADIUS server index |
| Context | configure system security dot1x radius-policy <i>string server number</i> |
| Tree | server |
| Range | 1 to 5 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

accounting-port *number*

| | |
|------------|---|
| Synopsis | UDP port number on which to contact the RADIUS server for accounting requests |
| Context | configure system security dot1x radius-policy <i>string server number accounting-port number</i> |
| Tree | accounting-port |
| Range | 1 to 65535 |
| Default | 1813 |
| Introduced | 16.0.R1 |
| Platforms | All |

address *string*

| | |
|------------|---|
| Synopsis | IP address of the RADIUS dot1x server |
| Context | configure system security dot1x radius-policy <i>string server number address string</i> |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms All

authentication-port *number*

Synopsis UDP port number on which to contact the RADIUS server for authentication

Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *string* [server](#) *number* **authentication-port** *number*

Tree [authentication-port](#)

Range 1 to 65535

Default 1812

Introduced 16.0.R1

Platforms All

secret *string*

Synopsis Secret key associated with the RADIUS server

Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *string* [server](#) *number* **secret** *string*

Tree [secret](#)

String Length 1 to 54

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

type *keyword*

Synopsis RADIUS server type

Context **configure** [system](#) [security](#) [dot1x](#) [radius-policy](#) *string* [server](#) *number* **type** *keyword*

Tree [type](#)

Default authorization

Options authorization, accounting, combined

Introduced 16.0.R1

Platforms All

source-address *string*

| | |
|------------|---|
| Synopsis | Source address of the RADIUS packet |
| Context | configure system security dot1x radius-policy <i>string</i> source-address <i>string</i> |
| Tree | source-address |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|--|
| Synopsis | Time assigned between the request retries toward the same RADIUS server |
| Context | configure system security dot1x radius-policy <i>string</i> timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 90 |
| Default | 5 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

ftp-server *boolean*

| | |
|------------|--|
| Synopsis | Enable FTP servers running on the system |
| Context | configure system security ftp-server <i>boolean</i> |
| Tree | ftp-server |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

hash-control

| | |
|------------|---|
| Synopsis | Enter the hash-control context |
| Context | configure system security hash-control |
| Tree | hash-control |
| Introduced | 16.0.R4 |
| Platforms | All |

management-interface

| | |
|-------------|--|
| Synopsis | Enter the management-interface context |
| Context | configure system security hash-control management-interface |
| Tree | management-interface |
| Description | Commands in this context configure encryption parameters for different management interfaces. |
| Introduced | 16.0.R4 |
| Platforms | All |

classic-cli

| | |
|------------|--|
| Synopsis | Enter the classic-cli context |
| Context | configure system security hash-control management-interface classic-cli |
| Tree | classic-cli |
| Introduced | 16.0.R4 |
| Platforms | All |

read-algorithm *keyword*

| | |
|-------------|---|
| Synopsis | Input encryption algorithm for configuration secrets |
| Context | configure system security hash-control management-interface classic-cli read-algorithm <i>keyword</i> |
| Tree | read-algorithm |
| Description | This command specifies how encrypted configuration secrets are interpreted and which encryption types are accepted when secrets are input into the system or read from a configuration file (for example, at system bootup time). |
| Default | all-hash |
| Options | all-hash, hash, hash2, custom |
| Introduced | 16.0.R4 |
| Platforms | All |

write-algorithm *keyword*

| | |
|----------|---|
| Synopsis | Output encryption algorithm for configuration secrets |
|----------|---|

| | |
|-------------|---|
| Context | configure system security hash-control management-interface classic-cli write-algorithm <i>keyword</i> |
| Tree | write-algorithm |
| Description | This command specifies the format of the output for encrypted configuration secrets (for example, in the saved configuration file, or in the output of the info or show commands). |
| Default | hash2 |
| Options | cleartext, hash, hash2, custom |
| Introduced | 16.0.R4 |
| Platforms | All |

grpc

| | |
|------------|---|
| Synopsis | Enter the grpc context |
| Context | configure system security hash-control management-interface grpc |
| Tree | grpc |
| Introduced | 16.0.R4 |
| Platforms | All |

hash-algorithm *keyword*

| | |
|-------------|---|
| Synopsis | Encryption algorithm for configuration secrets |
| Context | configure system security hash-control management-interface grpc hash-algorithm <i>keyword</i> |
| Tree | hash-algorithm |
| Description | This command specifies the format of the input and output for encrypted configuration secrets. |
| Default | hash2 |
| Options | cleartext, hash, hash2, custom |
| Introduced | 16.0.R4 |
| Platforms | All |

md-cli

| | |
|----------|---|
| Synopsis | Enter the md-cli context |
| Context | configure system security hash-control management-interface md-cli |

| | |
|------------|------------------------|
| Tree | md-cli |
| Introduced | 16.0.R4 |
| Platforms | All |

hash-algorithm *keyword*

| | |
|-------------|--|
| Synopsis | Encryption algorithm for configuration secrets |
| Context | configure system security hash-control management-interface md-cli hash-algorithm <i>keyword</i> |
| Tree | hash-algorithm |
| Description | This command specifies the format of the input and output for encrypted configuration secrets. |
| Default | hash2 |
| Options | cleartext, hash, hash2, custom |
| Introduced | 16.0.R4 |
| Platforms | All |

netconf

| | |
|------------|---|
| Synopsis | Enter the netconf context |
| Context | configure system security hash-control management-interface netconf |
| Tree | netconf |
| Introduced | 16.0.R4 |
| Platforms | All |

hash-algorithm *keyword*

| | |
|-------------|---|
| Synopsis | Encryption algorithm for configuration secrets |
| Context | configure system security hash-control management-interface netconf hash-algorithm <i>keyword</i> |
| Tree | hash-algorithm |
| Description | This command specifies the format of the input and output for encrypted configuration secrets. |
| Default | hash2 |
| Options | cleartext, hash, hash2, custom |
| Introduced | 16.0.R4 |

Platforms All

keychains

Synopsis Enter the **keychains** context
 Context **configure** [system](#) [security](#) [keychains](#)
 Tree [keychains](#)
 Introduced 16.0.R1
 Platforms All

keychain [[keychain-name](#)] *string*

Synopsis Enter the **keychain** list instance
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*
 Tree [keychain](#)
 Max. Instances 256
 Introduced 16.0.R1
 Platforms All

[[keychain-name](#)] *string*

Synopsis Keychain name
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*
 Tree [keychain](#)
 String Length 1 to 32
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

admin-state *keyword*

Synopsis Administrative state of the keychain
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [admin-state](#) *keyword*
 Tree [admin-state](#)

| | |
|------------|-----------------|
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

bidirectional

| | |
|------------|--|
| Synopsis | Enter the bidirectional context |
| Context | configure system security keychains keychain <i>string</i> bidirectional |
| Tree | bidirectional |
| Introduced | 16.0.R1 |
| Platforms | All |

entry [[keychain-entry-index](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | All |

[keychain-entry-index] *number*

| | |
|------------|--|
| Synopsis | Keychain identifier |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> |
| Tree | entry |
| Range | 0 to 63 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the keychain entry |
|----------|--|

| | |
|------------|--|
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Encryption algorithm used by the keychain key |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> algorithm <i>keyword</i> |
| Tree | algorithm |
| Options | aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Authentication key used by the encryption algorithm |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 54 |
| Introduced | 16.0.R1 |
| Platforms | All |

begin-time *string*

| | |
|------------|---|
| Synopsis | Calendar date and time to start using the key |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> begin-time <i>string</i> |
| Tree | begin-time |
| Introduced | 16.0.R1 |
| Platforms | All |

option *keyword*

| | |
|------------|--|
| Synopsis | Keychain key option |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> option <i>keyword</i> |
| Tree | option |
| Default | none |
| Options | none, basic, isis-enhanced |
| Introduced | 16.0.R1 |
| Platforms | All |

tolerance (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time within which an eligible receive key should overlap with the active send key |
| Context | configure system security keychains keychain <i>string</i> bidirectional entry <i>number</i> tolerance (<i>number</i> <i>keyword</i>) |
| Tree | tolerance |
| Range | 0 to 4294967294 |
| Default | 300 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|----------|--|
| Synopsis | Text description |
| Context | configure system security keychains keychain <i>string</i> description <i>string</i> |

| | |
|---------------|-----------------------------|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

receive

| | |
|------------|--|
| Synopsis | Enter the receive context |
| Context | configure system security keychains keychain <i>string</i> receive |
| Tree | receive |
| Introduced | 16.0.R1 |
| Platforms | All |

entry [[keychain-entry-index](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R1 |
| Platforms | All |

[keychain-entry-index] *number*

| | |
|------------|--|
| Synopsis | Keychain identifier |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> |
| Tree | entry |
| Range | 0 to 63 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the keychain entry |
|----------|--|

| | |
|------------|--|
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

algorithm *keyword*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Encryption algorithm used by the keychain key |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> algorithm <i>keyword</i> |
| Tree | algorithm |
| Options | aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Authentication key used by the encryption algorithm |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 54 |
| Introduced | 16.0.R1 |
| Platforms | All |

begin-time *string*

| | |
|------------|---|
| Synopsis | Calendar date and time to start using the key |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> begin-time <i>string</i> |
| Tree | begin-time |
| Introduced | 16.0.R1 |
| Platforms | All |

end-time *string*

| | |
|------------|---|
| Synopsis | Calendar date and time when the system should stop using the key |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> end-time <i>string</i> |
| Tree | end-time |
| Introduced | 16.0.R1 |
| Platforms | All |

tolerance (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Time within which an eligible receive key should overlap with the active send key |
| Context | configure system security keychains keychain <i>string</i> receive entry <i>number</i> tolerance (<i>number</i> <i>keyword</i>) |
| Tree | tolerance |
| Range | 0 to 4294967294 |
| Default | 300 |
| Units | seconds |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

send

| | |
|------------|---|
| Synopsis | Enter the send context |
| Context | configure system security keychains keychain <i>string</i> send |
| Tree | send |
| Introduced | 16.0.R1 |

Platforms All

entry [[keychain-entry-index](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

[keychain-entry-index] *number*

Synopsis Keychain identifier

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number*

Tree [entry](#)

Range 0 to 63 | 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of the keychain entry

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Default enable

Options enable, disable

Introduced 16.0.R1

Platforms All

algorithm *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Encryption algorithm used by the keychain key |
| Context | configure system security keychains keychain <i>string</i> send entry <i>number</i> algorithm <i>keyword</i> |
| Tree | algorithm |
| Options | aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Authentication key used by the encryption algorithm |
| Context | configure system security keychains keychain <i>string</i> send entry <i>number</i> authentication-key <i>string</i> |
| Tree | authentication-key |
| String Length | 1 to 54 |
| Introduced | 16.0.R1 |
| Platforms | All |

begin-time *string*

| | |
|------------|---|
| Synopsis | Calendar date and time to start using the key |
| Context | configure system security keychains keychain <i>string</i> send entry <i>number</i> begin-time <i>string</i> |
| Tree | begin-time |
| Introduced | 16.0.R1 |
| Platforms | All |

tcp-option-number

| | |
|------------|---|
| Synopsis | Enter the tcp-option-number context |
| Context | configure system security keychains keychain <i>string</i> tcp-option-number |
| Tree | tcp-option-number |
| Introduced | 16.0.R1 |
| Platforms | All |

receive keyword

| | |
|------------|---|
| Synopsis | TCP option value expected in the TCP header of received packets |
| Context | configure system security keychains keychain <i>string</i> tcp-option-number <i>receive</i> <i>keyword</i> |
| Tree | receive |
| Default | option-254 |
| Options | option-253, option-254, both, tcp-ao |
| Introduced | 16.0.R1 |
| Platforms | All |

send keyword

| | |
|------------|--|
| Synopsis | TCP option value assigned in the TCP header of transmitted packets |
| Context | configure system security keychains keychain <i>string</i> tcp-option-number <i>send</i> <i>keyword</i> |
| Tree | send |
| Default | option-254 |
| Options | option-253, option-254, tcp-ao |
| Introduced | 16.0.R1 |
| Platforms | All |

management

| | |
|-------------|--|
| Synopsis | Enter the management context |
| Context | configure system security management |
| Tree | management |
| Description | Commands in this context control which management protocols can be used to access the SR OS router via the 'Base' and 'management' router instances. |

| | |
|------------|---------|
| Introduced | 16.0.R5 |
| Platforms | All |

allow-ftp *boolean*

| | |
|-------------|---|
| Synopsis | Allow access to the FTP server |
| Context | configure system security management allow-ftp <i>boolean</i> |
| Tree | allow-ftp |
| Description | When configured to true , this command allows FTP access to the SR OS router via the 'Base' and 'management' router instances.
When configured to false , this command disallows access to the SR OS FTP server. |
| Default | true |
| Introduced | 16.0.R6 |
| Platforms | All |

allow-grpc *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the gRPC server |
| Context | configure system security management allow-grpc <i>boolean</i> |
| Tree | allow-grpc |
| Description | When configured to true , the system allows access to the gRPC server via the 'Base' and 'management' router instances. |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

allow-netconf *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the NETCONF server |
| Context | configure system security management allow-netconf <i>boolean</i> |
| Tree | allow-netconf |
| Description | When configured to true , the system allows NETCONF server access to the SR OS router via the 'Base' and 'management' router instances. |
| Default | true |
| Introduced | 19.5.R1 |
| Platforms | All |

allow-ssh *boolean*

| | |
|-------------|---|
| Synopsis | Allow access to the SSH server |
| Context | configure system security management allow-ssh <i>boolean</i> |
| Tree | allow-ssh |
| Description | When configured to true , this command allows SSH server access to the SR OS router via the 'Base' and 'management' router instances.
When configured to false , this command disallows SSH server access. |
| Default | true |
| Introduced | 16.0.R5 |
| Platforms | All |

allow-telnet *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the IPv4 Telnet server |
| Context | configure system security management allow-telnet <i>boolean</i> |
| Tree | allow-telnet |
| Description | When configured to true , this command allows IPv4 Telnet server access to the SR OS router via the 'Base' and 'management' router instances.
When configured to false , this command disallows access to the IPv4 Telnet server. |
| Default | true |
| Introduced | 16.0.R5 |
| Platforms | All |

allow-telnet6 *boolean*

| | |
|-------------|--|
| Synopsis | Allow access to the Telnet IPv6 server |
| Context | configure system security management allow-telnet6 <i>boolean</i> |
| Tree | allow-telnet6 |
| Description | When configured to true , this command allows IPv6 Telnet server access to the SR OS router via the 'Base' and 'management' router instances.
When configured to false , this command disallows access to the IPv6 Telnet server. |
| Default | true |
| Introduced | 16.0.R5 |
| Platforms | All |

management-access-filter

| | |
|-------------|--|
| Synopsis | Enter the management-access-filter context |
| Context | configure system security management-access-filter |
| Tree | management-access-filter |
| Description | <p>Commands in this context configure the attributes for management access filters.</p> <p>Management access filters control all traffic in and out of the CPM. The filters can be used to restrict management of the router by other nodes outside of specific networks (or sub-networks) or through designated ports.</p> <p>Management filters are enforced by the system software.</p> |
| Introduced | 16.0.R4 |
| Platforms | All |

ip-filter

| | |
|------------|---|
| Synopsis | Enter the ip-filter context |
| Context | configure system security management-access-filter ip-filter |
| Tree | ip-filter |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of management-access filters |
| Context | configure system security management-access-filter ip-filter admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

default-action *keyword*

| | |
|----------|---|
| Synopsis | Default action for the management access filter |
| Context | configure system security management-access-filter ip-filter default-action <i>keyword</i> |
| Tree | default-action |

| | |
|-------------|--|
| Description | This command specifies the default action for management access in the absence of a specific management access filter match. |
| Default | ignore-match |
| Options | ignore-match, accept, drop, reject |
| Introduced | 16.0.R4 |
| Platforms | All |

entry [[entry-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R4 |
| Platforms | All |

[entry-id] *number*

| | |
|-------------|--|
| Synopsis | Entry ID to identify the match criteria and the action |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> |
| Tree | entry |
| Description | This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries. |
| Range | 1 to 9999 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

action *keyword*

| | |
|-------------|---|
| Synopsis | Action associated with the management access filter |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> action <i>keyword</i> |
| Tree | action |
| Description | This command specifies the action associated with the management access filter match criteria entry. |

If the packet does not meet any of the match criteria, the configured default action is applied.

| | |
|------------|------------------------------------|
| Default | ignore-match |
| Options | ignore-match, accept, drop, reject |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

log-events *boolean*

| | |
|-------------|--|
| Synopsis | Enable match logging |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> log-events <i>boolean</i> |
| Tree | log-events |
| Description | When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.
When configured to false , match logging is disabled. |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

match

| | |
|-------------|--|
| Synopsis | Enter the match context |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match |
| Tree | match |
| Description | Commands in this context specify match criteria for the entry. |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

dst-port

| | |
|------------|--|
| Synopsis | Enable the dst-port context |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match dst-port |
| Tree | dst-port |
| Introduced | 16.0.R4 |
| Platforms | All |

mask *number*

| | |
|------------|---|
| Synopsis | IP address mask as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match dst-port mask <i>number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |
| Introduced | 16.0.R4 |
| Platforms | All |

port *number*

| | |
|------------|---|
| Synopsis | TCP or UDP port number as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match dst-port port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

mgmt-port

| | |
|-------------|---|
| Synopsis | Enter the mgmt-port context |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port |
| Tree | mgmt-port |
| Description | Commands in this context specify match criteria based on the Ethernet port. |
| Introduced | 16.0.R4 |
| Platforms | All |

cpm

| | |
|------------|---|
| Synopsis | Match any traffic received on any Ethernet port |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port cpm |
| Tree | cpm |
| Notes | The following elements are part of a choice: cpm , (lag and lag-id), or port-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

lag *string*

| | |
|---------------|---|
| Synopsis | LAG ID as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port lag <i>string</i> |
| Tree | lag |
| String Length | 1 to 27 |
| Notes | The following elements are part of a choice: cpm , (lag and lag-id), or port-id . |
| Introduced | 21.2.R1 |
| Platforms | All |

port-id *string*

| | |
|----------|---|
| Synopsis | Port ID as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port port-id <i>string</i> |
| Tree | port-id |

| | |
|------------|---|
| Notes | The following elements are part of a choice: cpm , (lag and lag-id), or port-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

protocol (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | IP protocol as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match protocol (<i>number</i> <i>keyword</i>) |
| Tree | protocol |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |
| Introduced | 16.0.R4 |
| Platforms | All |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router instance as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 16.0.R4 |
| Platforms | All |

src-ip

| | |
|-------------|--|
| Synopsis | Enter the src-ip context |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-ip |
| Tree | src-ip |
| Description | Commands in this context specify match criteria based on the source IP address. |
| Introduced | 16.0.R4 |
| Platforms | All |

address (*ipv4-prefix* | *ipv4-address*)

| | |
|------------|---|
| Synopsis | IP address or IP prefix as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-ip address (<i>ipv4-prefix</i> <i>ipv4-address</i>) |
| Tree | address |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R4 |
| Platforms | All |

ip-prefix-list *reference*

| | |
|------------|--|
| Synopsis | IP prefix list as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-ip ip-prefix-list <i>reference</i> |
| Tree | ip-prefix-list |
| Reference | configure filter match-list ip-prefix-list <i>string</i> |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 20.7.R1 |
| Platforms | All |

mask *string*

| | |
|------------|---|
| Synopsis | IP address mask as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-ip mask <i>string</i> |
| Tree | mask |
| Notes | The following elements are part of a choice: (address and mask) or ip-prefix-list . |
| Introduced | 16.0.R4 |
| Platforms | All |

src-port

| | |
|----------|--|
| Synopsis | Enable the src-port context |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-port |
| Tree | src-port |

| | |
|------------|---------|
| Introduced | 21.7.R1 |
| Platforms | All |

mask *number*

| | |
|------------|---|
| Synopsis | IP address mask as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-port mask <i>number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |
| Introduced | 21.7.R1 |
| Platforms | All |

port *number*

| | |
|------------|---|
| Synopsis | TCP or UDP port number as the match criterion |
| Context | configure system security management-access-filter ip-filter entry <i>number</i> match src-port port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 21.7.R1 |
| Platforms | All |

ipv6-filter

| | |
|------------|---|
| Synopsis | Enter the ipv6-filter context |
| Context | configure system security management-access-filter ipv6-filter |
| Tree | ipv6-filter |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of management-access filters |
|----------|---|

| | |
|------------|--|
| Context | configure system security management-access-filter ipv6-filter admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

default-action *keyword*

| | |
|-------------|--|
| Synopsis | Default action for the management access filter |
| Context | configure system security management-access-filter ipv6-filter default-action <i>keyword</i> |
| Tree | default-action |
| Description | This command specifies the default action for management access in the absence of a specific management access filter match. |
| Default | ignore-match |
| Options | ignore-match, accept, drop, reject |
| Introduced | 16.0.R4 |
| Platforms | All |

entry [[entry-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the entry list instance |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R4 |
| Platforms | All |

[entry-id] *number*

| | |
|-------------|--|
| Synopsis | Entry ID to identify the match criteria and the action |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> |
| Tree | entry |
| Description | This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries. |

| | |
|------------|-------------------------------------|
| Range | 1 to 9999 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

action *keyword*

| | |
|-------------|--|
| Synopsis | Action associated with the management access filter |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> action <i>keyword</i> |
| Tree | action |
| Description | This command specifies the action associated with the management access filter match criteria entry.
If the packet does not meet any of the match criteria, the configured default action is applied. |
| Default | ignore-match |
| Options | ignore-match, accept, drop, reject |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

log-events *boolean*

| | |
|----------|--|
| Synopsis | Enable match logging |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> log-events <i>boolean</i> |
| Tree | log-events |

| | |
|-------------|--|
| Description | When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.
When configured to false , match logging is disabled. |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

match

| | |
|-------------|--|
| Synopsis | Enter the match context |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match |
| Tree | match |
| Description | Commands in this context specify match criteria for the entry. |
| Introduced | 16.0.R4 |
| Platforms | All |

dst-port

| | |
|-------------|--|
| Synopsis | Enable the dst-port context |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match dst-port |
| Tree | dst-port |
| Description | Commands in this context specify match criteria based on the destination port. |
| Introduced | 16.0.R4 |
| Platforms | All |

mask *number*

| | |
|------------|--|
| Synopsis | IP address mask as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match dst-port mask <i>number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |
| Introduced | 16.0.R4 |
| Platforms | All |

port number

| | |
|------------|--|
| Synopsis | TCP or UDP port number as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match dst-port port number |
| Tree | port |
| Range | 1 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

flow-label number

| | |
|------------|---|
| Synopsis | Flow identifier used to discriminate traffic flows |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match flow-label number |
| Tree | flow-label |
| Range | 0 to 1048575 |
| Introduced | 16.0.R4 |
| Platforms | All |

mgmt-port

| | |
|-------------|---|
| Synopsis | Enter the mgmt-port context |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port |
| Tree | mgmt-port |
| Description | Commands in this context specify match criteria based on the Ethernet port. |
| Introduced | 16.0.R4 |
| Platforms | All |

cpm

| | |
|----------|---|
| Synopsis | Match any traffic received on any Ethernet port |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port cpm |

| | |
|------------|---|
| Tree | cpm |
| Notes | The following elements are part of a choice: cpm , (lag and lag-id), or port-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

lag string

| | |
|---------------|--|
| Synopsis | LAG ID as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port lag <i>string</i> |
| Tree | lag |
| String Length | 1 to 27 |
| Notes | The following elements are part of a choice: cpm , (lag and lag-id), or port-id . |
| Introduced | 21.2.R1 |
| Platforms | All |

port-id string

| | |
|------------|--|
| Synopsis | Port ID as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match mgmt-port port-id <i>string</i> |
| Tree | port-id |
| Notes | The following elements are part of a choice: cpm , (lag and lag-id), or port-id . |
| Introduced | 16.0.R4 |
| Platforms | All |

next-header (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | IP protocol to match |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match next-header (<i>number</i> <i>keyword</i>) |
| Tree | next-header |
| Range | 0 to 255 |
| Options | tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router instance as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 16.0.R4 |
| Platforms | All |

src-ip

| | |
|-------------|--|
| Synopsis | Enter the src-ip context |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match src-ip |
| Tree | src-ip |
| Description | Commands in this context specify match criteria based on the source port. |
| Introduced | 16.0.R4 |
| Platforms | All |

address (*ipv6-prefix* | *ipv6-address*)

| | |
|------------|---|
| Synopsis | IPv6 address or IPv6 prefix to match |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match src-ip address (<i>ipv6-prefix</i> <i>ipv6-address</i>) |
| Tree | address |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6-prefix-list *reference*

| | |
|----------|---|
| Synopsis | IPv6 prefix list as the match criterion |
|----------|---|

| | |
|------------|---|
| Context | configure system security management-access-filter ipv6-filter entry <i>number match src-ip ipv6-prefix-list reference</i> |
| Tree | ipv6-prefix-list |
| Reference | configure filter match-list ipv6-prefix-list <i>string</i> |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 20.7.R1 |
| Platforms | All |

mask string

| | |
|------------|--|
| Synopsis | IP address mask as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number match src-ip mask string</i> |
| Tree | mask |
| Notes | The following elements are part of a choice: (address and mask) or ipv6-prefix-list . |
| Introduced | 16.0.R4 |
| Platforms | All |

src-port

| | |
|-------------|--|
| Synopsis | Enable the src-port context |
| Context | configure system security management-access-filter ipv6-filter entry <i>number match src-port</i> |
| Tree | src-port |
| Description | Commands in this context specify match criteria based on the source port. |
| Introduced | 21.7.R1 |
| Platforms | All |

mask number

| | |
|----------|--|
| Synopsis | IP address mask as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number match src-port mask number</i> |
| Tree | mask |
| Range | 1 to 65535 |
| Default | 65535 |

| | |
|------------|---------|
| Introduced | 21.7.R1 |
| Platforms | All |

port *number*

| | |
|------------|---|
| Synopsis | TCP or UDP port number as the match criterion |
| Context | configure system security management-access-filter ipv6-filter entry <i>number</i> match src-port port <i>number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Notes | This element is mandatory. |
| Introduced | 21.7.R1 |
| Platforms | All |

mac-filter

| | |
|------------|--|
| Synopsis | Enter the mac-filter context |
| Context | configure system security management-access-filter mac-filter |
| Tree | mac-filter |
| Introduced | 16.0.R4 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of management access MAC filter |
| Context | configure system security management-access-filter mac-filter admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | All |

default-action *keyword*

| | |
|----------|---|
| Synopsis | Default action for the management access filter |
|----------|---|

| | |
|-------------|--|
| Context | configure system security management-access-filter mac-filter default-action <i>keyword</i> |
| Tree | default-action |
| Description | This command specifies the default action for management access in the absence of a specific management access filter match. |
| Default | ignore-match |
| Options | ignore-match, accept, drop |
| Introduced | 16.0.R4 |
| Platforms | All |

entry [**entry-id**] *number*

| | |
|------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> |
| Tree | entry |
| Introduced | 16.0.R4 |
| Platforms | All |

[entry-id] *number*

| | |
|-------------|--|
| Synopsis | Entry ID to identify the match criteria and the action |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> |
| Tree | entry |
| Description | This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries. |
| Range | 1 to 9999 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

action *keyword*

| | |
|----------|---|
| Synopsis | Action associated with the management access filter |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> action <i>keyword</i> |

| | |
|-------------|--|
| Tree | action |
| Description | This command specifies the action associated with the management access filter match criteria entry.

If the packet does not meet any of the match criteria, the configured default action is applied. |
| Default | ignore-match |
| Options | ignore-match, accept, drop |
| Introduced | 16.0.R4 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security management-access-filter mac-filter entry number description string |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | All |

log-events *boolean*

| | |
|-------------|--|
| Synopsis | Enable match logging |
| Context | configure system security management-access-filter mac-filter entry number log-events boolean |
| Tree | log-events |
| Description | When configured to true , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.

When configured to false , match logging is disabled. |
| Default | false |
| Introduced | 16.0.R4 |
| Platforms | All |

match

| | |
|----------|--------------------------------|
| Synopsis | Enter the match context |
|----------|--------------------------------|

| | |
|-------------|--|
| Context | configure system security management-access-filter mac-filter entry <i>number match</i> |
| Tree | match |
| Description | Commands in this context specify match criteria for the entry. |
| Introduced | 16.0.R4 |
| Platforms | All |

cfm-opcode

| | |
|-------------|--|
| Synopsis | Enter the cfm-opcode context |
| Context | configure system security management-access-filter mac-filter entry <i>number match</i>
cfm-opcode |
| Tree | cfm-opcode |
| Description | Commands in this context specify match criteria based on the CFM opcode. |
| Introduced | 16.0.R4 |
| Platforms | All |

eq *number*

| | |
|------------|---|
| Synopsis | Equal to comparison operator for the CFM opcode |
| Context | configure system security management-access-filter mac-filter entry <i>number match</i>
cfm-opcode eq <i>number</i> |
| Tree | eq |
| Range | 0 to 255 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R4 |
| Platforms | All |

gt *number*

| | |
|----------|---|
| Synopsis | Greater than comparison operator for the CFM opcode |
| Context | configure system security management-access-filter mac-filter entry <i>number match</i>
cfm-opcode gt <i>number</i> |
| Tree | gt |
| Range | 0 to 254 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

lt *number*

| | |
|------------|--|
| Synopsis | Less than comparison operator for the CFM opcode |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match cfm-opcode lt <i>number</i> |
| Tree | lt |
| Range | 1 to 255 |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R4 |
| Platforms | All |

range

| | |
|------------|---|
| Synopsis | Enable the range context |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match cfm-opcode range |
| Tree | range |
| Notes | The following elements are part of a choice: eq , gt , lt , or range . |
| Introduced | 16.0.R4 |
| Platforms | All |

end *number*

| | |
|------------|---|
| Synopsis | Upper bound of the range for the OpCode to match |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match cfm-opcode range end <i>number</i> |
| Tree | end |
| Range | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

start number

| | |
|------------|---|
| Synopsis | Lower bound of the range for the OpCode to match |
| Context | configure system security management-access-filter mac-filter entry number match cfm-opcode range start number |
| Tree | start |
| Range | 0 to 254 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

dot1p

| | |
|-------------|---|
| Synopsis | Enable the dot1p context |
| Context | configure system security management-access-filter mac-filter entry number match dot1p |
| Tree | dot1p |
| Description | Commands in this context specify match criteria based on the IEEE 802.1p value. |
| Introduced | 16.0.R4 |
| Platforms | All |

mask number

| | |
|------------|---|
| Synopsis | 3-bit mask as the match criterion |
| Context | configure system security management-access-filter mac-filter entry number match dot1p mask number |
| Tree | mask |
| Range | 1 to 7 |
| Default | 7 |
| Introduced | 16.0.R4 |
| Platforms | All |

priority number

| | |
|----------|---|
| Synopsis | IEEE 802.1p value as the match criterion |
| Context | configure system security management-access-filter mac-filter entry number match dot1p priority number |

| | |
|------------|----------------------------|
| Tree | priority |
| Range | 0 to 7 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

dst-mac

| | |
|-------------|---|
| Synopsis | Enable the dst-mac context |
| Context | configure system security management-access-filter mac-filter entry number match dst-mac |
| Tree | dst-mac |
| Description | Commands in this context specify match criteria based on the destination MAC. |
| Introduced | 16.0.R4 |
| Platforms | All |

address string

| | |
|------------|--|
| Synopsis | MAC address used as the match criterion |
| Context | configure system security management-access-filter mac-filter entry number match dst-mac address string |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

mask string

| | |
|------------|---|
| Synopsis | MAC address mask as the match criterion |
| Context | configure system security management-access-filter mac-filter entry number match dst-mac mask string |
| Tree | mask |
| Default | ff:ff:ff:ff:ff:ff |
| Introduced | 16.0.R4 |
| Platforms | All |

etype string

| | |
|---------------|---|
| Synopsis | Ethernet type II Ethertype value as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number match etype string</i> |
| Tree | etype |
| Description | This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.

The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames. |
| String Length | 5 to 6 |
| Introduced | 16.0.R4 |
| Platforms | All |

frame-type keyword

| | |
|------------|---|
| Synopsis | MAC frame type as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number match frame-type keyword</i> |
| Tree | frame-type |
| Default | 802dot3 |
| Options | 802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, 802dot1-ag |
| Introduced | 16.0.R4 |
| Platforms | All |

llc-dsap

| | |
|-------------|---|
| Synopsis | Enable the llc-dsap context |
| Context | configure system security management-access-filter mac-filter entry <i>number match llc-dsap</i> |
| Tree | llc-dsap |
| Description | Commands in this context specify match criteria based on the Destination Service Access Point (DSAP). |
| Introduced | 16.0.R4 |
| Platforms | All |

dsap number

| | |
|------------|--|
| Synopsis | 8-bit DSAP as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match llc-dsap dsap <i>number</i> |
| Tree | dsap |
| Range | 0 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

mask number

| | |
|------------|--|
| Synopsis | Mask for DSAP value as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match llc-dsap mask <i>number</i> |
| Tree | mask |
| Range | 1 to 255 |
| Default | 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

llc-ssap

| | |
|-------------|---|
| Synopsis | Enable the llc-ssap context |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match llc-ssap |
| Tree | llc-ssap |
| Description | Commands in this context specify match criteria based on the Source Service Access Point (SSAP). |
| Introduced | 16.0.R4 |
| Platforms | All |

mask number

| | |
|----------|--|
| Synopsis | Mask for SSAP value as the match criterion |
|----------|--|

| | |
|------------|--|
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match llc-ssap mask <i>number</i> |
| Tree | mask |
| Range | 1 to 255 |
| Default | 255 |
| Introduced | 16.0.R4 |
| Platforms | All |

ssap *number*

| | |
|------------|--|
| Synopsis | 8-bit SSAP as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match llc-ssap ssap <i>number</i> |
| Tree | ssap |
| Range | 0 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

service *string*

| | |
|---------------|--|
| Synopsis | Service ID used as the match condition |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match service <i>string</i> |
| Tree | service |
| String Length | 1 to 64 |
| Introduced | 16.0.R4 |
| Platforms | All |

snap-oui *keyword*

| | |
|----------|--|
| Synopsis | IEEE 802.3 LLC SNAP Ethernet Frame OUI value for match |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match snap-oui <i>keyword</i> |
| Tree | snap-oui |

| | |
|-------------|--|
| Description | This command specifies the IEEE 802.3 LLC SNAP Ethernet Frame OUI value as the MAC filter match criterion. |
| Options | zero, non-zero |
| Introduced | 16.0.R4 |
| Platforms | All |

snap-pid *number*

| | |
|-------------|---|
| Synopsis | IEEE 802.3 LLC SNAP Ethernet Frame PID as the match |
| Context | configure system security management-access-filter mac-filter entry <i>number match snap-pid number</i> |
| Tree | snap-pid |
| Description | This command specifies an IEEE 802.3 LLC SNAP Ethernet Frame PID value used as the MAC filter match criterion.

The SNAP PID match criterion is independent of the OUI field within the SNAP header. Two packets with different 3-byte OUI fields but the same PID field match the same filter entry based on a SNAP PID match criterion. |
| Range | 0 to 65535 |
| Introduced | 16.0.R4 |
| Platforms | All |

src-mac

| | |
|-------------|--|
| Synopsis | Enable the src-mac context |
| Context | configure system security management-access-filter mac-filter entry <i>number match src-mac</i> |
| Tree | src-mac |
| Description | Commands in this context specify match criteria based on the source MAC. |
| Introduced | 16.0.R4 |
| Platforms | All |

address *string*

| | |
|----------|---|
| Synopsis | MAC address used as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number match src-mac address string</i> |
| Tree | address |

| | |
|------------|----------------------------|
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

mask string

| | |
|------------|---|
| Synopsis | MAC address mask as the match criterion |
| Context | configure system security management-access-filter mac-filter entry <i>number</i> match src-mac mask <i>string</i> |
| Tree | mask |
| Default | ff:ff:ff:ff:ff:ff |
| Introduced | 16.0.R4 |
| Platforms | All |

per-peer-queuing boolean

| | |
|-------------|--|
| Synopsis | Allow CPM hardware queuing per peer |
| Context | configure system security per-peer-queuing <i>boolean</i> |
| Tree | per-peer-queuing |
| Description | When configured to true , the router automatically allocates a separate CPM hardware queue for the peer when a peering session is established.
When configured to false , a separate CPM hardware queue is not allowed. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pki

| | |
|------------|--|
| Synopsis | Enter the pki context |
| Context | configure system security pki |
| Tree | pki |
| Introduced | 16.0.R1 |
| Platforms | All |

ca-profile [[ca-profile-name](#)] *string*

| | |
|----------|---|
| Synopsis | Enter the ca-profile list instance |
|----------|---|

| | |
|----------------|---|
| Context | configure system security pki ca-profile <i>string</i> |
| Tree | ca-profile |
| Max. Instances | 128 |
| Introduced | 16.0.R1 |
| Platforms | All |

[ca-profile-name] *string*

| | |
|---------------|---|
| Synopsis | CA profile name |
| Context | configure system security pki ca-profile <i>string</i> |
| Tree | ca-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the CA profile |
| Context | configure system security pki ca-profile <i>string admin-state</i> <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

auto-crl-update

| | |
|------------|---|
| Synopsis | Enable the auto-crl-update context |
| Context | configure system security pki ca-profile <i>string auto-crl-update</i> |
| Tree | auto-crl-update |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the automatic CRL update |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

crl-urls**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the crl-urls context |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update crl-urls |
| Tree | crl-urls |
| Introduced | 16.0.R1 |
| Platforms | All |

url-entry [[entry-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the url-entry list instance |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update crl-urls url-entry <i>number</i> |
| Tree | url-entry |
| Introduced | 16.0.R1 |
| Platforms | All |

[entry-id] *number*

| | |
|----------|--|
| Synopsis | URL on this system |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update crl-urls url-entry <i>number</i> |
| Tree | url-entry |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |

Introduced 16.0.R1
 Platforms All

transmission-profile *reference*

Synopsis File transmission profile to update CRL
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [auto-crl-update](#) [crl-urls](#) [url-entry](#) *number*
[transmission-profile](#) *reference*
 Tree [transmission-profile](#)
 Reference **configure** [system](#) [transmission-profile](#) *string*
 Introduced 16.0.R4
 Platforms All

url *http-url-path-loose*

Synopsis Location of updated CRL
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [auto-crl-update](#) [crl-urls](#) [url-entry](#) *number*
[url](#) *http-url-path-loose*
 Tree [url](#)
 String Length 1 to 180
 Introduced 16.0.R1
 Platforms All

periodic-update-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Interval between two consecutive CRL updates
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [auto-crl-update](#) [periodic-update-interval](#)
number
 Tree [periodic-update-interval](#)
 Range 3600 to 31622400
 Default 86400
 Units seconds
 Introduced 16.0.R1

Platforms All

pre-update-time *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Time prior to the next update time of the current CRL |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update pre-update-time <i>number</i> |
| Tree | pre-update-time |
| Range | 0 to 31622400 |
| Default | 3600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

retry-interval *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Interval before retrying to update CRL |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update retry-interval <i>number</i> |
| Tree | retry-interval |
| Range | 0 to 31622400 |
| Default | 3600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

schedule-type *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Time scheduler type for an automated CRL update |
| Context | configure system security pki ca-profile <i>string</i> auto-crl-update schedule-type <i>keyword</i> |
| Tree | schedule-type |
| Default | next-update-based |
| Options | next-update-based, periodic |
| Introduced | 16.0.R1 |
| Platforms | All |

cert-file *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Certificate file name |
| Context | configure system security pki ca-profile <i>string</i> cert-file <i>string</i> |
| Tree | cert-file |
| String Length | 1 to 95 |
| Introduced | 16.0.R1 |
| Platforms | All |

cmpv2



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|-------------|---|
| Synopsis | Enter the cmpv2 context |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 |
| Tree | cmpv2 |
| Description | Commands in this context configure CMPv2 options. |
| Introduced | 16.0.R1 |
| Platforms | All |

accept-unprotected-message



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the accept-unprotected-message context |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 accept-unprotected-message |
| Tree | accept-unprotected-message |
| Introduced | 16.0.R1 |
| Platforms | All |

error-message *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Accept unprotected error messages |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 accept-unprotected-message error-message <i>boolean</i> |
| Tree | error-message |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

pkiconf-message *boolean*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Accept unprotected PKI confirmation messages |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 accept-unprotected-message pkiconf-message <i>boolean</i> |
| Tree | pkiconf-message |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

always-set-sender-for-ir *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Subject name in CMPv2 header for all Initial Registration (IR) messages |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 always-set-sender-for-ir <i>boolean</i> |
| Tree | always-set-sender-for-ir |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

http**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the http context |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 http |
| Tree | http |
| Introduced | 16.0.R1 |
| Platforms | All |

response-timeout *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|----------|--|
| Synopsis | HTTP response timeout |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 http response-timeout <i>number</i> |
| Tree | response-timeout |
| Range | 1 to 3600 |
| Default | 30 |
| Units | seconds |

Introduced 16.0.R1
 Platforms All

version *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP version for CMPv2 messages
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [http](#) [version](#) *keyword*
 Tree [version](#)
 Default 1.1
 Options 1.0, 1.1
 Introduced 16.0.R1
 Platforms All

key-list



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **key-list** context
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [key-list](#)
 Tree [key-list](#)
 Introduced 16.0.R1
 Platforms All

key [[reference-number](#)] *string*

Synopsis Enter the **key** list instance
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [key-list](#) [key](#) *string*
 Tree [key](#)
 Max. Instances 128
 Introduced 16.0.R1

Platforms All

[reference-number] *string*

Synopsis Unique identifier for the CA initial authentication key

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [key-list](#) [key](#) *string*

Tree [key](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

password *string*

Synopsis Shared secret for this CA initial authentication key

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [key-list](#) [key](#) *string* [password](#) *string*

Tree [password](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms All

recipient-subject *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis DN attributes for recipient subject of CMPv2 requests

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [recipient-subject](#) *string*

Tree [recipient-subject](#)

Description This command configures the recipient subject of CMPv2 requests.

String Length 1 to 256

Notes The following elements are part of a choice: **recipient-subject** or **use-ca-subject**.

Introduced 22.10.R1

Platforms All

response-signing-cert *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | File name of the certificate to verify CMPv2 responses |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 response-signing-cert <i>string</i> |
| Tree | response-signing-cert |
| Description | This command specifies an imported certificate used to verify the CMP response message that they are protected by signature. If this command is not configured, then CA's certificate is used. |
| String Length | 1 to 95 |
| Notes | The following elements are part of a choice: response-signing-cert or response-signing-use-extracert . |
| Introduced | 16.0.R1 |
| Platforms | All |

response-signing-use-extracert**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Use extraCerts certificate to verify response signature |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 response-signing-use-extracert |
| Tree | response-signing-use-extracert |
| Notes | The following elements are part of a choice: response-signing-cert or response-signing-use-extracert . |
| Introduced | 22.10.R1 |
| Platforms | All |

same-recipient-nonce-for-poll-request *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Same recipNonce as the last CMPv2 response for a poll request |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 same-recipient-nonce-for-poll-request <i>boolean</i> |
| Tree | same-recipient-nonce-for-poll-request |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

signing-cert-subject *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Comma separated subject DN attributes used to identify the signing certificate in the extraCerts field from CMPv2 response. If not configured, subject DN in sender field of CMPv2 response will be used to identify the signing certificate. Format: attr1=val1,attr2=val2... where: attrN={C ST O OU CN} |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 signing-cert-subject <i>string</i> |
| Tree | signing-cert-subject |
| String Length | 1 to 256 |
| Introduced | 23.3.R1 |
| Platforms | All |

url



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Enter the url context |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 url |
| Tree | url |
| Introduced | 16.0.R1 |
| Platforms | All |

service-name *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|--|
| Synopsis | Administrative service name |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 url service-name <i>string</i> |
| Tree | service-name |
| String Length | 1 to 64 |
| Notes | The following elements are part of a choice: service-name or transmission-profile . |
| Introduced | 16.0.R1 |
| Platforms | All |

transmission-profile *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Configure transmission profile for CMPv2. |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 url transmission-profile <i>reference</i> |
| Tree | transmission-profile |
| Reference | configure system transmission-profile <i>string</i> |
| Notes | The following elements are part of a choice: service-name or transmission-profile . |
| Introduced | 23.3.R1 |
| Platforms | All |

url-string *http-optional-url-loose***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | URL for CMPv2 |
| Context | configure system security pki ca-profile <i>string</i> cmpv2 url url-string <i>http-optional-url-loose</i> |
| Tree | url-string |
| String Length | 1 to 180 |

Introduced 16.0.R1
 Platforms All

use-ca-subject



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Use subject DN in CA certificate as CMPv2 request recipient
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [cmpv2](#) [use-ca-subject](#)
 Tree [use-ca-subject](#)
 Notes The following elements are part of a choice: **recipient-subject** or **use-ca-subject**.
 Introduced 22.10.R1
 Platforms All

crl-file *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Certificate Revocation List (CRL) file name
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [crl-file](#) *string*
 Tree [crl-file](#)
 String Length 1 to 95
 Introduced 16.0.R1
 Platforms All

description *string*

Synopsis Text description
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [description](#) *string*
 Tree [description](#)
 String Length 1 to 80
 Introduced 16.0.R1

Platforms All

ocsp



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **ocsp** context

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **ocsp**

Tree [ocsp](#)

Introduced 16.0.R1

Platforms All

responder-url *http-optional-url-loose*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP URL of the OCSP responder for the CA

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **ocsp** **responder-url** *http-optional-url-loose*

Tree [responder-url](#)

String Length 1 to 180

Introduced 16.0.R1

Platforms All

service-name *string*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative service name

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **ocsp** **service-name** *string*

Tree [service-name](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms All

transmission-profile *reference*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Transmission profile for the OCSP

Context **configure** system security pki ca-profile *string* oosp transmission-profile *reference*

Tree [transmission-profile](#)

Reference **configure** system transmission-profile *string*

Introduced 16.0.R6

Platforms All

revocation-check *keyword*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Method to verify the revocation status of certificates issued by the CA

Context **configure** system security pki ca-profile *string* revocation-check *keyword*

Tree [revocation-check](#)

Default crl

Options crl, crl-optional

Introduced 16.0.R1

Platforms All

certificate-auto-update [[certificate-file-name](#)] *string*

Synopsis Enter the **certificate-auto-update** list instance

Context **configure** system security pki certificate-auto-update *string*

Tree [certificate-auto-update](#)

Description Commands in this context configure automatic certificate update associations.

Max. Instances 256

Introduced 22.10.R1
Platforms All

[certificate-file-name] *string*

Synopsis Certificate file name
Context **configure** [system](#) [security](#) [pki](#) [certificate-auto-update](#) *string*
Tree [certificate-auto-update](#)
String Length 1 to 95
Notes This element is part of a list key.
Introduced 22.10.R1
Platforms All

key-file-name *string*

Synopsis Imported key filename
Context **configure** [system](#) [security](#) [pki](#) [certificate-auto-update](#) *string* **key-file-name** *string*
Tree [key-file-name](#)
String Length 1 to 95
Introduced 22.10.R1
Platforms All

profile *reference*

Synopsis Certificate update profile name
Context **configure** [system](#) [security](#) [pki](#) [certificate-auto-update](#) *string* **profile** *reference*
Tree [profile](#)
Reference **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string*
Introduced 22.10.R1
Platforms All

certificate-display-format *keyword*

Synopsis Display format for certificates and Certificate Revocation Lists (CRLs)
Context **configure** [system](#) [security](#) [pki](#) [certificate-display-format](#) *keyword*

| | |
|------------|--|
| Tree | certificate-display-format |
| Default | ascii |
| Options | ascii, utf8 |
| Introduced | 16.0.R1 |
| Platforms | All |

certificate-expiration-warning

| | |
|------------|---|
| Synopsis | Enter the certificate-expiration-warning context |
| Context | configure system security pki certificate-expiration-warning |
| Tree | certificate-expiration-warning |
| Introduced | 16.0.R1 |
| Platforms | All |

hours *number*

| | |
|------------|---|
| Synopsis | Time at which the system generates the certificate expiration warning trap for in-use certificates |
| Context | configure system security pki certificate-expiration-warning hours <i>number</i> |
| Tree | hours |
| Range | 0 to 8760 |
| Units | hours |
| Introduced | 16.0.R1 |
| Platforms | All |

repeat-hours *number*

| | |
|------------|--|
| Synopsis | Time period when the system repeatedly generates the certificate expiration warning trap |
| Context | configure system security pki certificate-expiration-warning repeat-hours <i>number</i> |
| Tree | repeat-hours |
| Range | 0 to 8760 |
| Default | 0 |
| Units | hours |
| Introduced | 16.0.R1 |

Platforms All

certificate-update-profile [[name](#)] *string*

Synopsis Enter the **certificate-update-profile** list instance

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string*

Tree [certificate-update-profile](#)

Description Commands in this context configure a certificate update profile that specifies the behavior of the automatic update certificate.

Max. Instances 256

Introduced 22.10.R1

Platforms All

[name] *string*

Synopsis Certificate update profile name

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string*

Tree [certificate-update-profile](#)

Description This command configures the certificate update profile name.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

after-issue *number*

Synopsis Time for scheduler updates after certificate issuance

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* [after-issue](#) *number*

Tree [after-issue](#)

Description This command configures the time for scheduler updates after the certificate issue time.

Range 864000 to 157680000

Units seconds

Notes The following elements are part of a choice: **after-issue** or **before-expiry**.

Introduced 22.10.R1

Platforms All

before-expiry *number*

Synopsis Time scheduler updates before certificate expiry

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* **before-expiry** *number*

Tree [before-expiry](#)

Description This command configures the time that the scheduler updates before the certificate expiration time.

Range 3600 to 157680000

Default 86400

Units seconds

Notes The following elements are part of a choice: **after-issue** or **before-expiry**.

Introduced 22.10.R1

Platforms All

cmpv2

Synopsis Enter the **cmpv2** context

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* **cmpv2**

Tree [cmpv2](#)

Notes The following elements are part of a choice: **cmpv2** or **est**.

Introduced 22.10.R1

Platforms All

ca-profile *reference*

Synopsis CA profile name

Context **configure** [system](#) [security](#) [pki](#) [certificate-update-profile](#) *string* **cmpv2** [ca-profile](#) *reference*

Tree [ca-profile](#)

Description This command specifies the use of CMPv2 as the protocol to update the certificate. The CMPv2 configuration is derived from the referenced CA profile.

Reference **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string*

Introduced 22.10.R1

Platforms All

dsa

| | |
|------------|--|
| Synopsis | Enter the dsa context |
| Context | configure system security pki certificate-update-profile <i>string</i> dsa |
| Tree | dsa |
| Notes | The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key . |
| Introduced | 22.10.R1 |
| Platforms | All |

key-size *number*

| | |
|-------------|---|
| Synopsis | Length of the generated DSA key |
| Context | configure system security pki certificate-update-profile <i>string</i> dsa key-size <i>number</i> |
| Tree | key-size |
| Description | This command specifies that the newly generated key is an DSA key with the specified key length in bits. |
| Range | 512 to 8192 |
| Default | 2048 |
| Introduced | 22.10.R1 |
| Platforms | All |

ecdsa

| | |
|------------|--|
| Synopsis | Enter the ecdsa context |
| Context | configure system security pki certificate-update-profile <i>string</i> ecdsa |
| Tree | ecdsa |
| Notes | The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key . |
| Introduced | 22.10.R1 |
| Platforms | All |

curve *keyword*

| | |
|----------|---|
| Synopsis | Elliptic curve to be used in ECDSA key generation |
| Context | configure system security pki certificate-update-profile <i>string</i> ecdsa curve <i>keyword</i> |
| Tree | curve |

| | |
|-------------|---|
| Description | This command specifies that the newly generated key is an ECDSA key with the specified curve. |
| Default | secp256r1 |
| Options | secp256r1, secp384r1, secp521r1 |
| Introduced | 22.10.R1 |
| Platforms | All |

est

| | |
|------------|--|
| Synopsis | Enter the est context |
| Context | configure system security pki certificate-update-profile <i>string</i> est |
| Tree | est |
| Notes | The following elements are part of a choice: cmpv2 or est . |
| Introduced | 22.10.R1 |
| Platforms | All |

est-profile *reference*

| | |
|-------------|---|
| Synopsis | EST profile name |
| Context | configure system security pki certificate-update-profile <i>string</i> est est-profile <i>reference</i> |
| Tree | est-profile |
| Description | This command specifies the use of EST as the protocol to update the certificate. The EST configuration is derived from the referenced EST profile. |
| Reference | configure system security pki est-profile <i>string</i> |
| Introduced | 22.10.R1 |
| Platforms | All |

hash-algorithm *keyword*

| | |
|-------------|---|
| Synopsis | Hash algorithm for a certificate request |
| Context | configure system security pki certificate-update-profile <i>string</i> hash-algorithm <i>keyword</i> |
| Tree | hash-algorithm |
| Description | This command specifies the hash algorithm used to generate a certificate request. |
| Default | sha256 |
| Options | md5, sha1, sha224, sha256, sha384, sha512 |

| | |
|------------|----------|
| Introduced | 22.10.R1 |
| Platforms | All |

retry-interval *number*

| | |
|-------------|---|
| Synopsis | Retry interval after a failed update |
| Context | configure system security pki certificate-update-profile <i>string</i> retry-interval <i>number</i> |
| Tree | retry-interval |
| Description | This command configures the retry interval after the update fails. |
| Range | 60 to 36000 |
| Default | 3600 |
| Units | seconds |
| Introduced | 22.10.R1 |
| Platforms | All |

rsa

| | |
|------------|--|
| Synopsis | Enter the rsa context |
| Context | configure system security pki certificate-update-profile <i>string</i> rsa |
| Tree | rsa |
| Notes | The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key . |
| Introduced | 22.10.R1 |
| Platforms | All |

key-size *number*

| | |
|-------------|--|
| Synopsis | Length of the generated RSA key |
| Context | configure system security pki certificate-update-profile <i>string</i> rsa key-size <i>number</i> |
| Tree | key-size |
| Description | This command specifies that the newly generated key is a RSA key with the specified key length in bits. |
| Range | 512 to 8192 |
| Default | 2048 |
| Introduced | 22.10.R1 |
| Platforms | All |

same-as-existing-key

| | |
|-------------|--|
| Synopsis | Generate the new key to same type and key length |
| Context | configure system security pki certificate-update-profile <i>string</i> same-as-existing-key |
| Tree | same-as-existing-key |
| Description | When configured, this command specifies that the newly generated key is the same type and key length as the existing key. |
| Notes | The following elements are part of a choice: dsa , ecdsa , rsa , or same-as-existing-key . |
| Introduced | 22.10.R1 |
| Platforms | All |

common-name-list [[cn-list-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the common-name-list list instance |
| Context | configure system security pki common-name-list <i>string</i> |
| Tree | common-name-list |
| Max. Instances | 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

[cn-list-name] *string*

| | |
|---------------|---|
| Synopsis | CN list name |
| Context | configure system security pki common-name-list <i>string</i> |
| Tree | common-name-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

common-name [[cn-index](#)] *number*

| | |
|----------|---|
| Synopsis | Enter the common-name list instance |
| Context | configure system security pki common-name-list <i>string</i> common-name <i>number</i> |

| | |
|------------|-----------------------------|
| Tree | common-name |
| Introduced | 16.0.R1 |
| Platforms | All |

[cn-index] *number*

| | |
|------------|---|
| Synopsis | Common name index |
| Context | configure system security pki common-name-list <i>string</i> common-name <i>number</i> |
| Tree | common-name |
| Range | 1 to 128 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

cn-type *keyword*

| | |
|------------|---|
| Synopsis | Common name type |
| Context | configure system security pki common-name-list <i>string</i> common-name <i>number</i> cn-type <i>keyword</i> |
| Tree | cn-type |
| Options | ip-address, domain-name |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

cn-value *string*

| | |
|---------------|---|
| Synopsis | Common name value |
| Context | configure system security pki common-name-list <i>string</i> common-name <i>number</i> cn-value <i>string</i> |
| Tree | cn-value |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

crl-expiration-warning

| | |
|------------|---|
| Synopsis | Enter the crl-expiration-warning context |
| Context | configure system security pki crl-expiration-warning |
| Tree | crl-expiration-warning |
| Introduced | 16.0.R1 |
| Platforms | All |

hours *number*

| | |
|------------|---|
| Synopsis | Time when the system generates the Certificate Revocation List (CRL) expiration warning trap |
| Context | configure system security pki crl-expiration-warning hours <i>number</i> |
| Tree | hours |
| Range | 0 to 8760 |
| Units | hours |
| Introduced | 16.0.R1 |
| Platforms | All |

repeat-hours *number*

| | |
|------------|--|
| Synopsis | Time when the system repeatedly generates the Certificate Revocation List (CRL) expiration warning trap |
| Context | configure system security pki crl-expiration-warning repeat-hours <i>number</i> |
| Tree | repeat-hours |
| Range | 0 to 8760 |
| Default | 0 |
| Units | hours |
| Introduced | 16.0.R1 |
| Platforms | All |

est-profile [*name*] *string*

| | |
|----------|--|
| Synopsis | Enter the est-profile list instance |
| Context | configure system security pki est-profile <i>string</i> |
| Tree | est-profile |

| | |
|----------------|---|
| Description | Commands in this context configure an Enrollment over Secure Transport (EST) profile. |
| Max. Instances | 128 |
| Introduced | 21.10.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Enrollment over Secured Transport profile name |
| Context | configure system security pki est-profile <i>string</i> |
| Tree | est-profile |
| Description | This command configures the EST profile name. |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 21.10.R1 |
| Platforms | All |

check-id-kp-cmcra-only *boolean*

| | |
|------------|---|
| Synopsis | Check id-kp-cmcra in the EST certificate |
| Context | configure system security pki est-profile <i>string</i> check-id-kp-cmcra-only <i>boolean</i> |
| Tree | check-id-kp-cmcra-only |
| Default | false |
| Introduced | 21.10.R1 |
| Platforms | All |

client-tls-profile *string*

| | |
|---------------|--|
| Synopsis | TLS client profile assigned to applications |
| Context | configure system security pki est-profile <i>string</i> client-tls-profile <i>string</i> |
| Tree | client-tls-profile |
| Description | This command specifies the TLS client profile to be assigned to applications for encryption. The profile creates the TLS connection to the EST server. |
| String Length | 1 to 32 |
| Introduced | 21.10.R1 |

Platforms All

http-authentication

Synopsis Enter the **http-authentication** context

Context **configure** [system security pki est-profile](#) *string* [http-authentication](#)

Tree [http-authentication](#)

Introduced 21.10.R1

Platforms All

password *string*

Synopsis Password for EST authentication

Context **configure** [system security pki est-profile](#) *string* [http-authentication password](#) *string*

Tree [password](#)

String Length 1 to 115

Introduced 21.10.R1

Platforms All

username *string*

Synopsis Username for the EST authentication

Context **configure** [system security pki est-profile](#) *string* [http-authentication username](#) *string*

Tree [username](#)

String Length 1 to 32

Introduced 21.10.R1

Platforms All

server

Synopsis Enter the **server** context

Context **configure** [system security pki est-profile](#) *string* [server](#)

Tree [server](#)

Description Commands in this context configure EST server parameters.

Introduced 21.10.R1

Platforms All

fqdn string

Synopsis Fully Qualified Domain Name (FQDN) of the EST server

Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* [server](#) [fqdn](#) *string*

Tree [fqdn](#)

Description This command specifies to use the FQDN of the EST server.

String Length 1 to 255

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 21.10.R1

Platforms All

ipv4 string

Synopsis IPv4 address of the EST server

Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* [server](#) [ipv4](#) *string*

Tree [ipv4](#)

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 21.10.R1

Platforms All

ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)

Synopsis IPv6 address of the EST server

Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* [server](#) [ipv6](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [ipv6](#)

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 21.10.R1

Platforms All

port number

Synopsis Port number of the EST server

| | |
|------------|---|
| Context | configure system security pki est-profile <i>string server port number</i> |
| Tree | port |
| Range | 1 to 65535 |
| Default | 443 |
| Introduced | 21.10.R1 |
| Platforms | All |

transmission-profile *string*

| | |
|---------------|---|
| Synopsis | Transmission profile name for EST |
| Context | configure system security pki est-profile <i>string transmission-profile string</i> |
| Tree | transmission-profile |
| Description | This command associates a file transmission profile to the EST profile.
The transmission profile defines transport parameters for protocol such as HTTP, include routing instance, source address, timeout value, and so on. |
| String Length | 1 to 32 |
| Introduced | 21.10.R1 |
| Platforms | All |

imported-format *keyword*

| | |
|------------|---|
| Synopsis | The supported encrypted file formats |
| Context | configure system security pki imported-format <i>keyword</i> |
| Tree | imported-format |
| Default | any |
| Options | any, secure |
| Introduced | 16.0.R6 |
| Platforms | All |

maximum-cert-chain-depth *number*

| | |
|----------|---|
| Synopsis | Maximum depth of certificate chain verification |
| Context | configure system security pki maximum-cert-chain-depth <i>number</i> |
| Tree | maximum-cert-chain-depth |
| Range | 1 to 7 |

| | |
|------------|---------|
| Default | 7 |
| Introduced | 16.0.R1 |
| Platforms | All |

python-script

| | |
|------------|--|
| Synopsis | Enter the python-script context |
| Context | configure system security python-script |
| Tree | python-script |
| Introduced | 21.10.R1 |
| Platforms | All |

authorization

| | |
|------------|--|
| Synopsis | Enter the authorization context |
| Context | configure system security python-script authorization |
| Tree | authorization |
| Introduced | 21.10.R1 |
| Platforms | All |

cron

| | |
|------------|---|
| Synopsis | Enter the cron context |
| Context | configure system security python-script authorization cron |
| Tree | cron |
| Introduced | 21.10.R1 |
| Platforms | All |

cli-user reference

| | |
|------------|---|
| Synopsis | User profile name when executing a Python application |
| Context | configure system security python-script authorization cron cli-user <i>reference</i> |
| Tree | cli-user |
| Reference | configure system security user-params local-user user <i>string</i> |
| Introduced | 21.10.R1 |

Platforms All

event-handler

Synopsis Enter the **event-handler** context

Context **configure** [system](#) [security](#) [python-script](#) [authorization](#) [event-handler](#)

Tree [event-handler](#)

Introduced 21.10.R1

Platforms All

cli-user *reference*

Synopsis User profile name when executing a Python application

Context **configure** [system](#) [security](#) [python-script](#) [authorization](#) [event-handler](#) [cli-user](#) *reference*

Tree [cli-user](#)

Reference **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string*

Introduced 21.10.R1

Platforms All

snmp

Synopsis Enter the **snmp** context

Context **configure** [system](#) [security](#) [snmp](#)

Tree [snmp](#)

Introduced 16.0.R1

Platforms All

access [[group](#)] *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword*

Synopsis Enter the **access** list instance

Context **configure** [system](#) [security](#) [snmp](#) [access](#) *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword*

Tree [access](#)

Introduced 16.0.R1

Platforms All

[group] string

| | |
|---------------|---|
| Synopsis | Group name |
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i>
security-level <i>keyword</i> |
| Tree | access |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

context string

| | |
|---------------|---|
| Synopsis | String against which the context name should match to gain access rights |
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i>
security-level <i>keyword</i> |
| Tree | access |
| String Length | 0 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

security-model keyword

| | |
|------------|---|
| Synopsis | Security model |
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i>
security-level <i>keyword</i> |
| Tree | access |
| Options | snmpv1, snmpv2c, usm |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

security-level keyword

| | |
|----------|--|
| Synopsis | Minimum level of security required to gain the access rights allowed by this entry |
|----------|--|

| | |
|------------|---|
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i> |
| Tree | access |
| Options | no-auth-no-privacy, auth-no-privacy, privacy |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

notify *string*

| | |
|---------------|---|
| Synopsis | SNMP view for notification access |
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i> notify <i>string</i> |
| Tree | notify |
| Description | This command specifies the SNMP view used to control which MIB objects can be accessed for notifications. |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefix-match *keyword*

| | |
|------------|--|
| Synopsis | Match type for the context |
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i> prefix-match <i>keyword</i> |
| Tree | prefix-match |
| Options | exact, prefix |
| Introduced | 16.0.R1 |
| Platforms | All |

read *string*

| | |
|----------|---|
| Synopsis | SNMP view for read access |
| Context | configure system security snmp access <i>string</i> context <i>string</i> security-model <i>keyword</i> security-level <i>keyword</i> read <i>string</i> |
| Tree | read |

| | |
|---------------|--|
| Description | This command specifies the SNMP view used to control which MIB objects can be accessed using a read (get) operation. |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

write string

| | |
|---------------|--|
| Synopsis | SNMP view for write access |
| Context | configure system security snmp access <i>string context string security-model keyword security-level keyword write string</i> |
| Tree | write |
| Description | This command specifies the SNMP view used to control which MIB objects can be accessed using a write (set) operation. |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

attempts

| | |
|-------------|---|
| Synopsis | Enter the attempts context |
| Context | configure system security snmp attempts |
| Tree | attempts |
| Description | Commands in this context configure settings for SNMPv2 or SNMPv3 connection attempts. The command settings are used to counter Denial of Service (DOS) attacks through SNMP.

If the threshold is exceeded, the host is locked out for the lockout time period. |
| Introduced | 16.0.R1 |
| Platforms | All |

count number

| | |
|----------|--|
| Synopsis | Unsuccessful attempts allowed within time period |
| Context | configure system security snmp attempts count <i>number</i> |
| Tree | count |
| Range | 1 to 64 |

| | |
|------------|---------|
| Default | 20 |
| Introduced | 16.0.R1 |
| Platforms | All |

lockout *number*

| | |
|-------------|---|
| Synopsis | Lockout period during which the host cannot log in |
| Context | configure system security snmp attempts lockout <i>number</i> |
| Tree | lockout |
| Description | This command configures the time period during which the host cannot log in. When the host exceeds the attempted counts setting, the host is locked out from further login attempts for the configured time period. |
| Range | 0 to 1440 |
| Default | 10 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

time *number*

| | |
|------------|--|
| Synopsis | Time before host lockout after unsuccessful attempts |
| Context | configure system security snmp attempts time <i>number</i> |
| Tree | time |
| Range | 0 to 60 |
| Default | 5 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

community [[community-string](#)] *string*

| | |
|------------|--|
| Synopsis | Enter the community list instance |
| Context | configure system security snmp community <i>string</i> |
| Tree | community |
| Introduced | 16.0.R1 |

Platforms All

[community-string] *string*

Synopsis SNMPv1 or SNMPv2c community string
Context **configure** [system](#) [security snmp community](#) *string*
Tree [community](#)
String Length 1 to 114
Notes This element is part of a list key.
Introduced 16.0.R1
Platforms All

access-permissions *keyword*

Synopsis Access permissions for objects in the MIB
Context **configure** [system](#) [security snmp community](#) *string* [access-permissions](#) *keyword*
Tree [access-permissions](#)
Options r, rw, rwa, mgmt, vpls-mgmt
Notes This element is mandatory.
Introduced 16.0.R1
Platforms All

source-access-list *reference*

Synopsis Source access list to validate received SNMP requests
Context **configure** [system](#) [security snmp community](#) *string* [source-access-list](#) *reference*
Tree [source-access-list](#)
Reference **configure** [system](#) [security snmp](#) [source-access-list](#) *string*
Introduced 16.0.R1
Platforms All

version *keyword*

Synopsis SNMP version
Context **configure** [system](#) [security snmp community](#) *string* [version](#) *keyword*

| | |
|------------|-------------------------|
| Tree | version |
| Default | both |
| Options | v1, v2c, both |
| Introduced | 16.0.R1 |
| Platforms | All |

source-access-list [[list-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the source-access-list list instance |
| Context | configure system security snmp source-access-list <i>string</i> |
| Tree | source-access-list |
| Description | Commands in this context configure SNMP source access lists.
SNMP source access lists are used to validate the source IP address of received SNMP requests. Multiple community (VPRN or Base router) and USM community instances can reference the same SNMP source access list. |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[list-name] *string*

| | |
|---------------|--|
| Synopsis | Source access list name |
| Context | configure system security snmp source-access-list <i>string</i> |
| Tree | source-access-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

source-host [[host-name](#)] *string*

| | |
|----------|--|
| Synopsis | Enter the source-host list instance |
| Context | configure system security snmp source-access-list <i>string</i> source-host <i>string</i> |
| Tree | source-host |

| | |
|----------------|---------|
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[host-name] *string*

| | |
|---------------|--|
| Synopsis | Source host entry name |
| Context | configure system security snmp source-access-list <i>string</i> source-host <i>string</i> |
| Tree | source-host |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Source IP address entry used to validate SNMP requests |
| Context | configure system security snmp source-access-list <i>string</i> source-host <i>string</i> address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | address |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

usm-community [[community-string](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the usm-community list instance |
| Context | configure system security snmp usm-community <i>string</i> |
| Tree | usm-community |
| Introduced | 16.0.R1 |
| Platforms | All |

[community-string] *string*

| | |
|----------|--|
| Synopsis | Community string associated with SNMPv3 access group |
|----------|--|

| | |
|---------------|--|
| Context | configure system security snmp usm-community string |
| Tree | usm-community |
| String Length | 1 to 114 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

group string

| | |
|---------------|---|
| Synopsis | Group to manage access rights of the community string |
| Context | configure system security snmp usm-community string group string |
| Tree | group |
| String Length | 1 to 32 |
| Introduced | 16.0.R1 |
| Platforms | All |

source-access-list reference

| | |
|------------|---|
| Synopsis | Source access list to validate received SNMP requests |
| Context | configure system security snmp usm-community string source-access-list reference |
| Tree | source-access-list |
| Reference | configure system security snmp source-access-list string |
| Introduced | 16.0.R1 |
| Platforms | All |

view [view-name] string subtree string

| | |
|------------|--|
| Synopsis | Enter the view list instance |
| Context | configure system security snmp view string subtree string |
| Tree | view |
| Introduced | 16.0.R1 |
| Platforms | All |

[view-name] string

| | |
|---------------|--|
| Synopsis | View name |
| Context | configure system security snmp view <i>string</i> subtree <i>string</i> |
| Tree | view |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

subtree string

| | |
|---------------|--|
| Synopsis | Object Identifier (OID) value |
| Context | configure system security snmp view <i>string</i> subtree <i>string</i> |
| Tree | view |
| String Length | 1 to 256 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

mask string

| | |
|---------------|---|
| Synopsis | Mask value as binary value, or hex value |
| Context | configure system security snmp view <i>string</i> subtree <i>string</i> mask <i>string</i> |
| Tree | mask |
| String Length | 1 to 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

type keyword

| | |
|------------|--|
| Synopsis | Type of SNMP security view mask |
| Context | configure system security snmp view <i>string</i> subtree <i>string</i> type <i>keyword</i> |
| Tree | type |
| Options | included, excluded |
| Introduced | 16.0.R1 |

Platforms All

source-address

Synopsis Enter the **source-address** context

Context **configure system security source-address**

Tree [source-address](#)

Description Commands in this context configure the IP source address that is used in all unsolicited packets sent by the specified applications.

This configuration applies to packets transmitted in-band (for example, a network port on an IOM) and does not apply to packets transmitted out-of-band on the management interface on the CPM Ethernet port. Packets transmitted using the CPM Ethernet port use the address of the CPM Ethernet port as the IP source address in the packet.

When a source address is specified for the PTP application, the port-based 1588 hardware timestamping assist function is applied to PTP packets matching the IPv4 address of the router interface used to ingress the SR/ESS or IP address specified in this command. If the IP address is removed, the port-based 1588 hardware timestamping assist function is only applied to PTP packets matching the IPv4 address of the router interface.

Introduced 16.0.R1

Platforms All

ipv4 [[application](#)] *keyword*

Synopsis Enter the **ipv4** list instance

Context **configure system security source-address ipv4 *keyword***

Tree [ipv4](#)

Introduced 16.0.R1

Platforms All

[[application](#)] *keyword*

Synopsis Application that uses the source IP address

Context **configure system security source-address ipv4 *keyword***

Tree [ipv4](#)

Options telnet, ftp, ssh, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, sntp, ntp, cflowd, ptp, mcreporter, sflow, icmp-error, ldap

Notes This element is part of a list key.

Introduced 16.0.R1
 Platforms All

address *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv4 address
 Context **configure** [system](#) [security](#) [source-address](#) [ipv4](#) *keyword* [address](#) *string*
 Tree [address](#)
 Notes The following elements are part of a mandatory choice: **address** or **interface-name**.
 Introduced 16.0.R1
 Platforms All

interface-name *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP interface name
 Context **configure** [system](#) [security](#) [source-address](#) [ipv4](#) *keyword* [interface-name](#) *string*
 Tree [interface-name](#)
 String Length 1 to 32
 Notes The following elements are part of a mandatory choice: **address** or **interface-name**.
 Introduced 16.0.R1
 Platforms All

ipv6 [[application](#)] *keyword*

Synopsis Enter the **ipv6** list instance
 Context **configure** [system](#) [security](#) [source-address](#) [ipv6](#) *keyword*
 Tree [ipv6](#)
 Introduced 16.0.R1

Platforms All

[**application**] *keyword*

Synopsis Application which uses the source IPv6 address

Context **configure system security source-address ipv6 keyword**

Tree [ipv6](#)

Options telnet, ftp, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, cflowd, ntp, sflow, icmp6-error, ldap, ssh, ptp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

address string



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv6 address

Context **configure system security source-address ipv6 keyword address string**

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

ssh

Synopsis Enter the **ssh** context

Context **configure system security ssh**

Tree [ssh](#)

Introduced 16.0.R1

Platforms All

client-cipher-list-v2

| | |
|------------|--|
| Synopsis | Enter the client-cipher-list-v2 context |
| Context | configure system security ssh client-cipher-list-v2 |
| Tree | client-cipher-list-v2 |
| Introduced | 16.0.R1 |
| Platforms | All |

cipher [[index](#)] *number*

| | |
|-------------|---|
| Synopsis | Enter the cipher list instance |
| Context | configure system security ssh client-cipher-list-v2 cipher <i>number</i> |
| Tree | cipher |
| Description | Commands in this context configure a client-cipher instance. Client-ciphers are used when the SR OS is acting as an SSH client. |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[index\]](#) *number*

| | |
|------------|---|
| Synopsis | Cipher index in the list |
| Context | configure system security ssh client-cipher-list-v2 cipher <i>number</i> |
| Tree | cipher |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|---|
| Synopsis | Algorithm for performing encryption or decryption |
| Context | configure system security ssh client-cipher-list-v2 cipher <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | 3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms All

client-kex-list-v2

Synopsis Enter the **client-kex-list-v2** context

Context **configure** [system](#) [security](#) [ssh](#) [client-kex-list-v2](#)

Tree [client-kex-list-v2](#)

Introduced 19.10.R3

Platforms All

kex [[index](#)] *number*

Synopsis Enter the **kex** list instance

Context **configure** [system](#) [security](#) [ssh](#) [client-kex-list-v2](#) **kex** *number*

Tree [kex](#)

Description Commands in this context configure SSH Key Exchange (KEX) algorithms for SR OS as a client.

If a list is configured, SSH uses the list with the first-listed algorithm having the highest priority.

By default, the client list is empty. The default list contains the following:

- diffie-hellman-group16-sha512
- diffie-hellman-group14-sha256
- diffie-hellman-group14-sha1
- diffie-hellman-group1-sha1

Introduced 19.10.R3

Platforms All

[\[index\]](#) *number*

Synopsis SSHv2 KEX algorithm index

Context **configure** [system](#) [security](#) [ssh](#) [client-kex-list-v2](#) **kex** *number*

Tree [kex](#)

Description This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.

Range 1 to 255

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 19.10.R3 |
| Platforms | All |

name *keyword*

| | |
|------------|--|
| Synopsis | KEX algorithm for computing a shared secret key |
| Context | configure system security ssh client-kex-list-v2 kex <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512 |
| Notes | This element is mandatory. |
| Introduced | 19.10.R3 |
| Platforms | All |

client-mac-list-v2

| | |
|------------|---|
| Synopsis | Enter the client-mac-list-v2 context |
| Context | configure system security ssh client-mac-list-v2 |
| Tree | client-mac-list-v2 |
| Introduced | 16.0.R1 |
| Platforms | All |

mac [[index](#)] *number*

| | |
|-------------|--|
| Synopsis | Enter the mac list instance |
| Context | configure system security ssh client-mac-list-v2 mac <i>number</i> |
| Tree | mac |
| Description | Commands in this context configure SSH MAC algorithms for SR OS as a client. |
| Introduced | 16.0.R1 |
| Platforms | All |

[[index](#)] *number*

| | |
|----------|---------------------|
| Synopsis | MAC algorithm index |
|----------|---------------------|

| | |
|------------|--|
| Context | configure system security ssh client-mac-list-v2 mac number |
| Tree | mac |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

name keyword

| | |
|------------|---|
| Synopsis | Algorithm for calculating message authentication code |
| Context | configure system security ssh client-mac-list-v2 mac number name keyword |
| Tree | name |
| Options | hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

key-re-exchange

| | |
|------------|--|
| Synopsis | Enter the key-re-exchange context |
| Context | configure system security ssh key-re-exchange |
| Tree | key-re-exchange |
| Introduced | 16.0.R1 |
| Platforms | All |

client

| | |
|------------|---|
| Synopsis | Enter the client context |
| Context | configure system security ssh key-re-exchange client |
| Tree | client |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the key re-exchange |
| Context | configure system security ssh key-re-exchange client admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

mbytes (*number* | *keyword*)

| | |
|------------|--|
| Synopsis | Maximum bytes transmitted before key re-exchange begins |
| Context | configure system security ssh key-re-exchange client mbytes (<i>number</i> <i>keyword</i>) |
| Tree | mbytes |
| Range | 1 to 64000 |
| Default | 1024 |
| Units | megabytes |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

minutes (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum time before key re-exchange is initiated |
| Context | configure system security ssh key-re-exchange client minutes (<i>number</i> <i>keyword</i>) |
| Tree | minutes |
| Range | 1 to 1440 |
| Default | 60 |
| Units | minutes |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

server

| | |
|------------|---|
| Synopsis | Enter the server context |
| Context | configure system security ssh key-re-exchange server |
| Tree | server |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the key re-exchange |
| Context | configure system security ssh key-re-exchange server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

mbytes (*number* | *keyword*)

| | |
|------------|---|
| Synopsis | Maximum bytes transmitted before key re-exchange begins |
| Context | configure system security ssh key-re-exchange server mbytes (<i>number</i> <i>keyword</i>) |
| Tree | mbytes |
| Range | 1 to 64000 |
| Default | 1024 |
| Units | megabytes |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

minutes (*number* | *keyword*)

| | |
|----------|--|
| Synopsis | Maximum time before key re-exchange is initiated |
| Context | configure system security ssh key-re-exchange server minutes (<i>number</i> <i>keyword</i>) |
| Tree | minutes |
| Range | 1 to 1440 |

| | |
|------------|----------|
| Default | 60 |
| Units | minutes |
| Options | infinite |
| Introduced | 16.0.R1 |
| Platforms | All |

permit-empty-passwords *boolean*

| | |
|------------|---|
| Synopsis | Permit users with empty password strings to log in |
| Context | configure system security ssh permit-empty-passwords <i>boolean</i> |
| Tree | permit-empty-passwords |
| Default | true |
| Introduced | 22.10.R1 |
| Platforms | All |

preserve-key *boolean*

| | |
|-------------|---|
| Synopsis | Preserve keys and restore on system or server restart |
| Context | configure system security ssh preserve-key <i>boolean</i> |
| Tree | preserve-key |
| Description | When configured to true , private, public, and host keys are saved by the server. The keys are restored following a system reboot or a restart of an SSH server.
When configured to false , the keys are held in memory by an SSH server but are not restored following a system reboot. |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

server-admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the SSH server |
| Context | configure system security ssh server-admin-state <i>keyword</i> |
| Tree | server-admin-state |
| Default | enable |
| Options | enable, disable |
| Introduced | 16.0.R1 |

Platforms All

server-cipher-list-v2

Synopsis Enter the **server-cipher-list-v2** context
 Context **configure** [system security ssh server-cipher-list-v2](#)
 Tree [server-cipher-list-v2](#)
 Introduced 16.0.R1
 Platforms All

cipher [[index](#)] *number*

Synopsis Enter the **cipher** list instance
 Context **configure** [system security ssh server-cipher-list-v2 cipher](#) *number*
 Tree [cipher](#)
 Description Commands in this context configure a server-cipher instance. Server-ciphers are used when SR OS is acting as an SSH server.
 Introduced 16.0.R1
 Platforms All

[\[index\]](#) *number*

Synopsis Cipher index in the list
 Context **configure** [system security ssh server-cipher-list-v2 cipher](#) *number*
 Tree [cipher](#)
 Range 1 to 255
 Notes This element is part of a list key.
 Introduced 16.0.R1
 Platforms All

name *keyword*

Synopsis Algorithm for performing encryption or decryption
 Context **configure** [system security ssh server-cipher-list-v2 cipher](#) *number* **name** *keyword*
 Tree [name](#)

| | |
|------------|--|
| Options | 3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

server-kex-list-v2

| | |
|------------|---|
| Synopsis | Enter the server-kex-list-v2 context |
| Context | configure system security ssh server-kex-list-v2 |
| Tree | server-kex-list-v2 |
| Introduced | 19.10.R3 |
| Platforms | All |

kex [[index](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the kex list instance |
| Context | configure system security ssh server-kex-list-v2 kex <i>number</i> |
| Tree | kex |
| Introduced | 19.10.R3 |
| Platforms | All |

[\[index\]](#) *number*

| | |
|-------------|---|
| Synopsis | SSHv2 KEX algorithm index |
| Context | configure system security ssh server-kex-list-v2 kex <i>number</i> |
| Tree | kex |
| Description | This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list. |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 19.10.R3 |
| Platforms | All |

name *keyword*

| | |
|------------|--|
| Synopsis | KEX algorithm for computing a shared secret key |
| Context | configure system security ssh server-kex-list-v2 kex <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512 |
| Notes | This element is mandatory. |
| Introduced | 19.10.R3 |
| Platforms | All |

server-mac-list-v2

| | |
|------------|---|
| Synopsis | Enter the server-mac-list-v2 context |
| Context | configure system security ssh server-mac-list-v2 |
| Tree | server-mac-list-v2 |
| Introduced | 16.0.R1 |
| Platforms | All |

mac [[index](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the mac list instance |
| Context | configure system security ssh server-mac-list-v2 mac <i>number</i> |
| Tree | mac |
| Introduced | 16.0.R1 |
| Platforms | All |

[index] *number*

| | |
|------------|---|
| Synopsis | MAC algorithm index |
| Context | configure system security ssh server-mac-list-v2 mac <i>number</i> |
| Tree | mac |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |

Platforms All

name *keyword*

Synopsis Algorithm for calculating message authentication code

Context **configure** [system](#) [security](#) [ssh](#) [server-mac-list-v2](#) [mac](#) *number* [name](#) *keyword*

Tree [name](#)

Options hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

system-passwords

Synopsis Enter the **system-passwords** context

Context **configure** [system](#) [security](#) [system-passwords](#)

Tree [system-passwords](#)

Description This command enters the context to configure system passwords.

Introduced 16.0.R1

Platforms All

admin-password *string*

Synopsis Context to configure system passwords

Context **configure** [system](#) [security](#) [system-passwords](#) [admin-password](#) *string*

Tree [admin-password](#)

Description This command allows a user with administrative permissions to configure a password that enables a user to become an administrator.

This password is valid only for one session. When enabled, no authorization to TACACS + or RADIUS is performed and the user is locally regarded as an administrative user.

If the **admin-password** is configured in the **configure system security system-passwords admin-password** context, then any user can enter the special mode by entering the **enable** command.

enable is in the default profile. By default, all users are given access to this command.

After the **enable** command is entered, the user is prompted for a password. If the password matches, user is given unrestricted access to all commands.

The minimum length of the password is determined by the **minimum-length** command. The complexity requirements for the password are determined by the **complexity** command.

Note: This command applies to a local user, in addition to users on RADIUS, TACACS, and LDAP.

| | |
|---------------|----------|
| String Length | 3 to 136 |
| Introduced | 16.0.R1 |
| Platforms | All |

tech-support

| | |
|------------|---|
| Synopsis | Enter the tech-support context |
| Context | configure system security tech-support |
| Tree | tech-support |
| Introduced | 16.0.R1 |
| Platforms | All |

ts-location (*ts-sat-url* | *cflash-url* | *string*)

| | |
|---------------|---|
| Synopsis | Default file path for generated tech-support files |
| Context | configure system security tech-support ts-location (<i>ts-sat-url</i> <i>cflash-url</i> <i>string</i>) |
| Tree | ts-location |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet-server *boolean*

| | |
|------------|---|
| Synopsis | Enable Telnet servers running on the system |
| Context | configure system security telnet-server <i>boolean</i> |
| Tree | telnet-server |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

telnet6-server *boolean*

| | |
|------------|--|
| Synopsis | Enable Telnet IPv6 servers running on the system |
| Context | configure system security telnet6-server <i>boolean</i> |
| Tree | telnet6-server |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

tls

| | |
|------------|--|
| Synopsis | Enter the tls context |
| Context | configure system security tls |
| Tree | tls |
| Introduced | 16.0.R1 |
| Platforms | All |

cert-profile [[cert-profile-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the cert-profile list instance |
| Context | configure system security tls cert-profile <i>string</i> |
| Tree | cert-profile |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[cert-profile-name] *string*

| | |
|---------------|---|
| Synopsis | TLS certificate profile name |
| Context | configure system security tls cert-profile <i>string</i> |
| Tree | cert-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the certificate profile |
| Context | configure system security tls cert-profile <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

entry [[entry-id](#)] *number*

| | |
|----------------|--|
| Synopsis | Enter the entry list instance |
| Context | configure system security tls cert-profile <i>string</i> entry <i>number</i> |
| Tree | entry |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

[entry-id] *number*

| | |
|------------|--|
| Synopsis | Certificate profile ID |
| Context | configure system security tls cert-profile <i>string</i> entry <i>number</i> |
| Tree | entry |
| Range | 1 to 8 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

certificate-file *string*

| | |
|----------|--|
| Synopsis | Certificate file name |
| Context | configure system security tls cert-profile <i>string</i> entry <i>number</i> certificate-file <i>string</i> |
| Tree | certificate-file |

String Length 1 to 95
 Introduced 16.0.R1
 Platforms All

key-file *string*

Synopsis Key file name
 Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* *entry* *number* [key-file](#) *string*
 Tree [key-file](#)
 String Length 1 to 95
 Introduced 16.0.R1
 Platforms All

send-chain

Synopsis Enter the **send-chain** context
 Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* *entry* *number* [send-chain](#)
 Tree [send-chain](#)
 Introduced 16.0.R1
 Platforms All

ca-profile [[ca-profile-name](#)] *reference*

Synopsis Add a list entry for **ca-profile**
 Context **configure** [system](#) [security](#) [tls](#) [cert-profile](#) *string* *entry* *number* [send-chain](#) [ca-profile](#) *reference*
 Tree [ca-profile](#)
 Max. Instances 7
 Introduced 16.0.R1
 Platforms All

[[ca-profile-name](#)] *reference*

Synopsis CA profile name

| | |
|------------|--|
| Context | configure system security tls cert-profile <i>string entry number send-chain ca-profile reference</i> |
| Tree | ca-profile |
| Reference | configure system security pki ca-profile <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

client-cipher-list [[client-cipher-list-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the client-cipher-list list instance |
| Context | configure system security tls client-cipher-list <i>string</i> |
| Tree | client-cipher-list |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[client-cipher-list-name] *string*

| | |
|---------------|---|
| Synopsis | Client cipher list name |
| Context | configure system security tls client-cipher-list <i>string</i> |
| Tree | client-cipher-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

tls12-cipher [[index](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the tls12-cipher list instance |
| Context | configure system security tls client-cipher-list <i>string tls12-cipher number</i> |
| Tree | tls12-cipher |
| Introduced | 22.2.R1 |
| Platforms | All |

[index] number

| | |
|------------|---|
| Synopsis | Index of the cipher |
| Context | configure system security tls client-cipher-list string tls12-cipher <i>number</i> |
| Tree | tls12-cipher |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | All |

name keyword

| | |
|------------|--|
| Synopsis | Cipher suite code |
| Context | configure system security tls client-cipher-list string tls12-cipher <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384 |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | All |

tls13-cipher [index] number

| | |
|-------------|---|
| Synopsis | Enter the tls13-cipher list instance |
| Context | configure system security tls client-cipher-list string tls13-cipher <i>number</i> |
| Tree | tls13-cipher |
| Description | Commands in this context configure the TLS 1.3-supported ciphers used by the client. |
| Introduced | 22.7.R1 |
| Platforms | All |

[index] number

| | |
|----------|---|
| Synopsis | Index number of the TLS 1.3 cipher |
| Context | configure system security tls client-cipher-list string tls13-cipher <i>number</i> |

| | |
|------------|-------------------------------------|
| Tree | tls13-cipher |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|---|
| Synopsis | Name of the TLS 1.3 cipher suite code |
| Context | configure system security tls client-cipher-list <i>string</i> tls13-cipher <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-aes256-gcm-sha384 , tls-aes128-gcm-sha256 , tls-chacha20-poly1305-sha256 , tls-aes128-ccm8-sha256 , tls-aes128-ccm-sha256 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | All |

client-group-list [[client-group-list-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the client-group-list list instance |
| Context | configure system security tls client-group-list <i>string</i> |
| Tree | client-group-list |
| Description | Commands in this context configure the list of TLS 1.3-supported group suite codes that the client sends in a client Hello message. |
| Max. Instances | 16 |
| Introduced | 22.7.R1 |
| Platforms | All |

[client-group-list-name] *string*

| | |
|---------------|--|
| Synopsis | Name of the TLS client group list |
| Context | configure system security tls client-group-list <i>string</i> |
| Tree | client-group-list |
| String Length | 1 to 32 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

tls13-group [[index](#)] *number*

| | |
|-------------|---|
| Synopsis | Enter the tls13-group list instance |
| Context | configure system security tls client-group-list <i>string</i> tls13-group <i>number</i> |
| Tree | tls13-group |
| Description | Commands in this context configure the TLS 1.3-supported group suite codes sent by the client in its Hello messages.
SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups. |
| Introduced | 22.7.R1 |
| Platforms | All |

[index] *number*

| | |
|------------|---|
| Synopsis | Index number of the TLS 1.3 group |
| Context | configure system security tls client-group-list <i>string</i> tls13-group <i>number</i> |
| Tree | tls13-group |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|--|
| Synopsis | Name of the TLS 1.3 group suite code |
| Context | configure system security tls client-group-list <i>string</i> tls13-group <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | All |

client-signature-list [[client-signature-list-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the client-signature-list list instance |
| Context | configure system security tls client-signature-list <i>string</i> |
| Tree | client-signature-list |
| Description | Commands in this context configure the list of TLS 1.3-supported signature suite codes that the client sends in a client Hello message. |
| Max. Instances | 16 |
| Introduced | 22.7.R1 |
| Platforms | All |

[client-signature-list-name] *string*

| | |
|---------------|--|
| Synopsis | Name of the TLS 1.3 client signature list |
| Context | configure system security tls client-signature-list <i>string</i> |
| Tree | client-signature-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

tls13-signature [[index](#)] *number*

| | |
|-------------|--|
| Synopsis | Enter the tls13-signature list instance |
| Context | configure system security tls client-signature-list <i>string</i> tls13-signature <i>number</i> |
| Tree | tls13-signature |
| Description | Commands in this context configure the TLS 1.3-supported signature suite codes sent by the client in its Hello messages. |
| Introduced | 22.7.R1 |
| Platforms | All |

[index] *number*

| | |
|----------|--|
| Synopsis | Index number of the TLS 1.3 signature |
| Context | configure system security tls client-signature-list <i>string</i> tls13-signature <i>number</i> |

| | |
|------------|-------------------------------------|
| Tree | tls13-signature |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|---|
| Synopsis | Name of the TLS 1.3 signature suite code |
| Context | configure system security tls client-signature-list <i>string</i> tls13-signature <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | All |

client-tls-profile [[client-profile-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the client-tls-profile list instance |
| Context | configure system security tls client-tls-profile <i>string</i> |
| Tree | client-tls-profile |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[client-profile-name] *string*

| | |
|---------------|---|
| Synopsis | Client TLS profile name |
| Context | configure system security tls client-tls-profile <i>string</i> |
| Tree | client-tls-profile |
| String Length | 1 to 32 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the client TLS profile |
| Context | configure system security tls client-tls-profile <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

cert-profile *reference*

| | |
|------------|--|
| Synopsis | Certificate profile ID |
| Context | configure system security tls client-tls-profile <i>string</i> cert-profile <i>reference</i> |
| Tree | cert-profile |
| Reference | configure system security tls cert-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

cipher-list *reference*

| | |
|------------|---|
| Synopsis | Cipher list for negotiation in the client Hello message |
| Context | configure system security tls client-tls-profile <i>string</i> cipher-list <i>reference</i> |
| Tree | cipher-list |
| Reference | configure system security tls client-cipher-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

group-list *reference*

| | |
|----------|---|
| Synopsis | Name of the list of supported group suite codes |
|----------|---|

| | |
|-------------|--|
| Context | configure system security tls client-tls-profile <i>string group-list reference</i> |
| Tree | group-list |
| Description | This command assigns an existing TLS 1.3 group list to the TLS client profile. |
| Reference | configure system security tls client-group-list <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | All |

protocol-version *keyword*

| | |
|-------------|---|
| Synopsis | TLS protocol version used by the TLS client profile |
| Context | configure system security tls client-tls-profile <i>string protocol-version keyword</i> |
| Tree | protocol-version |
| Description | This command configures the TLS version to be negotiated between the client and the server.

The client adds the specified version as a supported version in its Hello message to the server. |
| Default | tls-version-12 |
| Options | tls-version-all, tls-version-12, tls-version-13 |
| Introduced | 22.7.R1 |
| Platforms | All |

signature-list *reference*

| | |
|-------------|--|
| Synopsis | Name of the list of supported signature suite codes |
| Context | configure system security tls client-tls-profile <i>string signature-list reference</i> |
| Tree | signature-list |
| Description | This command assigns an existing TLS 1.3 signature list to the TLS client profile. |
| Reference | configure system security tls client-signature-list <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | All |

trust-anchor-profile *reference*

| | |
|----------|--|
| Synopsis | Trust anchor profile |
| Context | configure system security tls client-tls-profile <i>string trust-anchor-profile reference</i> |

| | |
|------------|---|
| Tree | trust-anchor-profile |
| Reference | configure system security tls trust-anchor-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

server-cipher-list [[server-cipher-list-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the server-cipher-list list instance |
| Context | configure system security tls server-cipher-list <i>string</i> |
| Tree | server-cipher-list |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[server-cipher-list-name] *string*

| | |
|---------------|---|
| Synopsis | Server cipher list name |
| Context | configure system security tls server-cipher-list <i>string</i> |
| Tree | server-cipher-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

tls12-cipher [[index](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the tls12-cipher list instance |
| Context | configure system security tls server-cipher-list <i>string</i> tls12-cipher <i>number</i> |
| Tree | tls12-cipher |
| Introduced | 22.2.R1 |
| Platforms | All |

[index] number

| | |
|------------|--|
| Synopsis | Index of the cipher |
| Context | configure system security tls server-cipher-list <i>string</i> tls12-cipher <i>number</i> |
| Tree | tls12-cipher |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.2.R1 |
| Platforms | All |

name keyword

| | |
|------------|--|
| Synopsis | Cipher suite code |
| Context | configure system security tls server-cipher-list <i>string</i> tls12-cipher <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-rsa-with3des-edc-cbc-sha , tls-rsa-with-aes128-cbc-sha , tls-rsa-with-aes256-cbc-sha , tls-rsa-with-aes128-cbc-sha256 , tls-rsa-with-aes256-cbc-sha256 , tls-rsa-with-aes128-gcm-sha256 , tls-rsa-with-aes256-gcm-sha384 |
| Notes | This element is mandatory. |
| Introduced | 22.2.R1 |
| Platforms | All |

tls13-cipher [index] number

| | |
|-------------|--|
| Synopsis | Enter the tls13-cipher list instance |
| Context | configure system security tls server-cipher-list <i>string</i> tls13-cipher <i>number</i> |
| Tree | tls13-cipher |
| Description | Commands in this context configure the TLS 1.3-supported ciphers used by the server. |
| Introduced | 22.7.R1 |
| Platforms | All |

[index] number

| | |
|----------|--|
| Synopsis | Index number of the TLS 1.3 cipher |
| Context | configure system security tls server-cipher-list <i>string</i> tls13-cipher <i>number</i> |

| | |
|------------|-------------------------------------|
| Tree | tls13-cipher |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|---|
| Synopsis | Name of the TLS 1.3 cipher suite code |
| Context | configure system security tls server-cipher-list <i>string</i> tls13-cipher <i>number</i> <i>name</i> <i>keyword</i> |
| Tree | name |
| Options | tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | All |

server-group-list [[server-group-list-name](#)] *string*

| | |
|----------------|--|
| Synopsis | Enter the server-group-list list instance |
| Context | configure system security tls server-group-list <i>string</i> |
| Tree | server-group-list |
| Description | Commands in this context configure the list of TLS 1.3-supported group suite codes that the server sends in a server Hello message. |
| Max. Instances | 16 |
| Introduced | 22.7.R1 |
| Platforms | All |

[server-group-list-name] *string*

| | |
|---------------|--|
| Synopsis | Name of the TLS server group list |
| Context | configure system security tls server-group-list <i>string</i> |
| Tree | server-group-list |
| String Length | 1 to 32 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

tls13-group [[index](#)] *number*

| | |
|-------------|---|
| Synopsis | Enter the tls13-group list instance |
| Context | configure system security tls server-group-list <i>string</i> tls13-group <i>number</i> |
| Tree | tls13-group |
| Description | Commands in this context configure the TLS 1.3-supported group suite codes sent by the server in its Hello messages.
SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups. |
| Introduced | 22.7.R1 |
| Platforms | All |

[index] *number*

| | |
|------------|--|
| Synopsis | Index number of the TLS 1.3 group |
| Context | configure system security tls server-group-list <i>string</i> tls13-group <i>number</i> |
| Tree | tls13-group |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|---|
| Synopsis | Name of the TLS 1.3 group suite code |
| Context | configure system security tls server-group-list <i>string</i> tls13-group <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | All |

server-signature-list [[server-signature-list-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the server-signature-list list instance |
| Context | configure system security tls server-signature-list <i>string</i> |
| Tree | server-signature-list |
| Description | Commands in this context configure the list of TLS 1.3-supported signature suite codes for the digital signature that the server sends in a server Hello message. |
| Max. Instances | 16 |
| Introduced | 22.7.R1 |
| Platforms | All |

[server-signature-list-name] *string*

| | |
|---------------|--|
| Synopsis | Name of the TLS 1.3 server signature list |
| Context | configure system security tls server-signature-list <i>string</i> |
| Tree | server-signature-list |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

tls13-signature [[index](#)] *number*

| | |
|-------------|--|
| Synopsis | Enter the tls13-signature list instance |
| Context | configure system security tls server-signature-list <i>string</i> tls13-signature <i>number</i> |
| Tree | tls13-signature |
| Description | Commands in this context configure the TLS 1.3-supported signature suite codes sent by the server in its Hello messages. |
| Introduced | 22.7.R1 |
| Platforms | All |

[index] *number*

| | |
|----------|--|
| Synopsis | Index number of the TLS 1.3 signature |
| Context | configure system security tls server-signature-list <i>string</i> tls13-signature <i>number</i> |

| | |
|------------|-------------------------------------|
| Tree | tls13-signature |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | All |

name *keyword*

| | |
|------------|---|
| Synopsis | Name of the TLS 1.3 signature suite code |
| Context | configure system security tls server-signature-list <i>string</i> tls13-signature <i>number</i> name <i>keyword</i> |
| Tree | name |
| Options | tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512 |
| Notes | This element is mandatory. |
| Introduced | 22.7.R1 |
| Platforms | All |

server-tls-profile [[server-profile-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the server-tls-profile list instance |
| Context | configure system security tls server-tls-profile <i>string</i> |
| Tree | server-tls-profile |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[server-profile-name] *string*

| | |
|---------------|---|
| Synopsis | TLS server profile name |
| Context | configure system security tls server-tls-profile <i>string</i> |
| Tree | server-tls-profile |
| String Length | 1 to 32 |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the server TLS profile |
| Context | configure system security tls server-tls-profile <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authenticate-client

| | |
|------------|--|
| Synopsis | Enter the authenticate-client context |
| Context | configure system security tls server-tls-profile <i>string</i> authenticate-client |
| Tree | authenticate-client |
| Introduced | 16.0.R1 |
| Platforms | All |

common-name-list *reference*

| | |
|------------|--|
| Synopsis | Common name list for client certificate authentication |
| Context | configure system security tls server-tls-profile <i>string</i> authenticate-client common-name-list <i>reference</i> |
| Tree | common-name-list |
| Reference | configure system security pki common-name-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

trust-anchor-profile *reference*

| | |
|----------|--|
| Synopsis | Trust anchor profile for client authentication |
|----------|--|

| | |
|------------|---|
| Context | configure system security tls server-tls-profile <i>string</i> authenticate-client trust-anchor-profile <i>reference</i> |
| Tree | trust-anchor-profile |
| Reference | configure system security tls trust-anchor-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

cert-profile *reference*

| | |
|------------|---|
| Synopsis | Certificate profile ID |
| Context | configure system security tls server-tls-profile <i>string</i> cert-profile <i>reference</i> |
| Tree | cert-profile |
| Reference | configure system security tls cert-profile <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

cipher-list *reference*

| | |
|------------|--|
| Synopsis | Cipher list used by the TLS server profile |
| Context | configure system security tls server-tls-profile <i>string</i> cipher-list <i>reference</i> |
| Tree | cipher-list |
| Reference | configure system security tls server-cipher-list <i>string</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

group-list *reference*

| | |
|-------------|---|
| Synopsis | Name of the list of supported group suite codes |
| Context | configure system security tls server-tls-profile <i>string</i> group-list <i>reference</i> |
| Tree | group-list |
| Description | This command assigns an existing TLS 1.3 group list to the TLS server profile. |
| Reference | configure system security tls server-group-list <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | All |

protocol-version *keyword*

| | |
|-------------|---|
| Synopsis | TLS protocol version used by the TLS server profile |
| Context | configure system security tls server-tls-profile <i>string</i> protocol-version <i>keyword</i> |
| Tree | protocol-version |
| Description | This command configures the TLS version to be negotiated between the server and the client.

The server adds the specified version as a supported version in its Hello message to the client. |
| Default | tls-version-12 |
| Options | tls-version-all, tls-version-12, tls-version-13 |
| Introduced | 22.7.R1 |
| Platforms | All |

signature-list *reference*

| | |
|-------------|---|
| Synopsis | Name of the list of supported signature suite codes |
| Context | configure system security tls server-tls-profile <i>string</i> signature-list <i>reference</i> |
| Tree | signature-list |
| Description | This command assigns an existing TLS 1.3 signature list to the TLS server profile. |
| Reference | configure system security tls server-signature-list <i>string</i> |
| Introduced | 22.7.R1 |
| Platforms | All |

tls-re-negotiate-timer *number*

| | |
|------------|--|
| Synopsis | TLS HELLO request timer |
| Context | configure system security tls server-tls-profile <i>string</i> tls-re-negotiate-timer <i>number</i> |
| Tree | tls-re-negotiate-timer |
| Range | 0 to 65000 |
| Default | 0 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

trust-anchor-profile [[trust-anchor-profile-name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the trust-anchor-profile list instance |
| Context | configure system security tls trust-anchor-profile <i>string</i> |
| Tree | trust-anchor-profile |
| Max. Instances | 16 |
| Introduced | 16.0.R1 |
| Platforms | All |

[trust-anchor-profile-name] *string*

| | |
|---------------|---|
| Synopsis | Trust anchor profile name |
| Context | configure system security tls trust-anchor-profile <i>string</i> |
| Tree | trust-anchor-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

trust-anchor [[ca-profile-name](#)] *reference*

| | |
|----------------|---|
| Synopsis | Add a list entry for trust-anchor |
| Context | configure system security tls trust-anchor-profile <i>string</i> trust-anchor <i>reference</i> |
| Tree | trust-anchor |
| Max. Instances | 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

[ca-profile-name] *reference*

| | |
|-----------|---|
| Synopsis | Trusted CA profile name |
| Context | configure system security tls trust-anchor-profile <i>string</i> trust-anchor <i>reference</i> |
| Tree | trust-anchor |
| Reference | configure system security pki ca-profile <i>string</i> |

| | |
|------------|-------------------------------------|
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

user-params

| | |
|------------|--|
| Synopsis | Enter the user-params context |
| Context | configure system security user-params |
| Tree | user-params |
| Introduced | 16.0.R1 |
| Platforms | All |

attempts

| | |
|------------|---|
| Synopsis | Enter the attempts context |
| Context | configure system security user-params attempts |
| Tree | attempts |
| Introduced | 16.0.R1 |
| Platforms | All |

count *number*

| | |
|------------|---|
| Synopsis | Number of unsuccessful login attempts |
| Context | configure system security user-params attempts count <i>number</i> |
| Tree | count |
| Range | 1 to 64 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

lockout *number*

| | |
|----------|---|
| Synopsis | Lockout period after unsuccessful login attempts |
| Context | configure system security user-params attempts lockout <i>number</i> |
| Tree | lockout |

| | |
|------------|-----------|
| Range | 0 to 1440 |
| Default | 10 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

time *number*

| | |
|------------|---|
| Synopsis | Time frame of unsuccessful login attempts |
| Context | configure system security user-params attempts <i>time</i> <i>number</i> |
| Tree | time |
| Range | 0 to 60 |
| Default | 5 |
| Units | minutes |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-order

| | |
|------------|---|
| Synopsis | Enter the authentication-order context |
| Context | configure system security user-params authentication-order |
| Tree | authentication-order |
| Introduced | 16.0.R1 |
| Platforms | All |

exit-on-reject *boolean*

| | |
|------------|---|
| Synopsis | Ignore subsequent AAA methods after a reject |
| Context | configure system security user-params authentication-order exit-on-reject <i>boolean</i> |
| Tree | exit-on-reject |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

order *keyword*

| | |
|----------------|---|
| Synopsis | Preferred order of password authentication |
| Context | configure system security user-params authentication-order order <i>keyword</i> |
| Tree | order |
| Options | local, radius, tacplus, ldap |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

local-user

| | |
|------------|--|
| Synopsis | Enter the local-user context |
| Context | configure system security user-params local-user |
| Tree | local-user |
| Introduced | 16.0.R1 |
| Platforms | All |

password

| | |
|------------|---|
| Synopsis | Enter the password context |
| Context | configure system security user-params local-user password |
| Tree | password |
| Introduced | 16.0.R1 |
| Platforms | All |

aging *number*

| | |
|------------|---|
| Synopsis | Maximum time during which a user password is valid |
| Context | configure system security user-params local-user password aging <i>number</i> |
| Tree | aging |
| Range | 1 to 500 |
| Units | days |
| Introduced | 16.0.R1 |

Platforms All

complexity-rules

Synopsis Enter the **complexity-rules** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#)

Tree [complexity-rules](#)

Introduced 16.0.R1

Platforms All

allow-user-name *boolean*

Synopsis Allow the username to be used as part of the password

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [allow-user-name](#) *boolean*

Tree [allow-user-name](#)

Default false

Introduced 16.0.R1

Platforms All

credits

Synopsis Enter the **credits** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [credits](#)

Tree [credits](#)

Notes The following elements are part of a choice: **credits** or **required**.

Introduced 16.0.R1

Platforms All

lowercase *number*

Synopsis Maximum credits for the use of lowercase letters

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [credits](#) [lowercase](#) *number*

Tree [lowercase](#)

Range 1 to 10

Introduced 16.0.R1
Platforms All

numeric *number*

Synopsis Maximum credits for the use of numeric characters
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [credits](#)
[numeric](#) *number*
Tree [numeric](#)
Range 1 to 10
Introduced 16.0.R1
Platforms All

special-character *number*

Synopsis Maximum credits for the use of special characters
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [credits](#)
[special-character](#) *number*
Tree [special-character](#)
Range 1 to 10
Introduced 16.0.R1
Platforms All

uppercase *number*

Synopsis Maximum credits for the use of uppercase letters
Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [credits](#)
[uppercase](#) *number*
Tree [uppercase](#)
Range 1 to 10
Introduced 16.0.R1
Platforms All

minimum-classes *number*

Synopsis Minimum number of different character classes to use

| | |
|------------|---|
| Context | configure system security user-params local-user password complexity-rules minimum-classes <i>number</i> |
| Tree | minimum-classes |
| Range | 2 to 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

minimum-length *number*

| | |
|------------|--|
| Synopsis | Minimum length required for local passwords |
| Context | configure system security user-params local-user password complexity-rules minimum-length <i>number</i> |
| Tree | minimum-length |
| Range | 6 to 50 |
| Default | 6 |
| Introduced | 16.0.R1 |
| Platforms | All |

repeated-characters *number*

| | |
|------------|---|
| Synopsis | Number of times same character can repeat consecutively |
| Context | configure system security user-params local-user password complexity-rules repeated-characters <i>number</i> |
| Tree | repeated-characters |
| Range | 2 to 8 |
| Introduced | 16.0.R1 |
| Platforms | All |

required

| | |
|------------|--|
| Synopsis | Enter the required context |
| Context | configure system security user-params local-user password complexity-rules required |
| Tree | required |
| Notes | The following elements are part of a choice: credits or required . |
| Introduced | 16.0.R1 |
| Platforms | All |

lowercase *number*

| | |
|------------|---|
| Synopsis | Number of lowercase letters required |
| Context | configure system security user-params local-user password complexity-rules required
lowercase <i>number</i> |
| Tree | lowercase |
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

numeric *number*

| | |
|------------|---|
| Synopsis | Number of numeric characters required |
| Context | configure system security user-params local-user password complexity-rules required
numeric <i>number</i> |
| Tree | numeric |
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

special-character *number*

| | |
|------------|---|
| Synopsis | Number of special characters required |
| Context | configure system security user-params local-user password complexity-rules required
special-character <i>number</i> |
| Tree | special-character |
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

uppercase *number*

| | |
|----------|---|
| Synopsis | Number of uppercase letters required |
| Context | configure system security user-params local-user password complexity-rules required
uppercase <i>number</i> |
| Tree | uppercase |

| | |
|------------|---------|
| Range | 1 to 10 |
| Introduced | 16.0.R1 |
| Platforms | All |

hashing *keyword*

| | |
|------------|---|
| Synopsis | Hashing algorithm for user passwords |
| Context | configure system security user-params local-user password hashing <i>keyword</i> |
| Tree | hashing |
| Default | bcrypt |
| Options | bcrypt, sha2-pbkdf2, sha3-pbkdf2 |
| Introduced | 20.7.R1 |
| Platforms | All |

history-size *number*

| | |
|------------|---|
| Synopsis | Number of previous passwords to compare against |
| Context | configure system security user-params local-user password history-size <i>number</i> |
| Tree | history-size |
| Range | 0 to 20 |
| Introduced | 16.0.R1 |
| Platforms | All |

minimum-age *number*

| | |
|------------|--|
| Synopsis | Minimum age required for a password before changing it |
| Context | configure system security user-params local-user password minimum-age <i>number</i> |
| Tree | minimum-age |
| Range | 0 to 86400 |
| Default | 600 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

minimum-change *number*

| | |
|------------|--|
| Synopsis | Minimum character differences between passwords |
| Context | configure system security user-params local-user password minimum-change <i>number</i> |
| Tree | minimum-change |
| Range | 1 to 20 |
| Default | 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

user [[user-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the user list instance |
| Context | configure system security user-params local-user user <i>string</i> |
| Tree | user |
| Introduced | 16.0.R1 |
| Platforms | All |

[user-name] *string*

| | |
|---------------|---|
| Synopsis | Local user name |
| Context | configure system security user-params local-user user <i>string</i> |
| Tree | user |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

access

| | |
|------------|---|
| Synopsis | Enter the access context |
| Context | configure system security user-params local-user user <i>string</i> access |
| Tree | access |
| Introduced | 16.0.R1 |
| Platforms | All |

console *boolean*

| | |
|------------|--|
| Synopsis | Allow console access (serial port or Telnet) |
| Context | configure system security user-params local-user user <i>string</i> access console <i>boolean</i> |
| Tree | console |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

ftp *boolean*

| | |
|------------|--|
| Synopsis | Allow FTP access |
| Context | configure system security user-params local-user user <i>string</i> access ftp <i>boolean</i> |
| Tree | ftp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

grpc *boolean*

| | |
|------------|---|
| Synopsis | Allow gRPC access |
| Context | configure system security user-params local-user user <i>string</i> access grpc <i>boolean</i> |
| Tree | grpc |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

li *boolean*

| | |
|------------|---|
| Synopsis | Enable/disable access to LI. |
| Context | configure system security user-params local-user user <i>string</i> access li <i>boolean</i> |
| Tree | li |
| Default | false |
| Introduced | 19.10.R1 |
| Platforms | All |

netconf *boolean*

| | |
|------------|--|
| Synopsis | Allow NETCONF session access |
| Context | configure system security user-params local-user user <i>string</i> access netconf <i>boolean</i> |
| Tree | netconf |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

snmp *boolean*

| | |
|------------|---|
| Synopsis | Allow SNMP access |
| Context | configure system security user-params local-user user <i>string</i> access snmp <i>boolean</i> |
| Tree | snmp |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

cli-engine *keyword*

| | |
|----------------|--|
| Synopsis | User level override for CLI engine access |
| Context | configure system security user-params local-user user <i>string</i> cli-engine <i>keyword</i> |
| Tree | cli-engine |
| Default | md-cli |
| Options | classic-cli, md-cli |
| Max. Instances | 2 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

console

| | |
|----------|--|
| Synopsis | Enter the console context |
| Context | configure system security user-params local-user user <i>string</i> console |

| | |
|------------|-------------------------|
| Tree | console |
| Introduced | 16.0.R1 |
| Platforms | All |

cannot-change-password *boolean*

| | |
|------------|---|
| Synopsis | Change password privileges |
| Context | configure system security user-params local-user user <i>string</i> console cannot-change-password <i>boolean</i> |
| Tree | cannot-change-password |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

login-exec (*sat-url* | *cflash-url* | *ftp-tftp-url* | *filename*)

| | |
|---------------|---|
| Synopsis | File to execute when a user successfully logs in |
| Context | configure system security user-params local-user user <i>string</i> console login-exec (<i>sat-url</i> <i>cflash-url</i> <i>ftp-tftp-url</i> <i>filename</i>) |
| Tree | login-exec |
| String Length | 1 to 200 |
| Introduced | 16.0.R1 |
| Platforms | All |

member *reference*

| | |
|----------------|---|
| Synopsis | User profiles for this user |
| Context | configure system security user-params local-user user <i>string</i> console member <i>reference</i> |
| Tree | member |
| Reference | configure system security aaa local-profiles profile <i>string</i> |
| Max. Instances | 8 |
| Notes | This element is ordered by the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

new-password-at-login *boolean*

| | |
|------------|---|
| Synopsis | Prompt a user to change password at next console login |
| Context | configure system security user-params local-user user <i>string</i> console new-password-at-login <i>boolean</i> |
| Tree | new-password-at-login |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

home-directory (*sat-url* | *cflash-without-slot-url*)

| | |
|---------------|---|
| Synopsis | Home directory for the user |
| Context | configure system security user-params local-user user <i>string</i> home-directory (<i>sat-url</i> <i>cflash-without-slot-url</i>) |
| Tree | home-directory |
| String Length | 1 to 200 |
| Introduced | 16.0.R1 |
| Platforms | All |

password *string*

| | |
|---------------|---|
| Synopsis | User password for console and FTP access |
| Context | configure system security user-params local-user user <i>string</i> password <i>string</i> |
| Tree | password |
| String Length | 3 to 136 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

public-keys

| | |
|----------|--|
| Synopsis | Enter the public-keys context |
| Context | configure system security user-params local-user user <i>string</i> public-keys |
| Tree | public-keys |

| | |
|-------------|---|
| Description | Commands in this context configure public keys for SSH. |
| Introduced | 16.0.R1 |
| Platforms | All |

ecdsa

| | |
|-------------|--|
| Synopsis | Enter the ecdsa context |
| Context | configure system security user-params local-user user <i>string</i> public-keys ecdsa |
| Tree | ecdsa |
| Description | Commands in this context configure Elliptic Curve Digital Signature Algorithm (ECDSA) public keys. |
| Introduced | 16.0.R1 |
| Platforms | All |

ecdsa-key [[ecdsa-public-key-id](#)] *number*

| | |
|-------------|--|
| Synopsis | Enter the ecdsa-key list instance |
| Context | configure system security user-params local-user user <i>string</i> public-keys ecdsa ecdsa-key <i>number</i> |
| Tree | ecdsa-key |
| Description | Commands in this context configure an ECDSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

[[ecdsa-public-key-id](#)] *number*

| | |
|------------|--|
| Synopsis | ECDSA public key identifier |
| Context | configure system security user-params local-user user <i>string</i> public-keys ecdsa ecdsa-key <i>number</i> |
| Tree | ecdsa-key |
| Range | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security user-params local-user user <i>string</i> public-keys ecdsa ecdsa-key <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

key-value *string*

| | |
|---------------|--|
| Synopsis | ECDSA public key value |
| Context | configure system security user-params local-user user <i>string</i> public-keys ecdsa ecdsa-key <i>number</i> key-value <i>string</i> |
| Tree | key-value |
| Description | This command configures a value for the ECDSA public key. The public key must be enclosed in quotation marks. For ECDSA, the key is between 1 and 1024 bits. |
| String Length | 1 to 255 |
| Introduced | 16.0.R1 |
| Platforms | All |

rsa

| | |
|-------------|--|
| Synopsis | Enter the rsa context |
| Context | configure system security user-params local-user user <i>string</i> public-keys rsa |
| Tree | rsa |
| Description | Commands in this context configure RSA public keys. |
| Introduced | 16.0.R1 |
| Platforms | All |

rsa-key [[rsa-public-key-id](#)] *number*

| | |
|----------|--|
| Synopsis | Enter the rsa-key list instance |
| Context | configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i> |

| | |
|-------------|---|
| Tree | rsa-key |
| Description | Commands in this context configure an RSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user. |
| Introduced | 16.0.R1 |
| Platforms | All |

[rsa-public-key-id] *number*

| | |
|------------|--|
| Synopsis | RSA public key identifier |
| Context | configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i> |
| Tree | rsa-key |
| Range | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

key-value *string*

| | |
|---------------|--|
| Synopsis | RSA public key value |
| Context | configure system security user-params local-user user <i>string</i> public-keys rsa rsa-key <i>number</i> key-value <i>string</i> |
| Tree | key-value |
| Description | This command configures a value for the RSA public key. The public key must be enclosed in quotation marks. For RSA, the key is between 768 and 4096 bits. |
| String Length | 1 to 800 |

Introduced 16.0.R1
 Platforms All

restricted-to-home *boolean*

Synopsis Restrict file access to the home directory of the user
 Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [restricted-to-home](#) *boolean*
 Tree [restricted-to-home](#)
 Default false
 Introduced 16.0.R1
 Platforms All

save-when-restricted *boolean*

Synopsis Save configurations when the user is restricted to home
 Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [save-when-restricted](#) *boolean*
 Tree [save-when-restricted](#)
 Description When configured to **true**, the system permits all configuration save operations (such as **admin save**) via any management interface (such as CLI and NETCONF) even if **restricted-to-home** is set to **true**. The home directory does not need to be configured.
 Default false
 Introduced 22.10.R1
 Platforms All

snmp

Synopsis Enter the **snmp** context
 Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [snmp](#)
 Tree [snmp](#)
 Introduced 16.0.R1
 Platforms All

authentication

| | |
|-------------|--|
| Synopsis | Enable the authentication context |
| Context | configure system security user-params local-user user <i>string</i> snmp authentication |
| Tree | authentication |
| Description | <p>Commands in this context configure the SNMPv3 authentication and privacy protocols for the user to communicate with the router. The keys are stored in an encrypted format in the configuration.</p> <p>The keys configured with these commands must be localized keys, which are a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the tools perform system management-interface snmp generate-key command to generate localized authentication and privacy keys.</p> <p>If authentication is not configured, only the username is required to allow and authenticate SNMPv3 operations.</p> |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key *string*

| | |
|---------------|---|
| Synopsis | Localized authentication key |
| Context | configure system security user-params local-user user <i>string</i> snmp authentication authentication-key <i>string</i> |
| Tree | authentication-key |
| Description | <p>This command specifies the authentication key for the authentication protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the tools perform system management-interface snmp generate-key command to generate a localized authentication key.</p> |
| String Length | 1 to 115 |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-protocol *keyword*

| | |
|----------|---|
| Synopsis | Authentication protocol |
| Context | configure system security user-params local-user user <i>string</i> snmp authentication authentication-protocol <i>keyword</i> |
| Tree | authentication-protocol |
| Options | hmac-md5-96, hmac-sha1-96, hmac-sha2-224, hmac-sha2-256, hmac-sha2-384, hmac-sha2-512 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

privacy

| | |
|------------|--|
| Synopsis | Enable the privacy context |
| Context | configure system security user-params local-user user <i>string</i> snmp authentication privacy |
| Tree | privacy |
| Introduced | 16.0.R1 |
| Platforms | All |

privacy-key *string*

| | |
|---------------|---|
| Synopsis | Localized privacy key |
| Context | configure system security user-params local-user user <i>string</i> snmp authentication privacy privacy-key <i>string</i> |
| Tree | privacy-key |
| Description | This command specifies the privacy key for the privacy protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the tools perform system management-interface snmp generate-key command to generate a localized privacy key. |
| String Length | 1 to 71 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

privacy-protocol *keyword*

| | |
|------------|--|
| Synopsis | Privacy protocol |
| Context | configure system security user-params local-user user <i>string</i> snmp authentication privacy privacy-protocol <i>keyword</i> |
| Tree | privacy-protocol |
| Options | cbc-des, cfb128-aes-128, cfb128-aes-192, cfb128-aes-256 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |

Platforms All

group *string*

Synopsis User to associate with a group name

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [snmp](#) [group](#) *string*

Tree [group](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

vprn-network-exceptions

Synopsis Enable the **vprn-network-exceptions** context

Context **configure** [system](#) [security](#) [vprn-network-exceptions](#)

Tree [vprn-network-exceptions](#)

Description Commands in this context configure the rate limiting attributes for processing packets with label TTL expiry received within an LSP shortcut or VPRN instances in the system and from all network IP interfaces. This includes labeled user and control plan packets, ping, and traceroute packets within GRT and VPRN, and ICMP replies.
These commands do not rate limit MPLS or service OAM packets.

Introduced 16.0.R1

Platforms All

count *number*

Synopsis Limit of exception messages received

Context **configure** [system](#) [security](#) [vprn-network-exceptions](#) [count](#) *number*

Tree [count](#)

Description This command specifies the threshold limit of exception messages. If the threshold value is exceeded within the configured time interval, packets are dropped.

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

window *number*

| | |
|-------------|---|
| Synopsis | Time interval to measure exception messages |
| Context | configure system security vprn-network-exceptions window <i>number</i> |
| Tree | window |
| Description | This command configures the time interval within which exception messages are counted. If the threshold value is exceeded within the configured time interval, packets are dropped. |
| Range | 1 to 60 |
| Default | 10 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

selective-fib *boolean*

| | |
|------------|--|
| Synopsis | FIB assigned to the system |
| Context | configure system selective-fib <i>boolean</i> |
| Tree | selective-fib |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

software-repository [[repository-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the software-repository list instance |
| Context | configure system software-repository <i>string</i> |
| Tree | software-repository |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[repository-name] *string*

| | |
|----------|---|
| Synopsis | Software repository name |
| Context | configure system software-repository <i>string</i> |
| Tree | software-repository |

| | |
|---------------|--|
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system software-repository <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

primary-location *string*

| | |
|---------------|---|
| Synopsis | Primary location for files in the software repository |
| Context | configure system software-repository <i>string</i> primary-location <i>string</i> |
| Tree | primary-location |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

secondary-location *string*

| | |
|---------------|---|
| Synopsis | Secondary location for files in the software repository |
| Context | configure system software-repository <i>string</i> secondary-location <i>string</i> |
| Tree | secondary-location |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tertiary-location *string*

| | |
|----------|--|
| Synopsis | Tertiary location for files in the software repository |
|----------|--|

| | |
|---------------|--|
| Context | configure system software-repository <i>string tertiary-location string</i> |
| Tree | tertiary-location |
| String Length | 1 to 180 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

switch-fabric

| | |
|-------------|--|
| Synopsis | Enter the switch-fabric context |
| Context | configure system switch-fabric |
| Tree | switch-fabric |
| Description | Commands in this context configure system level attributes related to the switch fabric. |
| Introduced | 20.5.R1 |
| Platforms | 7450 ESS, 7750 SR-7, 7750 SR-7s, 7750 SR-14s, 7950 XRS-20, 7950 XRS-40 |

failure-recovery

| | |
|-------------|---|
| Synopsis | Enter the failure-recovery context |
| Context | configure system switch-fabric failure-recovery |
| Tree | failure-recovery |
| Description | Commands in this context configure the attributes related to the automatic switch fabric recovery process. This process is triggered when there are two resets of an IOM/XCM due to ICC failures within a small time frame. The recovery process involves the sequential resetting of SFM in case the issues are due to one of the SFM in the ICC communication path. As the final step in the recovery process, a CPM switchover is triggered to reset the active CPM. |
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR-7, 7950 XRS-20, 7950 XRS-40 |

admin-state *keyword*

| | |
|----------|---|
| Synopsis | Administrative state of the failure recovery process |
| Context | configure system switch-fabric failure-recovery admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|---|
| Introduced | 21.2.R1 |
| Platforms | 7450 ESS, 7750 SR-7, 7950 XRS-20, 7950 XRS-40 |

sfm-loss-threshold *number*

| | |
|-------------|--|
| Synopsis | Number of SFMs that can fail before SFM overload state |
| Context | configure system switch-fabric sfm-loss-threshold <i>number</i> |
| Tree | sfm-loss-threshold |
| Description | This command specifies the number of SFMs that are permitted to fail before the system goes into SFM overload state.

The default value for the 7750 SR-7s is 1 and the default value for the 7750 SR-14s is 2. Users can select the SFM limit based on the number possible for the system minus one. For the 7750 SR-7s, the limit is 3 and the limit for the 7750 SR-14s is 7. |
| Range | 1 to 7 |
| Introduced | 20.5.R1 |
| Platforms | 7750 SR-7s, 7750 SR-14s |

telemetry

| | |
|-------------|---|
| Synopsis | Enter the telemetry context |
| Context | configure system telemetry |
| Tree | telemetry |
| Description | Commands in this context configure the parameters for the dial-out telemetry functionality. |
| Introduced | 20.2.R1 |
| Platforms | All |

destination-group [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the destination-group list instance |
| Context | configure system telemetry destination-group <i>string</i> |
| Tree | destination-group |
| Description | Commands in this context configure parameters for destination groups. |
| Max. Instances | 225 |
| Introduced | 20.5.R1 |

Platforms All

[name] *string*

Synopsis Destination group name

Context **configure** [system](#) [telemetry](#) [destination-group](#) *string*

Tree [destination-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms All

allow-unsecure-connection

Synopsis Allow connection without secured transport protocol

Context **configure** [system](#) [telemetry](#) [destination-group](#) *string* [allow-unsecure-connection](#)

Tree [allow-unsecure-connection](#)

Description When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.

Notes The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.

Introduced 20.5.R1

Platforms All

description *string*

Synopsis Text description

Context **configure** [system](#) [telemetry](#) [destination-group](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 20.5.R1

Platforms All

destination [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) port number

| | |
|----------------|---|
| Synopsis | Enter the destination list instance |
| Context | configure system telemetry destination-group string destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number |
| Tree | destination |
| Max. Instances | 4 |
| Notes | This element is ordered by the user. |
| Introduced | 20.5.R1 |
| Platforms | All |

[address] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

| | |
|---------------|---|
| Synopsis | Address of the destination within the destination group |
| Context | configure system telemetry destination-group string destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number |
| Tree | destination |
| String Length | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

port number

| | |
|------------|---|
| Synopsis | TCP port number for the destination |
| Context | configure system telemetry destination-group string destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port number |
| Tree | destination |
| Range | 0 1 to 65535 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router name or VPRN service name |
| Context | configure system telemetry destination-group <i>string</i> destination (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i> <i>fully-qualified-domain-name</i>) port <i>number</i> router-instance <i>string</i> |
| Tree | router-instance |
| Introduced | 20.5.R1 |
| Platforms | All |

tcp-keepalive

| | |
|------------|---|
| Synopsis | Enter the tcp-keepalive context |
| Context | configure system telemetry destination-group <i>string</i> tcp-keepalive |
| Tree | tcp-keepalive |
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the TCP keep-alive algorithm |
| Context | configure system telemetry destination-group <i>string</i> tcp-keepalive admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

idle-time *number*

| | |
|------------|---|
| Synopsis | Time until the first TCP keepalive probe is sent |
| Context | configure system telemetry destination-group <i>string</i> tcp-keepalive idle-time <i>number</i> |
| Tree | idle-time |
| Range | 1 to 100000 |
| Default | 600 |
| Units | seconds |
| Introduced | 20.5.R1 |

Platforms All

interval *number*

Synopsis Time between TCP keepalive probes

Context **configure** [system telemetry destination-group](#) *string tcp-keepalive interval number*

Tree [interval](#)

Range 1 to 100000

Default 15

Units seconds

Introduced 20.5.R1

Platforms All

retries *number*

Synopsis Number of probe retries before closing the connection

Context **configure** [system telemetry destination-group](#) *string tcp-keepalive retries number*

Tree [retries](#)

Description This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.

Range 3 to 100

Default 4

Introduced 20.5.R1

Platforms All

tls-client-profile *reference*

Synopsis TLS client profile assigned to the destination group

Context **configure** [system telemetry destination-group](#) *string tls-client-profile reference*

Tree [tls-client-profile](#)

Reference **configure** [system security tls client-tls-profile](#) *string*

Notes The following elements are part of a choice: **allow-unsecure-connection** or **tls-client-profile**.

Introduced 20.5.R1

Platforms All

notification-bundling

Synopsis Enter the **notification-bundling** context

Context **configure system telemetry notification-bundling**

Tree [notification-bundling](#)

Description Commands in this context configure the bundling of multiple notifications into one telemetry message.

Introduced 21.10.R1

Platforms All

admin-state *keyword*

Synopsis Administrative state of notification bundling

Context **configure system telemetry notification-bundling admin-state *keyword***

Tree [admin-state](#)

Default disable

Options enable, disable

Introduced 21.10.R1

Platforms All

max-msg-count *number*

Synopsis Maximum notifications count in telemetry message bundle

Context **configure system telemetry notification-bundling max-msg-count *number***

Tree [max-msg-count](#)

Range 2 to 1000

Default 100

Introduced 21.10.R1

Platforms All

max-time-granularity *number*

Synopsis Maximum interval when bundling of notifications occurs

| | |
|-------------|--|
| Context | configure system telemetry notification-bundling max-time-granularity <i>number</i> |
| Tree | max-time-granularity |
| Description | This command sets the maximum time interval during which telemetry notifications are bundled. All bundled notifications have the same timestamp, which is the timestamp of the bundle. |
| Range | 1 to 1000 |
| Default | 100 |
| Units | milliseconds |
| Introduced | 21.10.R1 |
| Platforms | All |

persistent-subscriptions

| | |
|------------|--|
| Synopsis | Enter the persistent-subscriptions context |
| Context | configure system telemetry persistent-subscriptions |
| Tree | persistent-subscriptions |
| Introduced | 20.5.R1 |
| Platforms | All |

subscription [[name](#)] *string*

| | |
|----------------|---|
| Synopsis | Enter the subscription list instance |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> |
| Tree | subscription |
| Max. Instances | 225 |
| Introduced | 20.5.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|---|
| Synopsis | Persistent subscription name |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> |
| Tree | subscription |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 20.5.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the persistent subscription |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 20.5.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.5.R1 |
| Platforms | All |

destination-group *reference*

| | |
|------------|---|
| Synopsis | Name of the destination group used in the subscription |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> destination-group <i>reference</i> |
| Tree | destination-group |
| Reference | configure system telemetry destination-group <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

encoding *keyword*

| | |
|-------------|--|
| Synopsis | Encoding used for telemetry notifications |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> encoding <i>keyword</i> |
| Tree | encoding |
| Description | This command specifies the encoding used for telemetry notifications as defined by the gNMI OpenConfig standard. |
| Default | json |
| Options | json, bytes, proto, json-ietf |
| Introduced | 20.5.R1 |
| Platforms | All |

local-source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|---|
| Synopsis | Local IP address of packets sent from the source |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> local-source-address (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | local-source-address |
| Introduced | 20.5.R1 |
| Platforms | All |

mode *keyword*

| | |
|-------------|--|
| Synopsis | Mode for telemetry notifications |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> mode <i>keyword</i> |
| Tree | mode |
| Description | This command specifies the subscription path mode for telemetry notifications sent out for the persistent subscription. |
| Options | target-defined, on-change, sample |
| Introduced | 20.5.R1 |
| Platforms | All |

originated-qos-marking *keyword*

| | |
|----------|---|
| Synopsis | QoS marking used for telemetry notification packets |
|----------|---|

| | |
|------------|---|
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> originated-qos-marking <i>keyword</i> |
| Tree | originated-qos-marking |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 20.5.R1 |
| Platforms | All |

sample-interval *number*

| | |
|-------------|---|
| Synopsis | Sampling interval for the persistent subscription |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> sample-interval <i>number</i> |
| Tree | sample-interval |
| Description | This command configures the sampling interval for the persistent subscription. The interval applies only in sampling or target-defined modes. |
| Range | 1000 to 18446744073709551615 |
| Default | 10000 |
| Units | milliseconds |
| Introduced | 20.5.R1 |
| Platforms | All |

sensor-group *reference*

| | |
|-------------|--|
| Synopsis | Sensor group used in the persistent subscription |
| Context | configure system telemetry persistent-subscriptions subscription <i>string</i> sensor-group <i>reference</i> |
| Tree | sensor-group |
| Description | This command specifies the sensor group to be used in the persistent subscription. If no valid paths exist in the sensor group, the configuration is accepted, however, no gRPC connection is established when persistent subscription is activated. |
| Reference | configure system telemetry sensor-groups sensor-group <i>string</i> |
| Introduced | 20.5.R1 |
| Platforms | All |

sensor-groups

| | |
|------------|---|
| Synopsis | Enter the sensor-groups context |
| Context | configure system telemetry sensor-groups |
| Tree | sensor-groups |
| Introduced | 20.5.R1 |
| Platforms | All |

sensor-group [\[name\]](#) *string*

| | |
|----------------|--|
| Synopsis | Enter the sensor-group list instance |
| Context | configure system telemetry sensor-groups sensor-group <i>string</i> |
| Tree | sensor-group |
| Max. Instances | 225 |
| Introduced | 20.5.R1 |
| Platforms | All |

[name] *string*

| | |
|---------------|--|
| Synopsis | Sensor group name |
| Context | configure system telemetry sensor-groups sensor-group <i>string</i> |
| Tree | sensor-group |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 20.5.R1 |
| Platforms | All |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure system telemetry sensor-groups sensor-group <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.5.R1 |

Platforms All

path [[xpath](#)] *string*

Synopsis Add a list entry for **path**

Context **configure** [system](#) [telemetry](#) [sensor-groups](#) [sensor-group](#) *string* [path](#) *string*

Tree [path](#)

Max. Instances 4500

Introduced 20.5.R1

Platforms All

[xpath] *string*

Synopsis YANG model path indicating the data to be streamed

Context **configure** [system](#) [telemetry](#) [sensor-groups](#) [sensor-group](#) *string* [path](#) *string*

Tree [path](#)

Description The command specifies the path from which data is streamed to the collector. Streamed data includes all descendants of the tree indicated by the path.

String Length 1 to 512

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms All

thresholds

Synopsis Enter the **thresholds** context

Context **configure** [system](#) [thresholds](#)

Tree [thresholds](#)

Introduced 16.0.R1

Platforms All

cflash-cap-alarm-percent [[cflash-id](#)] *string*

Synopsis Enter the **cflash-cap-alarm-percent** list instance

Context **configure** [system](#) [thresholds](#) [cflash-cap-alarm-percent](#) *string*

| | |
|------------|--|
| Tree | cflash-cap-alarm-percent |
| Introduced | 16.0.R1 |
| Platforms | All |

[cflash-id] *string*

| | |
|---------------|---|
| Synopsis | cflash device name monitored for capacity |
| Context | configure system thresholds cflash-cap-alarm-percent <i>string</i> |
| Tree | cflash-cap-alarm-percent |
| String Length | 1 to 200 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

falling-threshold *number*

| | |
|-------------|--|
| Synopsis | Falling threshold for the sampled statistic |
| Context | configure system thresholds cflash-cap-alarm-percent <i>string</i> falling-threshold <i>number</i> |
| Tree | falling-threshold |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p> |
| Range | 0 to 100 |
| Units | percent |
| Introduced | 16.0.R4 |
| Platforms | All |

interval *number*

| | |
|----------|--|
| Synopsis | Polling period over which data is sampled and compared |
| Context | configure system thresholds cflash-cap-alarm-percent <i>string</i> interval <i>number</i> |

| | |
|-------------|---|
| Tree | interval |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

rising-threshold *number*

| | |
|-------------|---|
| Synopsis | Rising threshold for the sampled statistic |
| Context | configure system thresholds cflash-cap-alarm-percent <i>string</i> rising-threshold <i>number</i> |
| Tree | rising-threshold |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p> |
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

rmon-event-type *keyword*

| | |
|------------|--|
| Synopsis | Notification type specifying action when event occurs |
| Context | configure system thresholds cflash-cap-alarm-percent <i>string</i> rmon-event-type <i>keyword</i> |
| Tree | rmon-event-type |
| Default | both |
| Options | none, log, trap, both |
| Introduced | 16.0.R1 |
| Platforms | All |

startup-alarm *keyword*

| | |
|-------------|--|
| Synopsis | Alarm type when the alarm is first created |
| Context | configure system thresholds cflash-cap-alarm-percent <i>string</i> startup-alarm <i>keyword</i> |
| Tree | startup-alarm |
| Description | This command specifies the alarm type that may be sent when this alarm is first created.
If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either , a single rising threshold crossing event is generated.
If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either , a single falling threshold crossing event is generated. |
| Default | either |
| Options | rising, falling, either |
| Introduced | 16.0.R1 |
| Platforms | All |

cflash-cap-warn-percent [**cflash-id**] *string*

| | |
|-------------|--|
| Synopsis | Enter the cflash-cap-warn-percent list instance |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> |
| Tree | cflash-cap-warn-percent |
| Description | Commands in this context configure the capacity monitoring of the compact flash. The usage is monitored as a percentage of the capacity of the compact flash. The severity level is warning. Both a rising and falling threshold can be specified. |
| Introduced | 16.0.R1 |
| Platforms | All |

[cflash-id] *string*

| | |
|---------------|---|
| Synopsis | cflash device name monitored for capacity |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> |
| Tree | cflash-cap-warn-percent |
| String Length | 1 to 200 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

falling-threshold *number*

| | |
|-------------|--|
| Synopsis | Falling threshold for the sampled statistic |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> falling-threshold <i>number</i> |
| Tree | falling-threshold |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p> |
| Range | 0 to 100 |
| Units | percent |
| Introduced | 16.0.R4 |
| Platforms | All |

interval *number*

| | |
|-------------|---|
| Synopsis | Polling period over which data is sampled and compared |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> interval <i>number</i> |
| Tree | interval |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

rising-threshold *number*

| | |
|-------------|---|
| Synopsis | Rising threshold for the sampled statistic |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> rising-threshold <i>number</i> |
| Tree | rising-threshold |
| Description | This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last |

sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values.

After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.

| | |
|------------|----------------------------|
| Range | 0 to 100 |
| Units | percent |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

rmon-event-type *keyword*

| | |
|------------|--|
| Synopsis | Notification type specifying action when event occurs |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> rmon-event-type <i>keyword</i> |
| Tree | rmon-event-type |
| Default | both |
| Options | none, log, trap, both |
| Introduced | 16.0.R1 |
| Platforms | All |

startup-alarm *keyword*

| | |
|-------------|--|
| Synopsis | Alarm type when the alarm is first created |
| Context | configure system thresholds cflash-cap-warn-percent <i>string</i> startup-alarm <i>keyword</i> |
| Tree | startup-alarm |
| Description | This command specifies the alarm type that may be sent when this alarm is first created.
If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either , a single rising threshold crossing event is generated.
If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either , a single falling threshold crossing event is generated. |
| Default | either |
| Options | rising, falling, either |
| Introduced | 16.0.R1 |
| Platforms | All |

kb-memory-use-alarm

| | |
|------------|--|
| Synopsis | Enable the kb-memory-use-alarm context |
| Context | configure system thresholds kb-memory-use-alarm |
| Tree | kb-memory-use-alarm |
| Introduced | 16.0.R4 |
| Platforms | All |

falling-threshold *number*

| | |
|-------------|--|
| Synopsis | Falling threshold for the sampled statistic |
| Context | configure system thresholds kb-memory-use-alarm falling-threshold <i>number</i> |
| Tree | falling-threshold |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p> |
| Range | -2147483648 to 2147483647 |
| Introduced | 16.0.R4 |
| Platforms | All |

interval *number*

| | |
|-------------|---|
| Synopsis | Polling period over which data is sampled and compared |
| Context | configure system thresholds kb-memory-use-alarm interval <i>number</i> |
| Tree | interval |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

rising-threshold *number*

| | |
|-------------|---|
| Synopsis | Rising threshold for the sampled statistic |
| Context | configure system thresholds kb-memory-use-alarm rising-threshold <i>number</i> |
| Tree | rising-threshold |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p> |
| Range | -2147483648 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

rmon-event-type *keyword*

| | |
|------------|---|
| Synopsis | Notification type specifying action when event occurs |
| Context | configure system thresholds kb-memory-use-alarm rmon-event-type <i>keyword</i> |
| Tree | rmon-event-type |
| Default | both |
| Options | none, log, trap, both |
| Introduced | 16.0.R4 |
| Platforms | All |

startup-alarm *keyword*

| | |
|-------------|---|
| Synopsis | Alarm type when the alarm is first created |
| Context | configure system thresholds kb-memory-use-alarm startup-alarm <i>keyword</i> |
| Tree | startup-alarm |
| Description | <p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either, a single rising threshold crossing event is generated.</p> |

If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.

| | |
|------------|-------------------------|
| Default | either |
| Options | rising, falling, either |
| Introduced | 16.0.R4 |
| Platforms | All |

kb-memory-use-warn

| | |
|------------|---|
| Synopsis | Enable the kb-memory-use-warn context |
| Context | configure system thresholds kb-memory-use-warn |
| Tree | kb-memory-use-warn |
| Introduced | 16.0.R4 |
| Platforms | All |

falling-threshold *number*

| | |
|-------------|--|
| Synopsis | Falling threshold for the sampled statistic |
| Context | configure system thresholds kb-memory-use-warn falling-threshold <i>number</i> |
| Tree | falling-threshold |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is equal to the falling or either values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the rising-threshold command.</p> |
| Range | -2147483648 to 2147483647 |
| Introduced | 16.0.R4 |
| Platforms | All |

interval *number*

| | |
|----------|--|
| Synopsis | Polling period over which data is sampled and compared |
| Context | configure system thresholds kb-memory-use-warn interval <i>number</i> |
| Tree | interval |

| | |
|-------------|---|
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds. |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

rising-threshold *number*

| | |
|-------------|---|
| Synopsis | Rising threshold for the sampled statistic |
| Context | configure system thresholds kb-memory-use-warn rising-threshold <i>number</i> |
| Tree | rising-threshold |
| Description | <p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated startup-alarm command is equal to the rising or either values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the falling-threshold command.</p> |
| Range | -2147483648 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R4 |
| Platforms | All |

rmon-event-type *keyword*

| | |
|------------|--|
| Synopsis | Notification type specifying action when event occurs |
| Context | configure system thresholds kb-memory-use-warn rmon-event-type <i>keyword</i> |
| Tree | rmon-event-type |
| Default | both |
| Options | none, log, trap, both |
| Introduced | 16.0.R4 |
| Platforms | All |

startup-alarm *keyword*

| | |
|-------------|--|
| Synopsis | Alarm type when the alarm is first created |
| Context | configure system thresholds kb-memory-use-warn startup-alarm <i>keyword</i> |
| Tree | startup-alarm |
| Description | This command specifies the alarm type that may be sent when this alarm is first created.
If the first sample is greater than or equal to the rising threshold value and startup-alarm is equal to rising or either , a single rising threshold crossing event is generated.
If the first sample is less than or equal to the falling threshold value and startup-alarm is equal to falling or either , a single falling threshold crossing event is generated. |
| Default | either |
| Options | rising, falling, either |
| Introduced | 16.0.R4 |
| Platforms | All |

rmon

| | |
|------------|---|
| Synopsis | Enter the rmon context |
| Context | configure system thresholds rmon |
| Tree | rmon |
| Introduced | 16.0.R1 |
| Platforms | All |

alarm [[rmon-alarm-id](#)] *number*

| | |
|----------------|---|
| Synopsis | Enter the alarm list instance |
| Context | configure system thresholds rmon alarm <i>number</i> |
| Tree | alarm |
| Max. Instances | 1200 |
| Introduced | 16.0.R1 |
| Platforms | All |

[rmon-alarm-id] *number*

| | |
|----------|---|
| Synopsis | Index ID for an entry in the alarm table |
| Context | configure system thresholds rmon alarm <i>number</i> |

| | |
|------------|-------------------------------------|
| Tree | alarm |
| Range | 0 to 65400 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

falling-event *number*

| | |
|------------|---|
| Synopsis | RMON event ID for falling threshold crossing event |
| Context | configure system thresholds rmon alarm <i>number</i> falling-event <i>number</i> |
| Tree | falling-event |
| Range | 0 to 65400 |
| Introduced | 16.0.R1 |
| Platforms | All |

falling-threshold *number*

| | |
|-------------|--|
| Synopsis | Falling threshold for the sampled statistic |
| Context | configure system thresholds rmon alarm <i>number</i> falling-threshold <i>number</i> |
| Tree | falling-threshold |
| Description | <p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold and the value at the last sampling interval was greater than this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated startup-alarm command is set to falling or either.</p> <p>After a falling threshold crossing event is generated, another such event is not generated until the sampled value exceeds this threshold and reaches or exceeds the rising-threshold command setting.</p> |
| Range | -2147483648 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|----------|--|
| Synopsis | Polling period over which data is sampled and compared |
| Context | configure system thresholds rmon alarm <i>number</i> interval <i>number</i> |

| | |
|-------------|--|
| Tree | interval |
| Description | This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds |
| Range | 1 to 2147483647 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

owner string

| | |
|---------------|---|
| Synopsis | Owner that created this entry and uses the resources |
| Context | configure system thresholds rmon alarm number owner string |
| Tree | owner |
| String Length | 1 to 80 |
| Default | TIMOS CLI |
| Introduced | 16.0.R1 |
| Platforms | All |

rising-event number

| | |
|------------|--|
| Synopsis | RMON event ID for rising threshold crossing event |
| Context | configure system thresholds rmon alarm number rising-event number |
| Tree | rising-event |
| Range | 0 to 65400 |
| Introduced | 16.0.R1 |
| Platforms | All |

rising-threshold number

| | |
|-------------|--|
| Synopsis | Rising threshold for the sampled statistic |
| Context | configure system thresholds rmon alarm number rising-threshold number |
| Tree | rising-threshold |
| Description | This command specifies the rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold and the value at the last sampling interval was below this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken |

is greater than or equal to this threshold and the associated **startup-alarm** command is set to **rising** or **either**.

After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches or falls below the **falling-threshold** command setting.

| | |
|------------|---------------------------|
| Range | -2147483648 to 2147483647 |
| Introduced | 16.0.R1 |
| Platforms | All |

sample-type *keyword*

| | |
|------------|---|
| Synopsis | Sampling type for value comparison with thresholds |
| Context | configure system thresholds rmon alarm <i>number</i> sample-type <i>keyword</i> |
| Tree | sample-type |
| Default | absolute |
| Options | absolute, delta |
| Introduced | 16.0.R1 |
| Platforms | All |

startup-alarm *keyword*

| | |
|------------|---|
| Synopsis | Alarm to send when this entry is first set to valid |
| Context | configure system thresholds rmon alarm <i>number</i> startup-alarm <i>keyword</i> |
| Tree | startup-alarm |
| Default | either |
| Options | rising, falling, either |
| Introduced | 16.0.R1 |
| Platforms | All |

variable-oid *string*

| | |
|---------------|---|
| Synopsis | Object identifier to sample the specific variable |
| Context | configure system thresholds rmon alarm <i>number</i> variable-oid <i>string</i> |
| Tree | variable-oid |
| String Length | 1 to 255 |
| Notes | This element is mandatory. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

event [*rmon-event-id*] *number*

| | |
|----------------|---|
| Synopsis | Enter the event list instance |
| Context | configure system thresholds rmon event <i>number</i> |
| Tree | event |
| Max. Instances | 1200 |
| Introduced | 16.0.R1 |
| Platforms | All |

[rmon-event-id] *number*

| | |
|------------|---|
| Synopsis | Index ID for an entry in the event table |
| Context | configure system thresholds rmon event <i>number</i> |
| Tree | event |
| Range | 1 to 65400 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure system thresholds rmon event <i>number</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

event-type *keyword*

| | |
|----------|---|
| Synopsis | Notification action to be taken when the event occurs |
|----------|---|

| | |
|------------|--|
| Context | configure system thresholds rmon event <i>number event-type keyword</i> |
| Tree | event-type |
| Default | both |
| Options | none, log, trap, both |
| Introduced | 16.0.R1 |
| Platforms | All |

owner string

| | |
|---------------|--|
| Synopsis | Owner that created this entry and uses the resources |
| Context | configure system thresholds rmon event <i>number owner string</i> |
| Tree | owner |
| String Length | 1 to 80 |
| Default | TIMOS CLI |
| Introduced | 16.0.R1 |
| Platforms | All |

time

| | |
|------------|-------------------------------|
| Synopsis | Enter the time context |
| Context | configure system time |
| Tree | time |
| Introduced | 16.0.R1 |
| Platforms | All |

dst-zone [**summer-time-zone**] *string*

| | |
|----------------|---|
| Synopsis | Enter the dst-zone list instance |
| Context | configure system time dst-zone <i>string</i> |
| Tree | dst-zone |
| Max. Instances | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

[summer-time-zone] *string*

| | |
|---------------|---|
| Synopsis | Summer time zone name |
| Context | configure system time dst-zone <i>string</i> |
| Tree | <i>dst-zone</i> |
| String Length | 1 to 5 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

end

| | |
|------------|---|
| Synopsis | Enter the end context |
| Context | configure system time dst-zone <i>string end</i> |
| Tree | <i>end</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

day *keyword*

| | |
|------------|--|
| Synopsis | Day of the week to end Daylight Savings Time |
| Context | configure system time dst-zone <i>string end day</i> <i>keyword</i> |
| Tree | <i>day</i> |
| Default | sunday |
| Options | sunday, monday, tuesday, wednesday, thursday, friday, saturday |
| Introduced | 16.0.R1 |
| Platforms | All |

hours-minutes *string*

| | |
|---------------|---|
| Synopsis | Time to end Daylight Savings Time in hh:mm format |
| Context | configure system time dst-zone <i>string end hours-minutes</i> <i>string</i> |
| Tree | <i>hours-minutes</i> |
| String Length | 5 |
| Default | 00:00 |
| Introduced | 16.0.R1 |

Platforms All

month *keyword*

Synopsis Month to end Daylight Savings Time

Context **configure** [system](#) [time](#) [dst-zone](#) *string* [end](#) [month](#) *keyword*

Tree [month](#)

Default january

Options january, february, march, april, may, june, july, august, september, october, november, december

Introduced 16.0.R1

Platforms All

week *keyword*

Synopsis Week of the month to end Daylight Savings Time

Context **configure** [system](#) [time](#) [dst-zone](#) *string* [end](#) [week](#) *keyword*

Tree [week](#)

Default first

Options first, second, third, fourth, last

Introduced 16.0.R1

Platforms All

offset *number*

Synopsis Offset for Daylight Savings Time

Context **configure** [system](#) [time](#) [dst-zone](#) *string* [offset](#) *number*

Tree [offset](#)

Range 0 to 60

Default 60

Units minutes

Introduced 16.0.R1

Platforms All

start

| | |
|------------|--|
| Synopsis | Enter the start context |
| Context | configure system time dst-zone string start |
| Tree | start |
| Introduced | 16.0.R1 |
| Platforms | All |

day keyword

| | |
|------------|--|
| Synopsis | Day of the week to start Daylight Savings Time |
| Context | configure system time dst-zone string start day keyword |
| Tree | day |
| Default | sunday |
| Options | sunday, monday, tuesday, wednesday, thursday, friday, saturday |
| Introduced | 16.0.R1 |
| Platforms | All |

hours-minutes string

| | |
|---------------|---|
| Synopsis | Time to start Daylight Savings Time in hh:mm format |
| Context | configure system time dst-zone string start hours-minutes string |
| Tree | hours-minutes |
| String Length | 5 |
| Default | 00:00 |
| Introduced | 16.0.R1 |
| Platforms | All |

month keyword

| | |
|----------|--|
| Synopsis | Month to start Daylight Savings Time |
| Context | configure system time dst-zone string start month keyword |
| Tree | month |
| Default | january |
| Options | january, february, march, april, may, june, july, august, september, october, november, december |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

week *keyword*

| | |
|------------|--|
| Synopsis | Week of the month to start Daylight Savings Time |
| Context | configure system time dst-zone <i>string</i> start week <i>keyword</i> |
| Tree | week |
| Default | first |
| Options | first, second, third, fourth, last |
| Introduced | 16.0.R1 |
| Platforms | All |

ntp

| | |
|------------|---|
| Synopsis | Enable the ntp context |
| Context | configure system time ntp |
| Tree | ntp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of NTP execution |
| Context | configure system time ntp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-check *boolean*

| | |
|----------|---|
| Synopsis | Reject NTP PDUs that do not match the authentication key-id, type, or key requirements |
| Context | configure system time ntp authentication-check <i>boolean</i> |

| | |
|------------|--------------------------------------|
| Tree | authentication-check |
| Default | true |
| Introduced | 16.0.R1 |
| Platforms | All |

authentication-key [[key-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the authentication-key list instance |
| Context | configure system time ntp authentication-key <i>number</i> |
| Tree | authentication-key |
| Introduced | 16.0.R1 |
| Platforms | All |

[key-id] *number*

| | |
|------------|---|
| Synopsis | Index of the NTP authentication key table that uniquely identifies an authentication key and type |
| Context | configure system time ntp authentication-key <i>number</i> |
| Tree | authentication-key |
| Range | 1 to 255 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

key *string*

| | |
|---------------|---|
| Synopsis | Key to authenticate NTP packets |
| Context | configure system time ntp authentication-key <i>number</i> key <i>string</i> |
| Tree | key |
| String Length | 1 to 71 |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

type *keyword*

| | |
|------------|---|
| Synopsis | Type of authentication method to authenticate NTP packet |
| Context | configure system time ntp authentication-key <i>number</i> type <i>keyword</i> |
| Tree | type |
| Options | des, message-digest |
| Notes | This element is mandatory. |
| Introduced | 16.0.R1 |
| Platforms | All |

broadcast [[router-instance](#)] *reference* [interface-name](#) *string*

| | |
|------------|--|
| Synopsis | Enter the broadcast list instance |
| Context | configure system time ntp broadcast <i>reference</i> interface-name <i>string</i> |
| Tree | broadcast |
| Introduced | 16.0.R1 |
| Platforms | All |

[router-instance] *reference*

| | |
|------------|--|
| Synopsis | Router name |
| Context | configure system time ntp broadcast <i>reference</i> interface-name <i>string</i> |
| Tree | broadcast |
| Reference | configure router <i>string</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-name *string*

| | |
|---------------|--|
| Synopsis | Interface to transmit or receive NTP broadcast packets |
| Context | configure system time ntp broadcast <i>reference</i> interface-name <i>string</i> |
| Tree | broadcast |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |

Introduced 16.0.R1
 Platforms All

key-id *reference*

Synopsis Authentication key and type used by the node
 Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [key-id](#) *reference*
 Tree [key-id](#)
 Reference **configure** [system](#) [time](#) [ntp](#) [authentication-key](#) *number*
 Introduced 16.0.R1
 Platforms All

ttl *number*

Synopsis TTL value of messages transmitted by this broadcast address
 Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [ttl](#) *number*
 Tree [ttl](#)
 Range 1 to 255
 Default 127
 Introduced 16.0.R1
 Platforms All

version *number*

Synopsis NTP version number generated or accepted by this node in NTP packets
 Context **configure** [system](#) [time](#) [ntp](#) [broadcast](#) *reference* [interface-name](#) *string* [version](#) *number*
 Tree [version](#)
 Range 2 to 4
 Default 4
 Introduced 16.0.R1
 Platforms All

broadcast-client [[router-instance](#)] *string* [interface-name](#) *string*

Synopsis Enter the **broadcast-client** list instance

| | |
|------------|---|
| Context | configure system time ntp broadcast-client <i>string interface-name string</i> |
| Tree | broadcast-client |
| Introduced | 16.0.R1 |
| Platforms | All |

[router-instance] *string*

| | |
|------------|---|
| Synopsis | Router name or VPRN service name |
| Context | configure system time ntp broadcast-client <i>string interface-name string</i> |
| Tree | broadcast-client |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

interface-name *string*

| | |
|---------------|---|
| Synopsis | Interface to transmit or receive NTP broadcast packets |
| Context | configure system time ntp broadcast-client <i>string interface-name string</i> |
| Tree | broadcast-client |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

authenticate *boolean*

| | |
|------------|--|
| Synopsis | Enforce authentication of NTP PDUs |
| Context | configure system time ntp broadcast-client <i>string interface-name string authenticate boolean</i> |
| Tree | authenticate |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast

| | |
|------------|--|
| Synopsis | Enable the multicast context |
| Context | configure system time ntp multicast |
| Tree | multicast |
| Introduced | 16.0.R1 |
| Platforms | All |

key-id *reference*

| | |
|------------|--|
| Synopsis | Authentication key and type used by the node |
| Context | configure system time ntp multicast key-id <i>reference</i> |
| Tree | key-id |
| Reference | configure system time ntp authentication-key <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

version *number*

| | |
|-------------|--|
| Synopsis | NTP version number generated by the node |
| Context | configure system time ntp multicast version <i>number</i> |
| Tree | version |
| Description | This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted. |
| Range | 2 to 4 |
| Default | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

multicast-client

| | |
|------------|---|
| Synopsis | Enable the multicast-client context |
| Context | configure system time ntp multicast-client |
| Tree | multicast-client |
| Introduced | 16.0.R1 |

Platforms All

authenticate *boolean*

Synopsis Enforce authentication of NTP PDUs
 Context **configure** [system](#) [time](#) [ntp](#) [multicast-client](#) [authenticate](#) *boolean*
 Tree [authenticate](#)
 Default false
 Introduced 16.0.R1
 Platforms All

ntp-server

Synopsis Enable the **ntp-server** context
 Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#)
 Tree [ntp-server](#)
 Introduced 16.0.R1
 Platforms All

authenticate *boolean*

Synopsis Authentication of NTP PDUs when acting as a server
 Context **configure** [system](#) [time](#) [ntp](#) [ntp-server](#) [authenticate](#) *boolean*
 Tree [authenticate](#)
 Default false
 Introduced 16.0.R1
 Platforms All

peer [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [router-instance](#) *string*

Synopsis Enter the **peer** list instance
 Context **configure** [system](#) [time](#) [ntp](#) [peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [router-instance](#) *string*
 Tree [peer](#)
 Introduced 16.0.R1

Platforms All

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the peer for a peering relationship

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **router-instance string**

Tree **peer**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

router-instance *string*

Synopsis Router name or VPRN service name

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **router-instance string**

Tree **peer**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

key-id *reference*

Synopsis Authentication key and type used by the node

Context **configure system time ntp peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **router-instance string key-id reference**

Tree **key-id**

Reference **configure system time ntp authentication-key number**

Introduced 16.0.R1

Platforms All

prefer *boolean*

Synopsis Set NTP server as preferred to receive time

| | |
|------------|---|
| Context | configure system time ntp peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) router-instance string prefer boolean |
| Tree | prefer |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

version number

| | |
|-------------|--|
| Synopsis | NTP version number generated by the node |
| Context | configure system time ntp peer (<i>ipv4-address-no-zone ipv6-address-no-zone</i>) router-instance string version number |
| Tree | version |
| Description | This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted. |
| Range | 2 to 4 |
| Default | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

server [ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone | keyword*) **router-instance string**

| | |
|------------|--|
| Synopsis | Enter the server list instance |
| Context | configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance string |
| Tree | server |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-no-zone | ipv6-address-no-zone | keyword*)

| | |
|----------|--|
| Synopsis | IP address of an external NTP server |
| Context | configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance string |
| Tree | server |

| | |
|------------|-------------------------------------|
| Options | ptp |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

router-instance *string*

| | |
|------------|---|
| Synopsis | Router name or VPRN service name |
| Context | configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance <i>string</i> |
| Tree | server |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

key-id *reference*

| | |
|------------|--|
| Synopsis | Authentication key and type used by the node |
| Context | configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance <i>string</i> key-id <i>reference</i> |
| Tree | key-id |
| Reference | configure system time ntp authentication-key <i>number</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

prefer *boolean*

| | |
|------------|--|
| Synopsis | Set NTP server as preferred to receive time |
| Context | configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance <i>string</i> prefer <i>boolean</i> |
| Tree | prefer |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

version number

| | |
|-------------|--|
| Synopsis | NTP version number generated by the node |
| Context | configure system time ntp server (<i>ipv4-address-no-zone ipv6-address-no-zone keyword</i>) router-instance <i>string</i> version <i>number</i> |
| Tree | version |
| Description | This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted. |
| Range | 2 to 4 |
| Default | 4 |
| Introduced | 16.0.R1 |
| Platforms | All |

prefer-local-time boolean

| | |
|-------------|---|
| Synopsis | Use local time over UTC time in the system |
| Context | configure system time prefer-local-time <i>boolean</i> |
| Tree | prefer-local-time |
| Description | <p>When configured to true, the system uses local time. This preference is applied to objects such as log file names, created and completed times reported in log files, NETCONF and gRPC date-and-time leafs, and rollback times displayed in show command outputs.</p> <p>When configured to false, the system uses UTC time.</p> <p>Note: The timezone used for show command outputs during a CLI session can be controlled using the environment time-display command.</p> <p>Note: The format used for the date-time strings may change, depending on the command setting. For example, when this command is set to true, all date-time strings include a suffix of three to five characters that indicates the timezone used.</p> <p>Note: The time format for timestamps on log events is controlled on a per-log basis, using the configure log log-id time-format command.</p> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

sntp

| | |
|----------|---|
| Synopsis | Enter the sntp context |
| Context | configure system time sntp |

| | |
|------------|----------------------|
| Tree | sntp |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of SNTP |
| Context | configure system time sntp admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R1 |
| Platforms | All |

server [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | Enter the server list instance |
| Context | configure system time sntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | server |
| Introduced | 16.0.R1 |
| Platforms | All |

[ip-address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

| | |
|------------|--|
| Synopsis | IP address of the SNTP server |
| Context | configure system time sntp server (<i>ipv4-address-no-zone</i> <i>ipv6-address-no-zone</i>) |
| Tree | server |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

interval *number*

| | |
|----------|----------------------------------|
| Synopsis | Frequency of querying the server |
|----------|----------------------------------|

| | |
|------------|---|
| Context | configure system time sntp server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
<i>interval number</i> |
| Tree | <i>interval</i> |
| Range | 64 to 1024 |
| Default | 64 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

prefer boolean

| | |
|------------|--|
| Synopsis | Preference value for this SNTP server |
| Context | configure system time sntp server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
<i>prefer boolean</i> |
| Tree | <i>prefer</i> |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

version number

| | |
|------------|--|
| Synopsis | SNTP version supported by this server |
| Context | configure system time sntp server (<i>ipv4-address-no-zone ipv6-address-no-zone</i>)
<i>version number</i> |
| Tree | <i>version</i> |
| Range | 1 to 3 |
| Default | 3 |
| Introduced | 16.0.R1 |
| Platforms | All |

sntp-state keyword

| | |
|----------|---|
| Synopsis | Mode for Simple Network Time Protocol (SNTP) |
| Context | configure system time sntp sntp-state <i>keyword</i> |
| Tree | <i>sntp-state</i> |
| Default | unicast |

| | |
|------------|--------------------|
| Options | unicast, broadcast |
| Introduced | 16.0.R1 |
| Platforms | All |

zone

| | |
|------------|-----------------------------------|
| Synopsis | Enter the zone context |
| Context | configure system time zone |
| Tree | zone |
| Introduced | 16.0.R1 |
| Platforms | All |

non-standard

| | |
|------------|---|
| Synopsis | Enter the non-standard context |
| Context | configure system time zone non-standard |
| Tree | non-standard |
| Notes | The following elements are part of a choice: non-standard or standard . |
| Introduced | 16.0.R1 |
| Platforms | All |

name *string*

| | |
|---------------|---|
| Synopsis | Non-standard time zone name |
| Context | configure system time zone non-standard name <i>string</i> |
| Tree | name |
| String Length | 1 to 5 |
| Introduced | 16.0.R1 |
| Platforms | All |

offset *string*

| | |
|----------|---|
| Synopsis | Offset from UTC |
| Context | configure system time zone non-standard offset <i>string</i> |
| Tree | offset |

String Length 5 to 6
 Introduced 16.0.R1
 Platforms All

standard

Synopsis Enter the **standard** context
 Context **configure system time zone standard**
 Tree **standard**
 Notes The following elements are part of a choice: **non-standard** or **standard**.
 Introduced 16.0.R1
 Platforms All

name *keyword*

Synopsis Standard time zone name
 Context **configure system time zone standard name** *keyword*
 Tree **name**
 Default utc
 Options hst, akst, pst, mst, cst, est, ast, nst, utc, gmt, wet, cet, eet, msk, msd, awst, acst, aest, nzst
 Introduced 16.0.R1
 Platforms All

transmission-profile [**name**] *string*

Synopsis Enter the **transmission-profile** list instance
 Context **configure system transmission-profile** *string*
 Tree **transmission-profile**
 Introduced 16.0.R4
 Platforms All

[name] *string*

Synopsis File transmission profile name

| | |
|---------------|--|
| Context | configure system transmission-profile <i>string</i> |
| Tree | transmission-profile |
| String Length | 1 to 32 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | All |

http-version *keyword*

| | |
|------------|---|
| Synopsis | HTTP version |
| Context | configure system transmission-profile <i>string</i> http-version <i>keyword</i> |
| Tree | http-version |
| Default | 1.1 |
| Options | 1.0, 1.1 |
| Introduced | 23.3.R1 |
| Platforms | All |

ipv4-source-address *string*

| | |
|------------|---|
| Synopsis | IPv4 source address used for the transport protocol |
| Context | configure system transmission-profile <i>string</i> ipv4-source-address <i>string</i> |
| Tree | ipv4-source-address |
| Introduced | 16.0.R4 |
| Platforms | All |

ipv6-source-address *string*

| | |
|------------|---|
| Synopsis | IPv6 source address used for the transport protocol |
| Context | configure system transmission-profile <i>string</i> ipv6-source-address <i>string</i> |
| Tree | ipv6-source-address |
| Introduced | 16.0.R4 |
| Platforms | All |

redirection *number*

| | |
|------------|---|
| Synopsis | Maximum level of redirection |
| Context | configure system transmission-profile <i>string</i> redirection <i>number</i> |
| Tree | redirection |
| Range | 1 to 8 |
| Introduced | 16.0.R4 |
| Platforms | All |

retry *number*

| | |
|------------|---|
| Synopsis | Number of attempts to reconnecting to the server |
| Context | configure system transmission-profile <i>string</i> retry <i>number</i> |
| Tree | retry |
| Range | 1 to 256 |
| Introduced | 16.0.R4 |
| Platforms | All |

router-instance *string*

| | |
|---------------|---|
| Synopsis | Router instance used by the transport protocol |
| Context | configure system transmission-profile <i>string</i> router-instance <i>string</i> |
| Tree | router-instance |
| String Length | 1 to 64 |
| Default | Base |
| Introduced | 16.0.R4 |
| Platforms | All |

timeout *number*

| | |
|----------|---|
| Synopsis | Timeout for a response from the server |
| Context | configure system transmission-profile <i>string</i> timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 3600 |
| Default | 60 |
| Units | seconds |

| | |
|------------|---------|
| Introduced | 16.0.R4 |
| Platforms | All |

usb [[usb-cflash](#)] *keyword*

| | |
|-------------|--|
| Synopsis | Enter the usb list instance |
| Context | configure system usb <i>keyword</i> |
| Tree | usb |
| Description | Commands in this context configure the operational state of the USB port. |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

[usb-cflash] *keyword*

| | |
|------------|--|
| Synopsis | Specifies the compact flash ID |
| Context | configure system usb <i>keyword</i> |
| Tree | usb |
| Options | cf2 |
| Notes | This element is part of a list key. |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of the USB port |
| Context | configure system usb <i>keyword</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.10.R1 |
| Platforms | 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se |

3.47 test-oam commands

```

configure
- test-oam
  - apply-groups reference
  - apply-groups-exclude reference
  - icmp
    - ipv6
      - apply-groups reference
      - apply-groups-exclude reference
      - length-field boolean
      - maximum-original-datagram boolean
    - ping-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dot1p number
      - dscp keyword
      - failure-threshold number
      - interval number
      - reactivation-failure-threshold number
      - reactivation-interval number
      - reactivation-threshold number
      - reactivation-timeout number
      - size number
      - timeout number
      - ttl number
  - link-measurement
    - measurement-template string
      - admin-state keyword
      - aggregate-sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
      - window-integrity number
    - apply-groups reference
    - apply-groups-exclude reference
    - delay keyword
    - description string
    - interval number
    - last-reported-delay-hold number
    - reporting boolean
    - sample-window
      - multiplier number
      - threshold
        - absolute number
        - relative number
      - window-integrity number
    - twamp-light
      - allow-egress-remark-dscp boolean
      - allow-ipv6-udp-checksum-zero boolean
      - dest-udp-port number
      - dscp keyword
      - fc keyword
      - ipv6-destination-discovery
        - admin-state keyword
        - discovery-interval number
        - discovery-timer number
        - update-interval number
      - pad-tlv-size number

```


configure test-oam link-measurement measurement-template twamp-light profile

- **profile** *keyword*
- **return-path**
 - **link** *boolean*
- **src-udp-port** *number*
- **timestamp-format** *keyword*
- **ttl** *number*
- **unidirectional-measurement** *keyword*
- **mpls-dm**
 - **admin-state** *keyword*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
- **twamp**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **server**
 - **admin-state** *keyword*
 - **allow-ipv6-udp-checksum-zero** *boolean*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **enforce-test-session-start-time** *boolean*
 - **inactivity-timeout** *number*
 - **max-connections** *number*
 - **max-sessions** *number*
 - **prefix** (*ipv4-prefix | ipv6-prefix*)
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **description** *string*
 - **max-connections** *number*
 - **max-sessions** *number*
 - **twamp-light**
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **inactivity-timeout** *number*
 - **source-udp-port-pools**
 - **port** *number*
 - **apply-groups** *reference*
 - **apply-groups-exclude** *reference*
 - **pool-type** *keyword*

3.47.1 test-oam command descriptions

test-oam

| | |
|------------|-----------------------------------|
| Synopsis | Enter the test-oam context |
| Context | configure test-oam |
| Tree | test-oam |
| Introduced | 16.0.R4 |
| Platforms | All |

icmp

| | |
|------------|--------------------------------|
| Synopsis | Enter the icmp context |
| Context | configure test-oam icmp |
| Tree | icmp |
| Introduced | 20.10.R1 |
| Platforms | All |

ipv6

| | |
|------------|-------------------------------------|
| Synopsis | Enter the ipv6 context |
| Context | configure test-oam icmp ipv6 |
| Tree | ipv6 |
| Introduced | 22.7.R1 |
| Platforms | All |

length-field *boolean*

| | |
|------------|--|
| Synopsis | Use length field in ICMPv6 responses |
| Context | configure test-oam icmp ipv6 length-field boolean |
| Tree | length-field |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | All |

maximum-original-datagram *boolean*

| | |
|-------------|---|
| Synopsis | ICMPv6 traceroute responses with largest datagram |
| Context | configure test-oam icmp ipv6 maximum-original-datagram <i>boolean</i> |
| Tree | maximum-original-datagram |
| Description | When configured to true , this command enables the original datagram field of the ICMPv6 error message to be a maximum of 1232 bytes.

When configured to false , the original datagram field of the ICMPv6 error message smaller than 1232 bytes be built smaller. |
| Default | false |
| Introduced | 22.7.R1 |
| Platforms | All |

ping-template [[name](#)] *string*

| | |
|-------------|--|
| Synopsis | Enter the ping-template list instance |
| Context | configure test-oam icmp ping-template <i>string</i> |
| Tree | ping-template |
| Description | Commands in this context define ping timers and thresholds that verify connectivity and the the operational state of the IP interface. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[name] *string*

| | |
|---------------|--|
| Synopsis | Ping template name |
| Context | configure test-oam icmp ping-template <i>string</i> |
| Tree | ping-template |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|----------|------------------|
| Synopsis | Text description |
|----------|------------------|

| | |
|---------------|---|
| Context | configure test-oam icmp ping-template <i>string description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dot1p *number*

| | |
|------------|---|
| Synopsis | Dot1p in Ethernet header of outgoing ping packets |
| Context | configure test-oam icmp ping-template <i>string dot1p number</i> |
| Tree | dot1p |
| Range | 0 to 7 |
| Default | 7 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

dscp *keyword*

| | |
|------------|---|
| Synopsis | DSCP value used in the outgoing ping packet |
| Context | configure test-oam icmp ping-template <i>string dscp keyword</i> |
| Tree | dscp |
| Default | nc1 |
| Options | be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

failure-threshold *number*

| | |
|----------|---|
| Synopsis | Failure threshold to declare inter-connectivity down |
| Context | configure test-oam icmp ping-template <i>string failure-threshold number</i> |
| Tree | failure-threshold |
| Range | 2 to 10 |

| | |
|------------|--|
| Default | 3 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|------------|---|
| Synopsis | Packet transmit interval |
| Context | configure test-oam icmp ping-template <i>string</i> interval <i>number</i> |
| Tree | interval |
| Range | 1 to 60 |
| Default | 60 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

reactivation-failure-threshold *number*

| | |
|-------------|---|
| Synopsis | Threshold of consecutive failures at reactivation |
| Context | configure test-oam icmp ping-template <i>string</i> reactivation-failure-threshold <i>number</i> |
| Tree | reactivation-failure-threshold |
| Description | This command configures the number of consecutive failures that must occur when transmitting at the reactivation interval without success before the transmission interval is changed to the standard interval. |
| Range | 1 to 10 |
| Default | 4 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

reactivation-interval *number*

| | |
|-------------|--|
| Synopsis | Ping reactivation interval |
| Context | configure test-oam icmp ping-template <i>string</i> reactivation-interval <i>number</i> |
| Tree | reactivation-interval |
| Description | This command configures the packet transmit interval used when the IP interface becomes operationally down because of a ping template failure after receiving a successful response to the previous ICMP echo request. |

| | |
|------------|--|
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

reactivation-threshold *number*

| | |
|-------------|---|
| Synopsis | Success threshold to declare inter-connectivity up |
| Context | configure test-oam icmp ping-template <i>string</i> reactivation-threshold <i>number</i> |
| Tree | reactivation-threshold |
| Description | This command configures the minimum number of consecutive successful responses of ICMP replies that must occur before the IP interface transitions from operationally down (due to ping validation failure) to operationally up. This value is a stability metric intended to prevent flapping. |
| Range | 1 to 10 |
| Default | 3 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

reactivation-timeout *number*

| | |
|------------|---|
| Synopsis | Reactivation wait time before packet is declared lost |
| Context | configure test-oam icmp ping-template <i>string</i> reactivation-timeout <i>number</i> |
| Tree | reactivation-timeout |
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

size *number*

| | |
|----------|---|
| Synopsis | Data field size of the outgoing ICMP echo packet |
| Context | configure test-oam icmp ping-template <i>string</i> size <i>number</i> |
| Tree | size |

| | |
|------------|--|
| Range | 12 to 9786 |
| Default | 56 |
| Units | octets |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

timeout *number*

| | |
|------------|---|
| Synopsis | Wait time before ICMP echo request is declared lost |
| Context | configure test-oam icmp ping-template <i>string</i> timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 5 |
| Units | seconds |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ttl *number*

| | |
|-------------|---|
| Synopsis | TTL value for the outgoing ping packet |
| Context | configure test-oam icmp ping-template <i>string</i> tll <i>number</i> |
| Tree | ttl |
| Description | This command configures the TTL value used in the outgoing ping packet. The tested interface must be directly connected on the same subnet. |
| Range | 1 to 255 |
| Default | 1 |
| Introduced | 20.10.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

link-measurement

| | |
|----------|--|
| Synopsis | Enter the link-measurement context |
| Context | configure test-oam link-measurement |
| Tree | link-measurement |

| | |
|-------------|---|
| Description | Commands in this context configure the link measurement template attributes that are inherited on associated IP interfaces for delay reporting to the routing engine. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

measurement-template [[template-name](#)] *string*

| | |
|-------------|---|
| Synopsis | Enter the measurement-template list instance |
| Context | configure test-oam link-measurement measurement-template <i>string</i> |
| Tree | measurement-template |
| Description | <p>Commands in this context configure the attributes of the measurement template that can be assigned to an IP interface.</p> <p>Changes can be made without disabling the template, although some modifications cause the test on associated IP interfaces to terminate and restart.</p> <p>A measurement template can be removed if no interfaces reference it.</p> |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[template-name] *string*

| | |
|---------------|---|
| Synopsis | Measurement template name |
| Context | configure test-oam link-measurement measurement-template <i>string</i> |
| Tree | measurement-template |
| String Length | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of the measurement template |
| Context | configure test-oam link-measurement measurement-template <i>string</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |

| | |
|------------|--|
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

aggregate-sample-window

| | |
|-------------|---|
| Synopsis | Enter the aggregate-sample-window context |
| Context | configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window |
| Tree | aggregate-sample-window |
| Description | Commands in this context configure the attributes of the aggregate sample window used with the measurement template assigned to an IP interface. The aggregate sample window is the collection of sample windows. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *number*

| | |
|------------|--|
| Synopsis | Number of sample windows in the aggregate sample window |
| Context | configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window multiplier <i>number</i> |
| Tree | multiplier |
| Range | 1 to 12 |
| Default | 12 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

threshold

| | |
|------------|---|
| Synopsis | Enter the threshold context |
| Context | configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window threshold |
| Tree | threshold |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

absolute number

| | |
|-------------|---|
| Synopsis | Absolute delta for delay measurement reporting |
| Context | configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window threshold absolute number |
| Tree | absolute |
| Description | This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.

If an absolute value is not configured the threshold is disabled. |
| Range | 1 to 100000 |
| Units | microseconds |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

relative number

| | |
|-------------|---|
| Synopsis | Relative delta for measurement reporting |
| Context | configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window threshold relative number |
| Tree | relative |
| Description | This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.

If a relative value is not configured, the threshold is disabled. |
| Range | 1 to 100 |
| Units | percent |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

window-integrity number

| | |
|-------------|--|
| Synopsis | Sample percentage required for window integrity report |
| Context | configure test-oam link-measurement measurement-template <i>string</i> aggregate-sample-window window-integrity number |
| Tree | window-integrity |
| Description | This command configures the percentage value that is used to determine whether the aggregate sample window is integral, by comparing the number of samples received from the sample window to the percentage configured. |

The configured percentage translates to a required sample window count that must be included in the aggregate sample window. The number of samples is computed as follows:

$$(\text{window-integrity (\%)}) \times (((\text{aggregate-sample-window length (s)}) / (\text{sample-window length (s)}))$$

If the number of samples in the aggregate sample window is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.

If the count is less than the computed number of required samples, the aggregate sample window does not have integrity and the value is not considered as representative. In this case the aggregate sample window results are not compared to the configured sample window thresholds.

If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.

| | |
|------------|--|
| Range | 1 to 100 |
| Units | percent |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

delay *keyword*

| | |
|-------------|---|
| Synopsis | Delay measurement statistic type |
| Context | configure test-oam link-measurement measurement-template <i>string</i> delay <i>keyword</i> |
| Tree | delay |
| Description | This command configures the type of delay measurement statistic used in the sample window and aggregate sample window. |
| Default | min |
| Options | min, max, avg |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|---------------|--|
| Synopsis | Text description |
| Context | configure test-oam link-measurement measurement-template <i>string</i> description <i>string</i> |
| Tree | description |
| String Length | 1 to 80 |

| | |
|------------|--|
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

interval *number*

| | |
|------------|--|
| Synopsis | Interval between test packet transmissions |
| Context | configure test-oam link-measurement measurement-template <i>string</i> interval <i>number</i> |
| Tree | interval |
| Range | 1 to 10 |
| Default | 1 |
| Units | seconds |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

last-reported-delay-hold *number*

| | |
|-------------|---|
| Synopsis | Time to wait to flush the last reported delay |
| Context | configure test-oam link-measurement measurement-template <i>string</i> last-reported-delay-hold <i>number</i> |
| Tree | last-reported-delay-hold |
| Description | <p>This command configures the timer that specifies the wait time before the last reported delay measurement is flushed after a link measurement test enters the operationally down state.</p> <p>The aging timer delays the flushing of the last reported delay metric to the routing engine. This timer starts a countdown to zero when an administrative function causes the operational state of the test on that specific interface to transition from up to down. If the timer expires before the operational state transitions to up, the previously reported value is flushed. The Delay Measurement Last Reported indicates "Cleared". The timestamp indicates the time of the clear event. The Triggered By indicates "Expired". If the administrative state recovers to operationally up before the expiration of the timer, the previous reported value is not flushed.</p> <p>The aging timer does not apply to failure conditions that do not affect the administrative state of the interface, for example interface failure or routing changes.</p> |
| Range | 0 1 to 86400 |
| Default | 86400 |
| Units | seconds |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

reporting *boolean*

| | |
|-------------|--|
| Synopsis | Report behavior for values for the configured threshold |
| Context | configure test-oam link-measurement measurement-template <i>string</i> reporting <i>boolean</i> |
| Tree | reporting |
| Description | <p>When configured to true, the system reports a reached threshold to the routing engine. Reaching a configured sample-window or aggregate-sample-window indicates a value of interest.</p> <p>When configured to false, values reaching thresholds are not reported to the routing engine. In both enabled and disabled cases, the sample-window and aggregate-sample-window information and computed values are stored on the node until overwriting occurs.</p> |
| Default | true |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

sample-window

| | |
|-------------|---|
| Synopsis | Enter the sample-window context |
| Context | configure test-oam link-measurement measurement-template <i>string</i> sample-window |
| Tree | sample-window |
| Description | Commands in this context configure sample window attributes used when the measurement template is assigned to an IP interface. The sample window is the collection of individual probe results over a defined period. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

multiplier *number*

| | |
|-------------|---|
| Synopsis | Multiplier of interval used for sample window length |
| Context | configure test-oam link-measurement measurement-template <i>string</i> sample-window multiplier <i>number</i> |
| Tree | multiplier |
| Description | This command configures the number of probe results that should be in the sample window. For example, a multiplier of 10 and an interval of 5 equals 50 probes being transmitted from an individual sample window. Consequently, 50 probe results are expected within the 50 second duration that the sample window is "In-progress". |
| Range | 1 to 900 |

| | |
|------------|--|
| Default | 10 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

threshold

| | |
|------------|--|
| Synopsis | Enter the threshold context |
| Context | configure test-oam link-measurement measurement-template <i>string</i> sample-window threshold |
| Tree | threshold |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

absolute *number*

| | |
|-------------|---|
| Synopsis | Absolute delta for delay measurement reporting |
| Context | configure test-oam link-measurement measurement-template <i>string</i> sample-window threshold absolute <i>number</i> |
| Tree | absolute |
| Description | This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.

If an absolute value is not configured the threshold is disabled. |
| Range | 1 to 100000 |
| Units | microseconds |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

relative *number*

| | |
|-------------|--|
| Synopsis | Relative delta for delay measurement reporting |
| Context | configure test-oam link-measurement measurement-template <i>string</i> sample-window threshold relative <i>number</i> |
| Tree | relative |
| Description | This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine. |

| | |
|------------|---|
| | If a relative value is not configured, the threshold is disabled. |
| Range | 1 to 500 |
| Units | percent |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

window-integrity *number*

| | |
|-------------|--|
| Synopsis | Sample percentage required for window integrity report |
| Context | configure test-oam link-measurement measurement-template <i>string</i> sample-window window-integrity <i>number</i> |
| Tree | window-integrity |
| Description | <p>This command configures the percentage value that is used to determine whether the sample window has enough samples to be considered representative for that window (integrity), by comparing the number of samples received from the sample window to the percentage configured.</p> <p>The configured percentage considers the interval of probes and the length of the sample window to determine the number of packets required in the sample:</p> $(\text{window-integrity } (\%)) \times ((\text{sample-window length } (s)) / \text{pps per test (interval)})$ <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the sample window results are not compared to configured sample window thresholds.</p> <p>If the count is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.</p> <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the value is not considered as representative. In this case the sample window results are not compared to the configured sample window thresholds.</p> <p>If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.</p> |
| Range | 1 to 100 |
| Units | percent |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

twamp-light

| | |
|----------|--------------------------------------|
| Synopsis | Enter the twamp-light context |
|----------|--------------------------------------|

| | |
|-------------|---|
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light |
| Tree | twamp-light |
| Description | Commands in this context configure TWAMP Light attributes that are used with the measurement template when assigned to IP interfaces. |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

allow-egress-remark-dscp *boolean*

| | |
|-------------|---|
| Synopsis | Allow overwrite of DSCP value by the egress QoS policy |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light allow-egress-remark-dscp <i>boolean</i> |
| Tree | allow-egress-remark-dscp |
| Description | <p>When configured to true, the egress QoS process is able to modify the DSCP based on the egress QoS configuration and expose the DSCP to egress DSCP processing rules.</p> <p>When configured to false, the egress QoS process uses the DSCP as configured and bypasses egress QoS DSCP marking.</p> <p>If the configure qos network egress remark-trusted force-egress-marking command is configured for the network egress QoS profile, the egress QoS process is applied and the DSCP can be overwritten regardless of the allow-egress-remark-dscp configuration.</p> |
| Default | false |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

allow-ipv6-udp-checksum-zero *boolean*

| | |
|-------------|--|
| Synopsis | Process IPv6 packets with UDP check sum zero |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light allow-ipv6-udp-checksum-zero <i>boolean</i> |
| Tree | allow-ipv6-udp-checksum-zero |
| Description | <p>When configured to true, processing of IPv6 packets that arrive with a UDP checksum of zero is allowed. The destination UDP ports that are registered as TWAMP Test packets in the template allow this behavior.</p> <p>When configured to false, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p> |
| Default | false |
| Introduced | 21.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dest-udp-port *number*

Synopsis Destination UDP port used by link measurement tests

Context **configure** **test-oam link-measurement measurement-template** *string* **twamp-light dest-udp-port** *number*

Tree **dest-udp-port**

Description This command configures the destination UDP port on outbound TWAMP Light measurement packets sent from the session controller. The destination UDP port must match the UDP port value configured on the TWAMP Light reflector that responds to this specific TWAMP Light test.

Range 1 to 65535

Default 862

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

dscp *keyword*

Synopsis DSCP copied to TWAMP Light echo request packet header

Context **configure** **test-oam link-measurement measurement-template** *string* **twamp-light dscp** *keyword*

Tree **dscp**

Description This command configures the DSCP to be copied into the IP header of each TWAMP Light echo request packet launched for the test.

Default nc1

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

fc *keyword*

Synopsis Forwarding class name for the TWAMP Light packets

| | |
|------------|--|
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light <i>fc</i> <i>keyword</i> |
| Tree | fc |
| Default | h1 |
| Options | be, l2, af, l1, h2, ef, h1, nc |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

ipv6-destination-discovery

| | |
|-------------|--|
| Synopsis | Enter the ipv6-destination-discovery context |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery |
| Tree | ipv6-destination-discovery |
| Description | Commands in this context configure IPv6 discovery of a directly-connected IPv6 peer address. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of IPv6 auto destination discovery |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery <i>admin-state</i> <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

discovery-interval *number*

| | |
|----------|--|
| Synopsis | Transmission frequency for discovery packets |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery <i>discovery-interval</i> <i>number</i> |
| Tree | discovery-interval |

| | |
|-------------|---|
| Description | This command configures transmission frequency of the discovery packet to the all-routers multicast group (ff02::2) to discover the link-local address of the peer. This frequency is used during the discover-timer interval. |
| Range | 1 to 10 |
| Default | 10 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

discover-timer *number*

| | |
|-------------|--|
| Synopsis | Maximum time to remain in the discovery phase |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery discover-timer <i>number</i> |
| Tree | discover-timer |
| Description | This command configures the amount of time to transmit peer discovery packets at the discover-interval .

The timer starts when the IPv6 protocols is enabled under the configure router interface if-attribute delay dynamic twamp-light ipv6 context. At the expiration of the discover-interval or when a peer is discovered, whichever comes first, the probe interval changes to the value configured for the update-interval . |
| Range | 1 to 1800 |
| Default | 60 |
| Units | seconds |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

update-interval *number*

| | |
|------------|---|
| Synopsis | Transmission frequency to maintain the peer address |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light ipv6-destination-discovery update-interval <i>number</i> |
| Tree | update-interval |
| Range | 0 1 to 3600 |
| Default | 600 |
| Units | seconds |
| Introduced | 22.7.R1 |

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

pad-tlv-size *number*

Synopsis Optional PAD TLV size

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light pad-tlv-size](#) *number*

Tree [pad-tlv-size](#)

Description This command enables a STAMP PDU to include the PAD TLV. This increases the size of the STAMP PDU by the size of the added TLV. The PAD TLV includes an all zeros pattern.

Range 4 to 9714

Units bytes

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

profile *keyword*

Synopsis QoS profile for packet treatment in local node

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light profile](#) *keyword*

Tree [profile](#)

Description This command specifies if the packets should be treated as in or out of profile as they move through the local node.

Default in

Options in, out

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

return-path

Synopsis Enter the **return-path** context

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light return-path](#)

Tree [return-path](#)

Description Commands in this context configure the return-path TLV carried in the STAMP PDU.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

link *boolean*

Synopsis The Return Path sub-TLV specifying link

Context **configure test-oam link-measurement measurement-template** *string twamp-light return-path link* *boolean*

Tree [link](#)

Description When configured to **true**, the system includes the **return-path** TLV link. The link sub-tlv instructs a Session-Reflector configured for type **stamp** to use the receiving logical IP interface for the transmission of the response packet from the reflector to the **session-sender**. The destination of the reflected packet must be installed in the forwarding table and reachable out the IP interface or the packet is dropped by the Session-Reflector. When there are parallel non-equal cost return paths between the Session-Reflector and the Session-Sender the response packet can only be returned on the lowest cost path.

When configured to **false**, the Return Path TLV carried in the STAMP PDU is not included with the test packet.

Default false

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

src-udp-port *number*

Synopsis Fixed source UDP port for link measurement tests

Context **configure test-oam link-measurement measurement-template** *string twamp-light src-udp-port* *number*

Tree [src-udp-port](#)

Description This command specifies a source UDP port for link measurement tests.

Unless required, Nokia suggests that the link measurement dynamically select an available source UDP port from the dynamic range. Before a UDP port in the configurable range can be configured as a source it must be owned by the application. Use the **configure test-oam twamp twamp-light source-udp-port-pools port pool-type** command to map the port range to the application.

By default a source UDP port allocates from the dynamic range. The configuration of the source port should only be configured when required for interoperability. When the source IP, destination IP, and destination UPD port are the same for a test, the source UDP port must be different in order to uniquely identify the session.

Range 64374 to 64383

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

timestamp-format *keyword*

| | |
|-------------|---|
| Synopsis | Format of the timestamp used in TWAMP Light PDU |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light timestamp-format <i>keyword</i> |
| Tree | timestamp-format |
| Description | This command configures the format of the timestamp used in the TWAMP Light PDU and places the requested timestamp format in the packet using the appropriate epoch. This is unrelated to any time distribution protocol used to synchronize time between clocks. |
| Default | ntp |
| Options | ntp, ptp |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

tll *number*

| | |
|------------|---|
| Synopsis | Time to live value used in the TWAMP Light test packet |
| Context | configure test-oam link-measurement measurement-template <i>string</i> twamp-light tll <i>number</i> |
| Tree | tll |
| Range | 1 to 255 |
| Default | 1 |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

unidirectional-measurement *keyword*

| | |
|-------------|---|
| Synopsis | Method used to compute the unidirectional delay value |
| Context | configure test-oam link-measurement measurement-template <i>string</i> unidirectional-measurement <i>keyword</i> |
| Tree | unidirectional-measurement |
| Description | This command specifies the unidirectional delay computation method as the actual forward delay (calculated using T2-T1 timestamps) or as derived using the round-trip delay divided by two (required if nodal clocks are not synchronized using an accurate time-synchronization method or protocol such as PTP). |
| Default | derived |

| | |
|------------|--|
| Options | derived, actual |
| Introduced | 21.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

mpls-dm

| | |
|------------|--|
| Synopsis | Enter the mpls-dm context |
| Context | configure test-oam mpls-dm |
| Tree | mpls-dm |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|--|
| Synopsis | Administrative state of MPLS DM packet processing |
| Context | configure test-oam mpls-dm admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R6 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

twamp

| | |
|------------|---|
| Synopsis | Enter the twamp context |
| Context | configure test-oam twamp |
| Tree | twamp |
| Introduced | 16.0.R4 |
| Platforms | All |

server

| | |
|----------|--|
| Synopsis | Enter the server context |
| Context | configure test-oam twamp server |
| Tree | server |

| | |
|------------|--|
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

admin-state *keyword*

| | |
|------------|---|
| Synopsis | Administrative state of the TWAMP server |
| Context | configure test-oam twamp server admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | disable |
| Options | enable, disable |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

allow-ipv6-udp-checksum-zero *boolean*

| | |
|-------------|--|
| Synopsis | Process IPv6 packets with a zero UDP checksum |
| Context | configure test-oam twamp server allow-ipv6-udp-checksum-zero <i>boolean</i> |
| Tree | allow-ipv6-udp-checksum-zero |
| Description | <p>When configured to true, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to false, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p> |
| Default | false |
| Introduced | 22.2.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

enforce-test-session-start-time *boolean*

| | |
|-------------|---|
| Synopsis | Discard TWAMP packets before test-session start time |
| Context | configure test-oam twamp server enforce-test-session-start-time <i>boolean</i> |
| Tree | enforce-test-session-start-time |
| Description | When configured to true , the router checks the signalled test-session start time against the server time and discards TWAMP test packets that arrive before the negotiated test-session start time. |

When configured to **false**, the router processes all TWAMP test packets without checking the test-session start time against the server time.

| | |
|------------|--|
| Default | true |
| Introduced | 23.3.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

inactivity-timeout *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Inactivity timeout for TWAMP control connections |
| Context | configure test-oam twamp server inactivity-timeout <i>number</i> |
| Tree | inactivity-timeout |
| Range | 60 to 3600 |
| Default | 900 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-connections *number*



WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|--|
| Synopsis | Limit of concurrent TWAMP server control connections |
| Context | configure test-oam twamp server max-connections <i>number</i> |
| Tree | max-connections |
| Range | 0 to 64 |
| Default | 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-sessions *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

| | |
|------------|---|
| Synopsis | Maximum number of concurrent TWAMP server test sessions |
| Context | configure test-oam twamp server max-sessions <i>number</i> |
| Tree | max-sessions |
| Range | 0 to 128 |
| Default | 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

prefix [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|----------------|---|
| Synopsis | Enter the prefix list instance |
| Context | configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | prefix |
| Max. Instances | 100 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

| | |
|------------|---|
| Synopsis | Prefix to match against TWAMP client address |
| Context | configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) |
| Tree | prefix |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

description *string*

| | |
|----------|---|
| Synopsis | Text description |
| Context | configure test-oam twamp server prefix (<i>ipv4-prefix</i> <i>ipv6-prefix</i>) description <i>string</i> |

| | |
|---------------|--|
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-connections *number*

| | |
|------------|---|
| Synopsis | Maximum number of control connections for TWAMP prefix |
| Context | configure test-oam twamp server prefix (ipv4-prefix ipv6-prefix) max-connections <i>number</i> |
| Tree | max-connections |
| Range | 0 to 64 |
| Default | 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

max-sessions *number*

| | |
|------------|--|
| Synopsis | Maximum concurrent TWAMP test sessions based on prefix |
| Context | configure test-oam twamp server prefix (ipv4-prefix ipv6-prefix) max-sessions <i>number</i> |
| Tree | max-sessions |
| Range | 0 to 128 |
| Default | 32 |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

twamp-light

| | |
|------------|--|
| Synopsis | Enter the twamp-light context |
| Context | configure test-oam twamp twamp-light |
| Tree | twamp-light |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

inactivity-timeout *number*

| | |
|------------|--|
| Synopsis | Time to maintain stale state on the session reflector |
| Context | configure test-oam twamp twamp-light inactivity-timeout <i>number</i> |
| Tree | inactivity-timeout |
| Range | 10 to 100 |
| Default | 100 |
| Units | seconds |
| Introduced | 16.0.R4 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

source-udp-port-pools

| | |
|------------|---|
| Synopsis | Enter the source-udp-port-pools context |
| Context | configure test-oam twamp twamp-light source-udp-port-pools |
| Tree | source-udp-port-pools |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

port [[port-number](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the port list instance |
| Context | configure test-oam twamp twamp-light source-udp-port-pools port <i>number</i> |
| Tree | port |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

[port-number] *number*

| | |
|------------|--|
| Synopsis | Source UDP port pools port number |
| Context | configure test-oam twamp twamp-light source-udp-port-pools port <i>number</i> |
| Tree | port |
| Range | 64374 to 64383 |
| Notes | This element is part of a list key. |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

pool-type *keyword*

| | |
|-------------|---|
| Synopsis | Pool type of an application pool |
| Context | configure test-oam twamp twamp-light source-udp-port-pools port <i>number</i> pool-type <i>keyword</i> |
| Tree | pool-type |
| Description | <p>This command maps the specified source UDP port to the TWAMP Light application allowed to configure the source UDP port. OAM-PM IP tests can only configure the source UDP port when the port pool UDP source port is configured with a pool-type oam-pm. The test-oam link-measurement measurement-template can only configure the src-udp-port when the port pool UDP source port is configured with pool-type link-measurement.</p> <p>This command maps the specified source UDP port to the application allowed to configure the source UDP port. The OAM-PM IP family of tests can only configure the source UDP port when the port pool UDP source port is configured with a pool-type oam-pm. The test-oam link-measurement measurement-template can only configure the src-udp-port when the port pool UDP source port is configured with a pool-type link-measurement. A pool-type cannot be changed if its current application is a test (either an oam-pm session or link-measurement template) and is configured to use the specified port, regardless of the administrative or operational state. The configuration reference linking to the source UDP prevents the change.</p> |
| Default | oam-pm |
| Options | oam-pm, link-measurement |
| Introduced | 22.7.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS |

3.48 vrrp commands

```

configure
- vrrp
- apply-groups reference
- apply-groups-exclude reference
- policy number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- context string
- delta-in-use-limit number
- description string
- priority-event
- host-unreachable (ipv4-address-with-zone | ipv6-address-with-zone)
- apply-groups reference
- apply-groups-exclude reference
- drop-count number
- hold-clear number
- hold-set number
- padding-size number
- priority
- event-type keyword
- priority-level number
- request-interval number
- timeout number
- lag-port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- number-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- weight-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- mc-ipsec-non-forwarding number
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- route-unknown (ipv4-prefix | ipv6-prefix)
- apply-groups reference

```

configure vrrp policy priority-event route-unknown apply-groups-exclude

- **apply-groups-exclude** *reference*
- **hold-clear** *number*
- **hold-set** *number*
- **less-specific**
 - **allow-default** *boolean*
- **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
- **priority**
 - **event-type** *keyword*
 - **priority-level** *number*
- **protocol** *keyword*

3.48.1 vrrp command descriptions

vrrp

| | |
|------------|-------------------------------|
| Synopsis | Enter the vrrp context |
| Context | configure vrrp |
| Tree | vrrp |
| Introduced | 16.0.R1 |
| Platforms | All |

policy [[policy-id](#)] *number*

| | |
|------------|--|
| Synopsis | Enter the policy list instance |
| Context | configure vrrp policy <i>number</i> |
| Tree | policy |
| Introduced | 16.0.R1 |
| Platforms | All |

[policy-id] *number*

| | |
|------------|--|
| Synopsis | Policy ID |
| Context | configure vrrp policy <i>number</i> |
| Tree | policy |
| Range | 1 to 9999 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

admin-state *keyword*

| | |
|----------|--|
| Synopsis | Administrative state of VRRP priority control policy |
| Context | configure vrrp policy <i>number</i> admin-state <i>keyword</i> |
| Tree | admin-state |
| Default | enable |
| Options | enable, disable |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

context *string*



WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

| | |
|---------------|---|
| Synopsis | Service name to which this policy applies |
| Context | configure <i>vrrp policy number context string</i> |
| Tree | context |
| String Length | 1 to 64 |
| Introduced | 16.0.R1 |
| Platforms | All |

delta-in-use-limit *number*

| | |
|------------|--|
| Synopsis | Limit on the delta priority control events |
| Context | configure <i>vrrp policy number delta-in-use-limit number</i> |
| Tree | delta-in-use-limit |
| Range | 1 to 254 |
| Default | 1 |
| Introduced | 16.0.R1 |
| Platforms | All |

description *string*

| | |
|---------------|---|
| Synopsis | Text description |
| Context | configure <i>vrrp policy number description string</i> |
| Tree | description |
| String Length | 1 to 80 |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-event

| | |
|------------|--|
| Synopsis | Enter the priority-event context |
| Context | configure vrrp policy <i>number</i> priority-event |
| Tree | priority-event |
| Introduced | 16.0.R1 |
| Platforms | All |

host-unreachable [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|------------|---|
| Synopsis | Enter the host-unreachable list instance |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) |
| Tree | host-unreachable |
| Introduced | 16.0.R1 |
| Platforms | All |

[\[ip-address\]](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|-------------|--|
| Synopsis | Host IP address that receives a constant ping probe |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) |
| Tree | host-unreachable |
| Description | This command configures the host IP address for which the specific host unreachable priority event monitors connectivity with a continuous ICMP echo request (ping) probe. |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

drop-count *number*

| | |
|----------|---|
| Synopsis | Threshold for consecutive message send attempts |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) drop-count <i>number</i> |
| Tree | drop-count |
| Range | 1 to 60 |
| Default | 3 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

hold-clear *number*

| | |
|------------|---|
| Synopsis | Delay time for a cleared event on the router instance |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) hold-clear <i>number</i> |
| Tree | hold-clear |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-set *number*

| | |
|------------|---|
| Synopsis | Hold time before transitioning to cleared state |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) hold-set <i>number</i> |
| Tree | hold-set |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

padding-size *number*

| | |
|------------|---|
| Synopsis | Packet length padding of the ICMP packet |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) padding-size <i>number</i> |
| Tree | padding-size |
| Range | 0 to 16384 |
| Default | 56 |
| Units | bytes |
| Introduced | 16.0.R1 |
| Platforms | All |

priority

| | |
|------------|--|
| Synopsis | Enter the priority context |
| Context | configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) priority |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | All |

event-type *keyword*

| | |
|------------|---|
| Synopsis | Effect of priority-level value on base priority value |
| Context | configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) priority event-type keyword |
| Tree | event-type |
| Default | delta |
| Options | delta, explicit |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-level *number*

| | |
|------------|--|
| Synopsis | Priority level associated with this event |
| Context | configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) priority priority-level number |
| Tree | priority-level |
| Range | 1 to 254 |
| Introduced | 16.0.R1 |
| Platforms | All |

request-interval *number*

| | |
|----------|---|
| Synopsis | Time interval between consecutive ICMP echo requests |
| Context | configure vrrp policy number priority-event host-unreachable (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) request-interval number |
| Tree | request-interval |

| | |
|------------|---------|
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

timeout *number*

| | |
|------------|--|
| Synopsis | Timeout for ICMP echo request messages |
| Context | configure vrrp policy <i>number</i> priority-event host-unreachable (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) timeout <i>number</i> |
| Tree | timeout |
| Range | 1 to 60 |
| Default | 1 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

lag-port-down [[lag-name](#)] *string*

| | |
|------------|---|
| Synopsis | Enter the lag-port-down list instance |
| Context | configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> |
| Tree | lag-port-down |
| Introduced | 16.0.R1 |
| Platforms | All |

[lag-name] *string*

| | |
|---------------|---|
| Synopsis | LAG name |
| Context | configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> |
| Tree | lag-port-down |
| String Length | 1 to 27 |
| Notes | This element is part of a list key. |
| Introduced | 21.2.R1 |
| Platforms | All |

hold-clear *number*

| | |
|------------|--|
| Synopsis | Delay time for a cleared event on the router instance |
| Context | configure <i>vrrp policy number priority-event lag-port-down string hold-clear number</i> |
| Tree | hold-clear |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-set *number*

| | |
|------------|--|
| Synopsis | Hold time before transitioning to cleared state |
| Context | configure <i>vrrp policy number priority-event lag-port-down string hold-set number</i> |
| Tree | hold-set |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

number-down [[number-of-lag-ports-down](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the number-down list instance |
| Context | configure <i>vrrp policy number priority-event lag-port-down string number-down number</i> |
| Tree | number-down |
| Introduced | 16.0.R1 |
| Platforms | All |

[number-of-lag-ports-down] *number*

| | |
|----------|---|
| Synopsis | Threshold of down LAG ports that create a set event |
| Context | configure <i>vrrp policy number priority-event lag-port-down string number-down number</i> |
| Tree | number-down |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

priority

| | |
|------------|--|
| Synopsis | Enter the priority context |
| Context | configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> number-down <i>number</i> priority |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | All |

event-type *keyword*

| | |
|------------|--|
| Synopsis | Effect of priority-level value on base priority value |
| Context | configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> number-down <i>number</i> priority event-type <i>keyword</i> |
| Tree | event-type |
| Default | delta |
| Options | delta, explicit |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-level *number*

| | |
|------------|---|
| Synopsis | Priority level associated with this event |
| Context | configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> number-down <i>number</i> priority priority-level <i>number</i> |
| Tree | priority-level |
| Range | 1 to 254 |
| Introduced | 16.0.R1 |
| Platforms | All |

weight-down [[lag-ports-down-weight](#)] *number*

| | |
|----------|--|
| Synopsis | Enter the weight-down list instance |
|----------|--|

| | |
|------------|---|
| Context | configure <i>vrrp policy number priority-event lag-port-down string weight-down number</i> |
| Tree | <i>weight-down</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[lag-ports-down-weight] *number*

| | |
|------------|---|
| Synopsis | LAG name for the reduced LAG ports |
| Context | configure <i>vrrp policy number priority-event lag-port-down string weight-down number</i> |
| Tree | <i>weight-down</i> |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

priority

| | |
|------------|--|
| Synopsis | Enter the priority context |
| Context | configure <i>vrrp policy number priority-event lag-port-down string weight-down number priority</i> |
| Tree | <i>priority</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

event-type *keyword*

| | |
|------------|---|
| Synopsis | Effect of priority-level value on base priority value |
| Context | configure <i>vrrp policy number priority-event lag-port-down string weight-down number priority event-type keyword</i> |
| Tree | <i>event-type</i> |
| Default | delta |
| Options | delta, explicit |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-level *number*

| | |
|------------|---|
| Synopsis | Priority level associated with this event |
| Context | configure vrrp policy <i>number</i> priority-event lag-port-down <i>string</i> weight-down <i>number</i> priority priority-level <i>number</i> |
| Tree | priority-level |
| Range | 1 to 254 |
| Introduced | 16.0.R1 |
| Platforms | All |

mc-ipsec-non-forwarding [[tunnel-group-id](#)] *number*

| | |
|------------|---|
| Synopsis | Enter the mc-ipsec-non-forwarding list instance |
| Context | configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> |
| Tree | mc-ipsec-non-forwarding |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

[tunnel-group-id] *number*

| | |
|------------|---|
| Synopsis | IPSEC tunnel group monitored by priority control event |
| Context | configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> |
| Tree | mc-ipsec-non-forwarding |
| Range | 1 to 64 |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-clear *number*

| | |
|----------|--|
| Synopsis | Delay time for a cleared event on the router instance |
| Context | configure vrrp policy <i>number</i> priority-event mc-ipsec-non-forwarding <i>number</i> hold-clear <i>number</i> |
| Tree | hold-clear |
| Range | 1 to 86400 |
| Units | seconds |

| | |
|------------|--|
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

hold-set *number*

| | |
|------------|---|
| Synopsis | Hold time before transitioning to cleared state |
| Context | configure <i>vrp policy number priority-event mc-ipsec-non-forwarding number hold-set number</i> |
| Tree | hold-set |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority

| | |
|------------|--|
| Synopsis | Enter the priority context |
| Context | configure <i>vrp policy number priority-event mc-ipsec-non-forwarding number priority</i> |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

event-type *keyword*

| | |
|------------|---|
| Synopsis | Event type |
| Context | configure <i>vrp policy number priority-event mc-ipsec-non-forwarding number priority event-type keyword</i> |
| Tree | event-type |
| Default | delta |
| Options | delta, explicit |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

priority-level *number*

| | |
|----------|---|
| Synopsis | Priority level associated with this event |
|----------|---|

| | |
|------------|---|
| Context | configure <i>vrrp policy number priority-event mc-ipsec-non-forwarding number priority priority-level number</i> |
| Tree | <i>priority-level</i> |
| Range | 1 to 254 |
| Introduced | 16.0.R1 |
| Platforms | 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR |

port-down [*port-id*] *string*

| | |
|------------|--|
| Synopsis | Enter the port-down list instance |
| Context | configure <i>vrrp policy number priority-event port-down string</i> |
| Tree | <i>port-down</i> |
| Introduced | 16.0.R1 |
| Platforms | All |

[port-id] *string*

| | |
|------------|--|
| Synopsis | Port ID for the reduced LAG ports |
| Context | configure <i>vrrp policy number priority-event port-down string</i> |
| Tree | <i>port-down</i> |
| Notes | This element is part of a list key. |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-clear *number*

| | |
|------------|--|
| Synopsis | Delay time for a cleared event on the router instance |
| Context | configure <i>vrrp policy number priority-event port-down string hold-clear number</i> |
| Tree | <i>hold-clear</i> |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

hold-set *number*

| | |
|------------|--|
| Synopsis | Hold time before transitioning to cleared state |
| Context | configure <i>vrrp policy number priority-event port-down string hold-set number</i> |
| Tree | hold-set |
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

priority

| | |
|------------|---|
| Synopsis | Enter the priority context |
| Context | configure <i>vrrp policy number priority-event port-down string priority</i> |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | All |

event-type *keyword*

| | |
|------------|--|
| Synopsis | Effect of priority-level value on base priority value |
| Context | configure <i>vrrp policy number priority-event port-down string priority event-type keyword</i> |
| Tree | event-type |
| Default | delta |
| Options | delta, explicit |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-level *number*

| | |
|------------|---|
| Synopsis | Priority level associated with this event |
| Context | configure <i>vrrp policy number priority-event port-down string priority priority-level number</i> |
| Tree | priority-level |
| Range | 1 to 254 |
| Introduced | 16.0.R1 |

Platforms All

route-unknown [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **route-unknown** list instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Introduced 16.0.R1

Platforms All

[ip-prefix] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix of route monitored by priority control event

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

hold-clear *number*

Synopsis Delay time for a cleared event on the router instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)
[hold-clear](#) *number*

Tree [hold-clear](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms All

hold-set *number*

Synopsis Hold time before transitioning to cleared state

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)
[hold-set](#) *number*

Tree [hold-set](#)

| | |
|------------|------------|
| Range | 1 to 86400 |
| Units | seconds |
| Introduced | 16.0.R1 |
| Platforms | All |

less-specific

| | |
|------------|--|
| Synopsis | Enable the less-specific context |
| Context | configure vrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
less-specific |
| Tree | less-specific |
| Introduced | 16.0.R1 |
| Platforms | All |

allow-default *boolean*

| | |
|------------|--|
| Synopsis | Match on default route |
| Context | configure vrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
less-specific allow-default <i>boolean</i> |
| Tree | allow-default |
| Default | false |
| Introduced | 16.0.R1 |
| Platforms | All |

next-hop [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|------------|---|
| Synopsis | Add a list entry for next-hop |
| Context | configure vrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
next-hop (<i>ipv4-address-with-zone</i> <i>ipv6-address-with-zone</i>) |
| Tree | next-hop |
| Introduced | 19.5.R1 |
| Platforms | All |

[*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

| | |
|----------|---|
| Synopsis | Next-hop IP address for a returned route prefix |
|----------|---|

| | |
|-------------|---|
| Context | configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>)
next-hop (<i>ipv4-address-with-zone ipv6-address-with-zone</i>) |
| Tree | next-hop |
| Description | This command configures the next-hop IP address used to match the route prefix being monitored by the priority control event with the results of a route table lookup. |
| Notes | This element is part of a list key. |
| Introduced | 19.5.R1 |
| Platforms | All |

priority

| | |
|------------|--|
| Synopsis | Enter the priority context |
| Context | configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>)
priority |
| Tree | priority |
| Introduced | 16.0.R1 |
| Platforms | All |

event-type *keyword*

| | |
|------------|---|
| Synopsis | Effect of priority-level value on base priority value |
| Context | configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>)
priority event-type keyword |
| Tree | event-type |
| Default | delta |
| Options | delta, explicit |
| Introduced | 16.0.R1 |
| Platforms | All |

priority-level *number*

| | |
|----------|--|
| Synopsis | Priority level associated with this event |
| Context | configure vrrp policy number priority-event route-unknown (<i>ipv4-prefix ipv6-prefix</i>)
priority priority-level number |
| Tree | priority-level |
| Range | 1 to 254 |

| | |
|------------|---------|
| Introduced | 16.0.R1 |
| Platforms | All |

protocol *keyword*

| | |
|-------------------|--|
| Synopsis | Routing protocol as match criterion |
| Context | configure vrrp policy <i>number</i> priority-event route-unknown (<i>ipv4-prefix</i> <i>ipv6-prefix</i>)
protocol <i>keyword</i> |
| Tree | protocol |
| Options | bgp, ospf, isis, rip, static, bgp-vpn |
| Max.
Instances | 6 |
| Introduced | 16.0.R1 |
| Platforms | All |

4 Deprecated and obsolete commands

This section lists the deprecated and obsolete commands in this major release.

4.1 Deprecated commands

This chapter provides a list of commands that are marked as “status deprecated” in the Nokia YANG models and the MD-CLI and should no longer be used. Only releases in which commands are initially deprecated are included in this section. If applicable, the equivalent configuration groups command is also deprecated (but not explicitly listed).

See the SR OS Software Release Notes for more information.

4.1.1 23.3.R1

subscriber-mgmt commands:

- configure subscriber-mgmt radius-accounting-policy triggered-updates gtp-mobility

4.2 Obsolete commands

This chapter provides a list of commands that are marked as “status obsolete” in the Nokia YANG models and the MD-CLI. These commands can no longer be used and are considered invalid. Only releases in which commands are initially obsoleted are included in this section. If applicable, the equivalent configuration groups command is also obsoleted (but not explicitly listed).

See the SR OS Software Release Notes for more information.

4.2.1 23.3.R1

aaa commands:

- configure aaa diameter peer-policy
- configure aaa diameter peer-policy applications
- configure aaa diameter peer-policy applications gx
- configure aaa diameter peer-policy applications gy
- configure aaa diameter peer-policy applications nasreq
- configure aaa diameter peer-policy apply-groups
- configure aaa diameter peer-policy apply-groups-exclude
- configure aaa diameter peer-policy connection-timer
- configure aaa diameter peer-policy description
- configure aaa diameter peer-policy ipv4-source-address
- configure aaa diameter peer-policy ipv6-source-address
- configure aaa diameter peer-policy name
- configure aaa diameter peer-policy origin-host
- configure aaa diameter peer-policy origin-realm
- configure aaa diameter peer-policy peer
- configure aaa diameter peer-policy peer address
- configure aaa diameter peer-policy peer admin-state
- configure aaa diameter peer-policy peer apply-groups
- configure aaa diameter peer-policy peer apply-groups-exclude
- configure aaa diameter peer-policy peer connection-timer
- configure aaa diameter peer-policy peer destination-host
- configure aaa diameter peer-policy peer destination-realm
- configure aaa diameter peer-policy peer peer-name
- configure aaa diameter peer-policy peer preference
- configure aaa diameter peer-policy peer statistics
- configure aaa diameter peer-policy peer transaction-timer

- configure aaa diameter peer-policy peer transport
- configure aaa diameter peer-policy peer transport port-number
- configure aaa diameter peer-policy peer watchdog-timer
- configure aaa diameter peer-policy proxy
- configure aaa diameter peer-policy proxy admin-state
- configure aaa diameter peer-policy proxy local-address
- configure aaa diameter peer-policy proxy mcs-peer
- configure aaa diameter peer-policy proxy mcs-peer address
- configure aaa diameter peer-policy proxy mcs-peer apply-groups
- configure aaa diameter peer-policy proxy mcs-peer apply-groups-exclude
- configure aaa diameter peer-policy proxy mcs-peer sync-tag
- configure aaa diameter peer-policy proxy router-instance
- configure aaa diameter peer-policy python-policy
- configure aaa diameter peer-policy role
- configure aaa diameter peer-policy router-instance
- configure aaa diameter peer-policy transaction-timer
- configure aaa diameter peer-policy vendor-support
- configure aaa diameter peer-policy watchdog-timer

isa commands:

- configure isa video-group ad-insert
- configure isa video-group rt-client

lag commands:

- configure lag port-weight-speed
- configure lag weight-threshold
- configure lag weight-threshold action
- configure lag weight-threshold cost
- configure lag weight-threshold value

python commands:

- configure python python-policy vsd
- configure python python-policy vsd apply-groups
- configure python python-policy vsd apply-groups-exclude
- configure python python-policy vsd script

redundancy commands:

- configure redundancy multi-chassis peer sync diameter-proxy

router commands:

- configure router interface ip-tunnel

- configure router interface ip-tunnel remote-ip
- configure router nat inside large-scale dual-stack-lite deterministic policy-map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure router nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure router nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure router nat inside large-scale nat44 deterministic policy-map
- configure router nat inside large-scale nat44 deterministic policy-map admin-state
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure router nat inside large-scale nat44 deterministic policy-map map from
- configure router nat inside large-scale nat44 deterministic policy-map map to
- configure router nat inside large-scale nat44 deterministic policy-map nat-policy
- configure router nat inside large-scale nat44 deterministic policy-map source-prefix

service commands:

- configure service ies video-interface adi
- configure service ies video-interface adi scte30
- configure service ies video-interface adi scte30 ad-server
- configure service ies video-interface adi scte30 ad-server address
- configure service ies video-interface adi scte30 local-address
- configure service ies video-interface adi scte30 local-address apply-groups
- configure service ies video-interface adi scte30 local-address apply-groups-exclude
- configure service ies video-interface adi scte30 local-address control
- configure service ies video-interface adi scte30 local-address data
- configure service ies video-interface rt-client

- configure service ies video-interface rt-client apply-groups
- configure service ies video-interface rt-client apply-groups-exclude
- configure service ies video-interface rt-client src-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure service vprn nat inside large-scale nat44 deterministic policy-map
- configure service vprn nat inside large-scale nat44 deterministic policy-map admin-state
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale nat44 deterministic policy-map map from
- configure service vprn nat inside large-scale nat44 deterministic policy-map map to
- configure service vprn nat inside large-scale nat44 deterministic policy-map nat-policy
- configure service vprn nat inside large-scale nat44 deterministic policy-map source-prefix
- configure service vprn video-interface adi
- configure service vprn video-interface adi scte30
- configure service vprn video-interface adi scte30 ad-server
- configure service vprn video-interface adi scte30 ad-server address
- configure service vprn video-interface adi scte30 local-address
- configure service vprn video-interface adi scte30 local-address apply-groups
- configure service vprn video-interface adi scte30 local-address apply-groups-exclude

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- configure service vprn video-interface adi scte30 local-address control
 - configure service vprn video-interface adi scte30 local-address data
 - configure service vprn video-interface rt-client
 - configure service vprn video-interface rt-client apply-groups
 - configure service vprn video-interface rt-client apply-groups-exclude
 - configure service vprn video-interface rt-client src-address

subscriber-mgmt commands:

- configure subscriber-mgmt bgp-peering-policy prefix-limit
- configure subscriber-mgmt diameter-gx-policy peer-policy
- configure subscriber-mgmt diameter-gy-policy peer-policy
- configure subscriber-mgmt diameter-nasreq-policy peer-policy

system commands:

- configure system management-interface netconf capabilities writable-running
- configure system management-interface yang-modules base-r13-modules
- configure system security cli-script authorization vsd
- configure system security cli-script authorization vsd cli-user

Customer document and product support



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